2014



North Carolina Department of Environment and Natural Resources

Pat McCrory Governor

John E. Skvarla, III Secretary

June 10, 2014

Joe Harrell Enviva Pellets Ahoskie, LLC 142 NC Route 561 East Ahoskie, North Carolina 27910

Subject:

Enviva Pellets Ahoskie, LLC

Ahoskie, Hertford County, North Carolina

Facility ID 4600107, Air Quality Permit No. 10121R02

VOC Emission Test Protocols for Tracking No. 2014-115st: Hammermill ES-DHM-1,

Tracking No. 2014-116st: Wood Dryer ES-DRYER and

Tracking No. 2014-117st: Pellet Cooler ES-CLR3

Air Control Techniques, Inc.

Proposed Test Dates: June 24 through 27, 2014

Dear Mr. Harrell:

The North Carolina Division of Air Quality (DAQ) has reviewed the protocols for the emissions testing at Enviva Pellets Ahoskie. The proposed test methods are acceptable to determine the VOC emissions as discussed below.

The emissions sources are direct heat, wood-fired dryer ES-DRYER controlled by simple cyclone CD-DC and wet electrostatic precipitator CD-WESP; four dry wood hammermills CD-DHM-1 through 4 controlled by four simple cyclones CD-DHM-C1 through C4 and two fabric filters CD-DHM-FF1 and FF2; and four pellet coolers ES-CLR1 through CLR4 controlled by CD-CLR-C1 and C2.

In order to modify the permit to allow for softwood use up to 35%, Enviva has proposed EPA Method 25A testing to quantify the VOC emissions from the dryer, hammermills, and pellet coolers while using a 35% softwood/65% hardwood feed. The proposed test methods, test dates, sampling locations and operating rates for the sampling period are tabulated below.

| Tracking No./ | Emission Source/ | Process Rate | | | Proposed | |
|--------------------------|---|--------------|-----------|-----------|-------------------------|----------------|
| Proposed Date | Test Location | Permitted | Normal | Proposed | Methods | Pollutant |
| 2014-115st June 26 | Hammermill ES-DHM-1 Exhaust duct (prior to fabric filter) | 8.6 tons/hr | 6 tons/hr | 6 tons/hr | | |
| 2014-116st June 24-25 | Dryer ES-DRYER CD-WESP exhaust | 43 ODT/hr | 48 ODT/hr | 43 ODT/hr | EPA 1, 2, 3A, 4, 25A | VOC as propane |
| 2014-117st June 27 | Pellet Cooler ES-CLR3 Pellet cooler stack 2 | 76- | 20 ODT/hr | 20 ODT/hr | | |

The proposed EPA Method 1, 2, 3A, 4 and 25A testing is acceptable to determine the VOO as propane emissions at the proposed sampling locations. Approval of the methods and locations does not imply the test results will be considered representative of facility-wide VOC emissions. This issue remains outside the scope of this protocol approval.

Joe Harrell June 10, 2014 Page 2

The proposed operating rates for testing are acceptable. Please note that DAQ recommends that testing be performed at approximately 90% of maximum operating rate. The test results will only be considered representative for process rates and conditions up to approximately 110% of the tested operating rates. Additional testing may be required if Enviva intends to operate at higher process rates than tested. The final test report shall include information documenting the operation of the tested emission sources and associated equipment (for example: operating rates of pellet coolers ES-CLR1, 2, and 4).

The protocol indicated that the following process and control information will be recorded during the testing periods: the fabric filter static pressure drops and product throughput (tons/hr) for the ES-DHM-1; dryer WESP secondary voltages and currents, dryer inlet and outlet temperatures, total feed rate oven dried ton per hour (ODT/hr) and material moisture content for ES-DRYER; and cyclone pressure drops and product throughput (tons/hr) for the ES-CLR3.

Approval of the proposed methods does not exempt the tester from the minimum requirements of the testing methodologies nor does it exempt Enviva from any regulatory requirement. Any deviations from the proposed testing remain subject to approval by DAQ. If you have any questions, please contact me at (919) 707-8416 or shannon.vogel@ncdenr.gov.

Sincerely,

Shannon M. Vogel

Environmental Engineer

Shannon M. V.

cc: Central Files, Hertford County

Robert Fisher, WARO

John Richards, Air Control Techniques, Inc.

IBEAM Documents - 4600107



North Carolina Department of Environment and Natural Resources

Division of Air Quality

Pat McCrory Governor

Sheila C. Holman Director

John E. Skvarla, III Secretary

March 10, 2014

Kevin Kernan Chief Operating Officer 7200 Wisconsin Ave. Suite 1000, Bethesda, MD 20814

Dear Mr. Kernan:

SUBJECT:

Air Quality Permit No. 10121R02

Facility ID: 4600107

Enviva Pellets Ahoskie, LLC Ahoskie, Hertford County, NC

Fee Class: Title V

In accordance with your completed Air Quality Permit Application for a permit modification received December 10, 2013, we are forwarding herewith Air Quality Permit No. 10121R02 to Enviva Pellets Ahoskie, LLC, 142 N.C. Rt 561 East, Ahoskie, 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 2Q .0503(8) have been listed for informational purposes in "ATTACHMENT 1." 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.

The Permittee shall amend the current Title V Air Quality Permit Application (application 4600107.12A) to include the new air emission sources listed in this permit (ID Nos. ES-FB, ES-FPH, ES-TLB, ES-PL1, ES-PL2) on or before 30 days after the issuance of this permit.

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

Permitting Section 1641 Mail Service Center, Raleigh, North Carolina 27699-1641 217 West Jones Street, Raleigh, North Carolina 27603 Phone: 919-707-8405 / Fax: 919-715-0717

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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.

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 GS 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 GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

For PSD increment tracking purposes, PM10 emissions from this facility have increased by 1.0 pounds per hour.

This Air Quality Permit shall be effective from March 10, 2014 until November 30, 2015, 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 permit, please contact Russell Braswell at 909-707-8731 or russell.braswell@ncdenr.gov. Should you have any questions about the requirement to file a Title V permit application as mentioned above, please contact Kevin Godwin at 919-707-8480 or kevin.godwin@ncdenr.gov.

Sincerely yours,

WAD.WAZ William D. Willets, P.E.

Acting Chief

Enclosure

c: Robert Fisher, Supervisor, Washington Regional Office Connie Horne (cover letter only)

Central Files

ATTACHMENT 1 to Permit No. 10121R02

Insignificant Activities under 15A NCAC 2Q .0503(8)

| Emission Source ID No. | Emission Source Description |
|------------------------|---|
| IES-DWH | Dried wood handling |
| IES-PP | Pellet press system |
| IST-1 and IST-2 | Two diesel storage tanks (2,500 gallon and 500 gallon capacity) |
| IES-CHP | Electric powered green wood chipper |
| IES-GWHS | Green wood handling and storage |
| IES-GWFB | Green wood fuel storage bin |

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source 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 2D .1100 "Control of Toxic Air Pollutants" or 2Q .0711 "Emission Rates Requiring a Permit".

ATTACHMENT 2 to Permit No. 10121R02

List of changes made in the R02 permit.

| Old Page(s) | New Page(s) | Condition/ | Description of Change(s) |
|--------------|--------------|---------------------------|--|
| Global | Global | N/A | Change the application number and complete date; Change permit revision number to R02; Change the issuance/effective dates of the permit Clarified equipment ID No. callouts in all stipulations. Added new equipment to all relevant regulations |
| Cover letter | Cover letter | N/a | • Added a reminder for the amendment of the current Title V permit application. |
| 3 | 3 | Equipment list | Clarified ID callouts Added new sources from application Corrected "coarse" to "dry wood" Corrected CD-CLR-5 to 3, at Permittee's request Changed all instances of "CHM" to DHM, at Permittee's request. Removed "in series" from control device descriptions. These descriptors are left in the section headers. |
| 4 | 4 | 2.1.A | • Updated regulation table to include 2D .0540 |
| 4 | 4 | n/a | Removed testing requirement, because it had been satisfied. |
| 5 | 5 | 2.1.A.1 | Added specific maintenance requirements for CD-WESP Added a semi-annual reporting requirement per DAQ policy. Removed noncompliance statement because this is generally not included in "R" permits. |
| Varies | Varies | Each instance of 2D .0521 | • Removed requirement to establish "normal" VE for all existing sources. This requirement remains for sources new to this permit. |
| 6 | 7 | 2.1.B | Updated regulation table to include 2D .0540 |
| n/a | 10 | 2.2.A.1 | Added specific requirement for 2D .0540 |

^{*} Based on the new permit.

State of North Carolina, Department of Environment, and Natural Resources



Division of Air Quality

AIR QUALITY PERMIT

| Permit No. | Replaces Permit No.(s) | Effective Date | Expiration Date |
|------------|------------------------|----------------|-------------------|
| 10121R02 | 10121R01 | March 10, 2014 | November 30, 2015 |

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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, 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, LLC

Facility ID:

4600107

Facility Site Location:

142 N.C. Rt 561 East

City, County, State, Zip:

Ahoskie, Hertford County, North Carolina, 27910

Mailing Address: City, State, Zip:

7200 Wisconsin Avenue, Suite 1000

Bethesda, Maryland, 20814

Application Number:

4600107.12A

Complete Application Date:

January 22, 2014

Primary SIC Code:

2499

Division of Air Quality, Regional Office Address:

Washington Regional Office

943 Washington Square Mall

Washington, North Carolina, 27889

Permit issued this the 10th of March, 2014

William D. Willets, P.E., Acting Chief, Air Permitting Section By Authority of the Environmental Management Commission

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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 (125 million Btu per hour heat input) | CD-DC | One simple cyclone (204 inches in diameter; ID No. CD-DC) |
| | 0 | CD-WESP | One wet electrostatic precipitator (29,904 square feet of total collection plate area; ID No. CD-WESP) |
| ES-DWDS | Dried wood day silo | CD-DWDS-BV | One bin vent filter (377 square feet of filter area) |
| ES-DHM-1, ES-DHM-2, ES-DHM-3, ES-DHM-4 | Four dry wood hammermills | CD-DHM-C1, CD-DHM-C2, CD-DHM-C3, CD-DHM-C4 | Four simple cyclones (57 inches in diameter each; ID Nos. CD-DHM-C1 through C4) |
| | | CD-DHM-FF1, CD-DHM-FF2 | two fabric filters (6,667 square feet of filter area each; CD-DHM-FF1 and FF2) |
| ES-HAF | Hammermill area and Hammermill No. 5 | CD-HAF-FF | One fabric filter (5,417 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-CLR1, ES-CLR2, ES-CLR3, ES-CLR4 | Four pellet coolers | CD-CLR-C1, CD-CLR-C2 | Two multicyclones (43 inch diameter tubes each) |
| ES-CLR5 | Pellet cooler No. 5 | CD-CLR-3 | One simple cyclone |
| ES-EG, ES-FWP (NSPS, IIII; GACT, ZZZZ) | One emergency use generator (350 brake horsepower; ID No. ES-EG) and one fire water pump (300 brake horsepower; ID No. ES-FWP) | N/A | N/A |
| ES-FB | Fines bin | CD-FB-BV | One bin vent filter (325 square feet of filter area) |
| ES-FPH | Finished product handling | | |
| ES-TLB | Truck loadout bin (with 12 bottoms) | CD-FPH-BF | One bagfilter (4,842 square feet of filter area) |
| ES-PL1, ES-PL2 | Two pellet loadouts | | |

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(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 (ID No. ES-DRYER) with simple cyclone (ID No. CD-DC) in series with one wet electrostatic precipitator (ID No. CD-WESP)
- Dried wood day silo (ID No. ES-DWDS) with bin vent filter (ID No. CD-DWDS-BV)
- Four dry wood hammermills (ID Nos. ES-DHM-1 through ES-DHM-4) with four simple cyclones (ID Nos. CD-DHM-C1 through CD-DHM-C4) in series with two fabric filters (ID Nos. CD-DHM-FF1 and CD-DHM-FF2)
- Hammermill area and Hammermill No. 5 (ID No. ES-HAF) with fabric filter (ID No. CD-HAF-FF)
- Pellet feed mill silo (ID No. ES-PMFS) with bin vent filter (ID No. CD-PMFS-BV)
- Five pellet coolers (ID Nos. ES-CLR1 through ES-CLR5) with two multicylones (ID Nos. CD-CLR-C1 and CD-CLR-C2)
- Fines bin (ID No. ES-FB) with bin vent filter (ID No. CD-FB-BV)
- Finished product handling (ID No. ES-FPH), truck loadout bin (ID Nos. ES-TLB), and two pellet loadouts (ID Nos. ES-PL1, ES-PL2) all venting to bagfilter (ID No. CD-FPH-BF)

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

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|---------------------|--|-----------------------|
| Particulate | $E = 4.10 \text{ x P}^{0.67}$ for process weight rate < 30 tph | 15A NCAC 02D .0515 |
| matter | $E = 55 \times P^{0.11} - 40$ for process weigh rate ≥ 30 tph | |
| | Where, E = allowable emission rate (lb/hr) P = process weight rate (tph) | |
| Sulfur | (ID No. ES-DRYER only) | 15A NCAC 02D .0516 |
| dioxide | 2.3 pounds per million Btu heat input | |
| Visible | 20 percent opacity when averaged over a six | 15A NCAC 02D .0521 |
| emissions | minute period | |
| Fugitive dust | See Section 2.2.A.1 | 15A NCAC 2D .0540 |
| Toxic air | See Section 2.2 A.2 | 15A NCAC 02D .1100 |
| pollutants | | and 15A NCAC 2Q .0711 |

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

a. Emissions of particulate matter from these sources (ID Nos. ES-DRYER, ES-DWDS, ES-DHM1 through ES-DHM4, ES-HAF, ES-PMFS, ES-CLR1 through ES-CLR5, ES-FB, ES-FPH, ES-TLB, ES-PL1, ES-PL2) shall not exceed an allowable emission rate as calculated by the following equation:

 $E = 4.10 \text{ x P}^{0.67}$ for process weight rate < 30 tph $E = 55 \text{ x P}^{0.11}$ - 40 for process weight rate \geq 30 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.

Monitoring/Recordkeeping [15A NCAC 020 .0508(f)]

- b. Particulate matter emissions from the emission sources listed above (ID Nos. ES-DRYER, ES-WDWS, ES-DHM1 through ES-DHM4, ES-HAF, ES-PMFS, ES-CLR1 through ES-CLR5, ES-FB, ES-FPH, ES-TLB, ES-PL1, ES-PL2) shall be controlled as described above. To assure 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 units for leaks.
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters' structural integrity.
 - iii. an annual (for each 12 month period following the initial inspection) internal inspection of the wet electrostatic precipitator. This inspection must include (but is not limited to):
 - 1. visual checks of critical components,
 - 2. checks for any equipment that does not alarm when de-energized, to ensure it is operational,
 - 3. checks for signs of plugging in the hopper and gas distribution equipment, and
 - 4. replacement of broken equipment as required.
- c. 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 [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report 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. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Emissions of sulfur dioxide from this source (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]

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

b. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from firing wood

for these sources.

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

a. Visible emissions from these sources (ID Nos. ES-DRYER, ES-WDWS, ES-DHM1 through ES-DHM4, ES-HAF, ES-PMFS, ES-CLR1 through ES-CLR5, ES-FB, ES-FPH, ES-TLB, ES-PL1, ES-PL2) 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)]

Monitoring [15A NCAC 02Q .0508(f)]

- b. To assure compliance, once a month the Permittee shall observe the emission points of these sources 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 fines bin, finished product handling, pellet loadout bins, and pellet loadouts (ID Nos. ES-FB, ES-FPH, ES-TLB, ES-PL1, ES-PL2) in the first 30 days following the startup of those sources. 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.4. a. above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. 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.

B. Emergency Generator (ID No. ES-EG) and Fire Water Pump (ID No. ES-FWP)

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

| Regulated Limits/Standards | | Applicable Regulation |
|----------------------------|--|---------------------------|
| Pollutant | | |
| Sulfur dioxide | 2.3 pounds per million Btu heat input | 15A NCAC 2D .0516 |
| Visible emissions | 20 percent opacity | 15A NCAC 2D .0521 |
| Hazardous air | National Emission Standards for Hazardous Air | 15A NCAC 2D .1111 |
| pollutants (HAP) | Pollutants for Stationary Reciprocating Internal | (40 CFR 63, Subpart |
| | Combustion Engines (RICE) | ZZZZ) |
| | No additional requirements per 63.6590(c) | · |
| NMHC and NOx, | 0.20 g/kW for PM; 3.5 g/kW for CO; and 4 g/kW | 15A NCAC 2D .0524 |
| CO, PM | for NOx + NMHC | (40 CFR 60, Subpart IIII) |
| Fugitive dust | See Section 2.2.A.1 | 15A NCAC 2D .0540 |
| Toxic air | State-enforceable only | 15A NCAC 2D .1100 |
| pollutants | See Section 2.2 A.2. | |

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources (ID Nos. ES-EG, ES-FWP) 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 2D .0516]

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources (ID Nos. ES-EG, ES-FWP).

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-EG, ES-FWP) 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 2D .0521(d)]

Monitoring [15A NCAC 2Q .0508(f)]

- b. To assure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-EG, ES-FWP) 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. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - 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 F.2. a. above.

Recordkeeping [15A NCAC 2Q .0508(f)]

c. 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.

3. 15A NCAC 2D .0524 NEW SOURCE PERFORMANCE STANDARDS [40 CFR Subpart IIII]

a. The provisions of this subpart are applicable to manufacturer, owners, and operators of stationary compression ignition (CI), reciprocating internal combustion engines (RICE). The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, recordkeeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions."

Emission Standards for Manufacturers:

Emergency Engines

b. Pursuant to 40 CFR §60.4202 (a), stationary RICE engine manufacturers must certify their 2007 model year and later emergency stationary RICE. For engines greater than or equal to 50 hp, the certification emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

Fire Pump Engines

- c. Pursuant to 40 CFR §60.4202(d), beginning with the model years in table 3 to this subpart, stationary RICE manufacturers must certify their fire pump RICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
- d. Pursuant to 40 CFR §60.4210, RICE manufacturers must certify the engine using the certification procedures required in 40 CFR Part 89, subpart b, or 40 CFR Part 1039, subpart c as applicable.
- e. Pursuant to 40 CFR §60.4203, RICE must meet the emission standards during the useful life of the engine.

Emission Standards for Owners and Operators:

Emergency and Fire Pump Engines

f. Pursuant to 40 CFR §60.4205, owners and operators must comply with the following emission standards:

0.20 g/kW for PM 3.5 g/kW for CO 4 g/kW for NOx + NMHC

g. Pursuant to 40 CFR §60.4206, owners and operators must operate and maintain the stationary RICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

h. Pursuant to 40 CFR §60.4207, owners and operators must use fuel with a maximum sulfur content of 15 ppmw and a cetane index of at least 40.

Pursuant to 40 CFR §60.4209(a), the owner or operator must install a non-resettable hour meter prior to start-up of the engines.

4. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR 63 Subpart ZZZZ)

- a. Pursuant to §63.6580, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.
- b. Pursuant to §63.6590(c), a new stationary RICE located at an area source must meet the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.

Multiple Emission Source(s) Specific Limitations and Conditions 2.2-

A. Facility-wide sources

State-enforceable only

1. 15A NCAC 2D .0540: PARTICULATES FROM FUGITIVE DUST EMISSION SOURCES

a. As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall comply with all aspects of the most recently submitted fugitive dust control plan, approved September 13, 2013 and revised January 14, 2014.

State-enforceable only

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(S) | TOXIC AIR POLLUTANT(S) | EMISSION LIMIT(S) |
|---------------------|----------------------------|-------------------|
| Dryer system | Acrolein | 0.989 lb/hr |
| (ID No. ES-DRYER) | Arsenic & compounds | 2.674 lb/year |
| (ID 110. ES-DRIER) | Benzene | 2864.52 lb/year |
| | Benzo(a)pyrene | 2.9 lb/yr |
| | Cadmium | 0.50 lb/year |
| | chlorine | 2.37 lb/day |
| | Formaldehyde | 6.02 lb/hr |
| | Hexachlorodibenzo-p-dioxin | 1.752 lb/year |
| | Hydrogen chloride | 0.24 lb/hr |
| | Phenol | 1.204 lb/hr |
| Fire Water Pump | Acrolein | 1.94E-04 lb/hr |
| (ID No. ES-FWP) | Arsenic & compounds | 1.50E-03 lb/year |
| (ID No. ES-F WI) | Benzene | 17.52 lb/year |
| | Benzo(a)pyrene | 2.30E-04 lb/year |
| | Formaldehyde | 2.48E-03 lb/hr |
| E | Acrolein | 2,27E-04 lb/hr |
| Emergency generator | Arsenic & compounds | 1.80E-03 lb/year |
| (ID No. ES-EG) | Benzene | 17.52 lb/year |
| | Benzo(a)pyrene | 1.97E-04 lb/year |
| | Formaldehyde | 2.893E-03 lb/hr |

a. For compliance purposes, within 30 days after each calendar year quarter the Permittee shall report acrolein, benzene, formaldehyde, and phenol emissions associated with each of the respective averaging periods to the Regional Supervisor, DAQ.

State-enforceable only

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 listed in the table below:

| Pollutant (CAS Number) | Carcinogens | Chronic Toxicants | Acute Systemic Toxicants | Acute Irritants |
|--|-------------|-------------------|--------------------------|-----------------|
| | (lb/yr) | (lb/day) | (lb/hr) | (lb/hr) |
| 1,3 Butadiene (106-99-0) | 11 | | Visit in the second | (,) |
| Acetaldehyde (75-07-0) | | | | 6.8 |
| Beryllium (7440-41-7) | 0.28 | | | |
| Carbon tetrachloride (56- | 460 | | | |
| 23-5) | | | | |
| Chlorobenzene (108-90-7) | | 46 | | |
| Chloroform (67-66-3) | 290 | | | |
| Di(2-ethylhexyl)phthalate (DEHP) (117-81-7 | | 0.63 | | |
| Ethylene dichloride (1,2- | 260 | | | |
| dichloroethane) (107-06-2) | | | | |
| Managanese & cmpds | | 0.63 | | |
| Mercury, vapor (7439-97-6) | | 0.013 | | |
| Methyl chloroform (1,1,1- | | 250 | | |
| trichloroethane) (71-55-6) | | | | |
| 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 metal (7440-02-0) | | 0.13 | | |
| Pentachlorophenol (87- | | 0.063 | 0.0064 | |
| 86-5) | | 01003 | 0.0001 | |
| Perchloroethylene (tetrachloroethylene) (127-18-4) | 13000 | | | |
| 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 (CFC 111) (75-01-4) | | | 140 | 2111 |
| Vinyl chloride (75-01-4) | 26 | | | |
| Xylene (1330-20-7) | ۷۵ | 57 | | 16.4 |

a. No monitoring, recordkeeping, or reporting is required to comply with 15A NCAC 2Q .0711.

SECTION 3 - GENERAL CONDITIONS

1. REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, AND REQUESTS FOR RENEWAL shall be submitted to:

Robert Fisher Regional Air Quality Supervisor North Carolina Division of Air Quality Washington Regional Office 943 Washington Square Mall Washington, NC 27889 (252) 946-6481

- 2. <u>PERMIT RENEWAL REQUIREMENT</u> 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. The renewal request should be submitted to the Regional Supervisor, DAQ.
- 3. <u>ANNUAL FEE PAYMENT</u> 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. <u>ANNUAL EMISSION INVENTORY REQUIREMENTS</u> The Permittee shall report by June 30 of each year the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by the responsible official of the facility.
- 5. <u>EQUIPMENT RELOCATION</u> 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.
- 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. <u>REPORTING REQUIREMENT</u> 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.

- 8. This permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
- 9. 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.
- 10. 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.
 - 11. 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.
 - 12. 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.
 - 13. 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.
 - 14. 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.
 - 15. <u>PERMIT RETENTION REQUIREMENT</u> 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.
 - 16. <u>CLEAN AIR ACT SECTION 112(r) REQUIREMENTS</u> Pursuant to 40 CFR Part 68 "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
 - 17. 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.

Permit No. 10121R02 Page 14

Permit issued this the March 10, 2014.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Acting Chief, Air Permits Section Division of Air Quality

By Authority of the Environmental Management Commission

Air Permit No. 10121R02

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

NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review

Facility Data

Permit Issue Date:

Facility Address:

Region: Washington Regional Office

County: Hertford

NC Facility ID: 4600107

Inspector's Name: Robert Fisher
Date of Last Inspection: 06/11/2013

Compliance Code: 3 / Compliance - inspection

Permit Applicability (this application only)

SIP: 15A NCAC 2D .0540

NSPS: NESHAP: PSD:

PSD Avoidance:

NC Toxics: 112(r): Other:

oskie. NC 27910

Applicant (Facility's Name): Enviva Pellets Ahoskie, LLC

142 N.C. Rt 561 East Ahoskie, NC 27910

Facility Contact

Tom Garrahan

Plant Manager

(252) 209-6032 x210

142 NC Route 561

Ahoskie, NC 27910

Enviva Pellets Ahoskie, LLC

SIC: 2499 / Wood Products, Nec

NAICS: 321999 / All Other Miscellaneous Wood Product Manufacturing

Kevin Kernan

Suite 1000.

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

Contact Data

Authorized Contact

Chief Operating Officer

7200 Wisconsin Ave.

Bethesda, MD 20814

Application Data

Application Number: 4600107.13A

Date Received: 12/10/2013
Application Type: Modification
Application Schedule: State

Existing Permit Data

Existing Permit Number: 10121/R01 Existing Permit Issue Date: 01/03/2012 Existing Permit Expiration Date: 11/30/2015

Total Actual emissions in TONS/YEAR:

| CY | SO2 | NOX | VOC | CO | PM10 | Total HAP | Largest HAP |
|------|-------|-------|-------|-------|--------|-----------|--------------------------|
| 2012 | 17.50 | 79.88 | 24.79 | 29.83 | 113.93 | 8.91 | 2.3544 [Formaldehyde] |
| 2011 | 1.10 | 13.50 | 16.30 | 18.90 | 12.60 | | ·] |

Technical Contact

142 NC Route 561 East

Ahoskie, NC 27910

Joseph Harrell

EHS Manager

(252) 209-6032

(Data taken by IBEAM from the ED module)

Review Engineer: Russell Braswell

Comments / Recommendations:

Issue 10121/R02

Permit Issue Date: 3/10/14

Permit Expiration Date: November 30, 2015

Review Engineer's Signature:

Date: 3/10/14

1. Purpose of Application:

Enviva Pellets Ahoskie, LLC (Enviva) currently holds Air Permit 10121R01, with a requirement to submit a First Time Title V application within one year of commencement of operation at the facility. Starting in August of 2012, the DAQ has received complaints of fugitive dust leaving the facility's property. In response

¹ This application (46000107.12A) was received on November 13, 2012 which was within the time period allowed. The .12A application is not considered in this permit renewal.

to these complaints, Enviva submitted a fugitive dust control plan as required by 15A NCAC 2D .0540. Additionally, Enviva plans to install several new product handling processes which can be expected to reduce dust emissions.

2. Facility Description:

Enviva is a wood pellets manufacturing plant. According to Betsy Huddleston's November 27, 2012 inspection report, the facility uses 90% hardwood and 10% softwood.

3. History/Background:

| • | December 7, 2010 | The R00 permit is issued with a requirement to submit a First Time Title V |
|---|------------------|--|
| | | application within a year of startup. |

| • | October 25, 2011 | Enviva submitted application 4600107.11A. |
|---|------------------|---|
|---|------------------|---|

| • | January 3, 2012 | Permit R01 is issued in response to application .11A. This permit changed the |
|---|-----------------|---|
| | • | configuration of several control devices and incorporated modeling. |

| • | November 13, 2012 | Enviva submitted application .12A in order to comply with the First Time Title |
|---|-------------------|--|
| | 110/422001 4-9-1- | V requirement. The .12A application is separate from this application (.13A). |

4. Application Chronology:

| • | December 10, 2013 | Enviva submitted this application (.13A). The required zoning consistency |
|---|-------------------|---|
| | | determination was not included with this application. |
| | | |

| • | January 22, 2013 | The required zoning consistency determination was received. |
|---|------------------|---|
|---|------------------|---|

| • | January 24, 2013 | Responsibility for this permit application was transferred to Russell Braswell. |
|---|------------------|---|
|---|------------------|---|

| • | February 10, 2013 | An initial draft of the permit and review were distributed to DAQ staff (Mark Cuilla, Mike Pjetraj, Robert Bright, Yongcheng Chen, Betsy Huddleston), Enviva staff (Joe Harrell), and Trinity Consultants (Dale Overcash). For a summary of comments received, see Attachment 2. |
|---|-------------------|--|
| | | summary of comments received, see Attachment 2. |

• March 10, 2014 Permit issued.

5. Permit Modifications/Changes and TVEE Discussion:

According to Betsy Huddleston's November 27, 2012 inspection, the heat input rate of the dryer is incorrect, and there is a cyclone associated with hammermill #5 that is not included on the permit. These issues will be addressed in the First Time Title V permit. This application is only concerned with the new sources listed on the application and the addition of the fugitive dust control plan requirement.

Minor administrative corrections (e.g. changing "coarse" to "dry wood", removing requirements for stack testing that have been satisfied) have been made to the permit.

At the request of the Permittee, CD-CLR-5 has been renamed to -3 and each instance of "CHM" has been changed to "DHM". See Attachment 2 for details.

The list of changes to the permit can be found in Attachment 1. The following new emission sources have been added to IBEAM:

| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description | |
|---------------------------|-------------------------------------|-----------------------|--|--|
| ES-FB | Fines bin | CD-FB-BV | One bin vent filter (325 square feet of filter area) | |
| ES-FPH | Finished product handling | | | |
| ES-TLB | Truck loadout bin (with 12 bottoms) | CD-FPH-BF | One bagfilter (4,842 square feet of filter area) | |
| ES-PL1, ES-PL2 | Two pellet loadouts | | | |

6. Regulatory Review:

The new sources at the facility are subject to the following regulations, in addition to the General Conditions:

- a. 15A NCAC 2D .0515 "Particulates from Miscellaneous Industrial Processes"
- b. 15A NCAC 2D .0521 "Control of Visible Emissions"
- c. 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources"

It should be noted that there are other regulations that apply to other sources at the facility, but as they do not apply to these specific sources, they will not be discussed in this review.

a. 15A NCAC 2D .0515 "Particulates from Miscellaneous Industrial Processes"

This regulation limits the amount of particulate a source can emit as a function of its maximum process rate (excluding any liquid or gaseous fuel). This limit only applies to "miscellaneous" processes (i.e. processes not covered by 2D .0503 through 2D .0514). The regulation gives the limits as:

For
$$P \le 30$$
, $E = 4.10 \times (P)^{0.67}$
For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

Where:

P = Maximum process rate, in tons per hour

E = Maximum allowable particulate emission rate, in pounds per hour (calculated to three decimal places. Liquid and gaseous fuels are not considered part of the process rate.)

Note that the sources at this facility are not considered "wood products finishing plants" and are therefore not subject to 2D .0512.

Each of the new sources will be controlled by fabric filters. Enviva states that the planned fabric filters will have a maximum outlet particulate loading rate of 0.01 gr/ft³, which will easily be low enough to ensure compliance. Fabric filters are very effective at capturing wood dust, so the proposed outlet loading rate is reasonable.

In order to demonstrate compliance, Enviva must perform regular maintenance and monitoring of the control devices. All maintenance and monitoring activities must be recorded in a logbook and reported twice per year.

Compliance will be determined during the next inspection.

b. 15A NCAC 2D .0521 "Control of Visible Emissions"

This regulation limits visible emissions (VE) from post-1971 processes to less than 20% opacity when averaged over a six minute period. Sources are allowed one exception per hour. The hourly exception cannot exceed 87% opacity, and cannot occur more than four times per 24-hour period.

Fabric filters are historically very effective at capturing wood dust, so little VE is to be expected from these sources. Regular monitoring and recordkeeping is required to demonstrate compliance. Additionally, the facility must establish what "normal" VE is for each source within 30 days of commencement of operations.

Compliance will be determined during the next inspection.

c. 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emissions"

This regulation requires that facilities not contribute to substantive dust complaints outside their property boundary.

There have been several substantive complaints against Enviva (see Section 10). As such, Enviva was required to develop a fugitive dust control plan and have the plan approved by the Director. The most recent plan was approved on September 13, 2013 and amended on January 14, 2014. Enviva must comply with all aspects of the plan, or potentially be found in noncompliance with the regulation.

Compliance will be determined based on inspections and complaint investigations (if any are required.)

7. NSPS, MACT/GACT, PSD/NSR, 112(r), RACT, CAM:

a. NSPS

None of the new sources are subject to any NSPS.

b. MACT/GACT

None of the new sources are subject to any MACT/GACT.

The permit application specifically requested a permit shield for NESHAP Subpart DDDD. This regulation specifically applies to facilities that are considered Major Source for HAP. Based on the emission summary below, it appears that Enviva does not have potential emissions such that HAP-Major is a consideration. Therefore, NESHAP Subpart DDDD does not apply to the facility.

c. PSD/NSR

Based on the facility emission summary, as calculated by Trinity Consultants, the facility does not have potential emissions such that PSD is triggered for any pollutant.

Based on the emission calculations in the application, this modification will cause an increase of up to 1.00 lb/hr of PM10 emissions. Therefore, PSD Increment Tracking will be notified.

d. 112(r)

Enviva does not store any 112(r)-subject chemicals.

e. RACT

The facility is not located in an area of ozone noncompliance. Therefore, RACT does not apply.

f. Compliance Assurance Monitoring (CAM)

CAM is only considered during permit renewal, First Time Title V, or if the modification is for a "Large" source (a source with potential emissions of a pollutant greater than 100 ton/yr *after* control).

This application does not meet any of the criteria above, so CAM will not be considered.

8. Air Toxics:

This application does not change any emission rate of Toxic Air Pollutants (TAPs). Therefore, none of the regulations pertaining to TAPs need reviewing.

It should be noted that the modeling done with the R01 application is based off of an incorrect dryer heat input rate of 125 mmBtu/hr (see Section 5 for details). The First Time Title V permit will have to examine the emission limits associated with 2D .1100 based on the correct dryer heat input rate.

9. Facility Emissions Review

| Pollutant | Potential Emissions [As calculated by Trinity Consultants] (ton/yr) | | |
|----------------------|---|--|--|
| CO ₂ e | 129 | | |
| TSP* | 128.78 | | |
| PM10* | 128.78 | | |
| PM2.5* | 128.78 | | |
| CO | 45.94 | | |
| NO_x | 183.98 | | |
| VOC | 20.25 | | |
| SO_2 | 19.20 | | |
| Single largest HAP** | <10 | | |
| Total HAP** | 15.1 | | |

^{*} While the emission calculations submitted by Trinity Consultants indicate an increase in overall particulate emissions (due to increased air handling and product handling), a decrease in *fugitive* particulate emissions is also expected.

** Taken from the R01 review. The new sources with this application will not have an effect on HAP emission rates.

10. Compliance Status

1. Notices of Violation/Recommendation for Enforcement since the R00 permit.

May 2, 2013 NOV issued for improperly operating emission sources and control devices.

2. Inspection status

The facility was most recently fully inspected on November 27, 2012 by Betsy Huddleston. The facility was deemed in compliance at the time of inspection.

3. Complaints

The facility has been investigated for dust complaints on

- September 17, 2012,
- November 27, 2012,
- April 11, 2013 (resulting in the NOV mentioned above),
- May 3, 2013, and
- June 11, 2013.

These complaints related to fugitive dust. In response to these complaints, Enviva submitted a dust control plan. The plan was most recently amended on January 14, 2014.

11. Other Regulatory Concerns

A PE seal was included with the application.

A zoning consistency form was submitted and indicated consistency with zoning.

12. Public Notice/EPA and Affected State(s) Review

No Public Notice is required with this permit because this permit application is being processed with the 2Q .0300 permitting procedures.

13. Recommendations

Issue 10121R02.

| Old Page(s) | New Page(s) | Condition/ Item* | Description of Change(s) | |
|-------------|-------------|---------------------------|---|--|
| Global | Global | N/A | Change the application number and complete date; Change permit revision number to R02; Change the issuance/effective dates of the permit Clarified equipment ID No. callouts in all stipulations. Added new equipment to all relevant regulations | |
| 3 | 3 | Equipment list | Clarified ID callouts Added new sources from application Corrected "coarse" to "dry wood" Corrected CD-CLR-5 to 3, at Permittee's request Changed all instances of "CHM" to DHM, at Permittee's request. | |
| 4 | 4 | 2.1.A | Updated regulation table to include 2D .0540 | |
| 4 | 4 | n/a | Removed testing requirement, because it had be | |
| 5 | 5 | 2.1.A.1 | Added specific maintenance requirements for CD-WESP | |
| Varies | Varies | Each instance of 2D .0521 | Removed requirement to establish "normal" VE for all existing sources. This requirement remains for sources new to this permit. | |
| 6 | 7 | 2.1.B | Updated regulation table to include 2D .0540 | |
| n/a | 10 | 2.2.A.1 | Added specific requirement for 2D .0540 | |

^{*} Based on the new permit.

- 1. Betsy Huddleston, by email, February 10, 2014
 - a. In the application, it appears that there is a mismatch when calculating PM emissions from the pellet coolers.

Response: The permit application includes calculations for a planned additional pellet cooler. This explains the discrepancy.

b. Betsy stated that Enviva had initially not planned on installing twelve pellet loadout bins. Where did these extra bins come from?

Response: The permit application requested equipment IDs ES-PB1 through 12. Betsy contacted Joe Harrell and confirmed that Enviva did not plan on installing twelve bins. In an email, Harrell suggested "Truck Loadout Bin with 12 conical bottoms" as the source description.

c. Betsy pointed out a few reference errors in the permit and in the review.

Response: These have been fixed.

d. Betsy pointed out that the equipment being added with the permit application is not specifically listed in the review.

Response: This oversight has been fixed.

- 2. Joe Harrell, by email, February 14, 2014
 - a. The new authorized official is Tom Garrahan

Response: After getting the contact information, I have made this update.

b. Joe pointed out a few errors regarding the name of the facility and its parent company.

Response: Fixed.

c. Joe requested changing the equipment IDs of the hammermills and their cyclones to match the identification the facility uses.

Response: Fixed.

d. Joe confirmed that there will only be one pellet loadout bin installed. The loadout bin will have 12 outlets, but only be one bin.

Response: This has been corrected.

- 3. Mark Cuilla, by email, March 6, 2014
 - a. Mark noted some typos in the permit and review.

Response: Fixed.

Attachment 2, cont.
Comments received on initial draft

b. Mark asked why there were no standard testing conditions in the permit.

Response: I discussed this with Mark and William Willets. We decided that it was not appropriate to have the DAQ standard testing language in "R" Title V permits.

c. Mark noted that there needs to be a maintenance reporting requirement in section 2.1.A.1.

Response: Added.



North Carolina Department of Environment and Natural Resources

Pat McCrory Governor Division of Air Quality Sheila C. Holman Director

John E. Skvarla, III Secretary

<u>CERTIFIED MAIL</u>: 70101870000133232204 <u>RETURN RECEIPT REQUESTED</u>

December 11, 2013

Mr. Peter Najera VP of Operations Enviva Pellets Ahoskie, LLC 7200 Wisconsin Ave. Suite 1100 Bethesda, MD 20814

SUBJECT: Receipt of Permit Application

Modification of Permit No. 10121R01

Application No. 4600107.13A Enviva Pellets Ahoskie, LLC

Facility ID: 4600107, Ahoskie, Hertford County

Dear Mr. Najera:

Your air permit application (4600107.13A) for Enviva Pellets Ahoskie, LLC, located in Hertford County. North Carolina was received by this Division on December 10, 2013.

Submittal of your air permit application request must include the following items:

A permit application processing fee:

Under the new permit application processing fee schedule effective January 1, 2013, your required fee is \$889.00.

The amount of fee monies (Check No.) received was \$867.00. The amount due is \$22.00.

Pending review of your application and based on the required fee amount indicated above, you may be required to pay an additional amount.

Number of Copies of Application:

The appropriate number of copies of the application was received.

Permitting Section
1641 Mail Service Center, Raleigh, North Carolina 27699-1641
217 West Jones Street, NC 27603
Phone: 919-707-8405 / FAX: 919-715-0717
Internet: www.ncair.org

Mr. Najera December 11, 2013 Page 2

Local zoning and subdivision ordinances consistency determination:

Your application did contain the complete request for consistency determination.

Signature of An Authorized Official:

Your application was signed by an authorized official as defined by 15A NCAC 2Q.0304(j).

PE Seal Requirement:

The appropriate PE Seal was received.

In summary, this application <u>did not</u> contain all the required elements as indicated above and has not been accepted for processing. This information must be submitted and contain the above requested information. The requested information must be submitted to our Office within thirty (30) days or the application may be terminated.

Pursuant to 15A NCAC 2Q.0507, the Permittee is required to address any requirements that becomes applicable after the date a Title V application is filed prior to release of a Title V draft permit. If necessary, please update your Title V application as soon as practical by submitting three copies of the required forms, plus one confidential copy if appropriate, to Division of Air Quality, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. Please include an A1 form with the words, "Initial Title V Application Update" typed or written across the top and a signed E5 form with a revised date.

Should you have any questions concerning this matter, please contact Kevin Godwin at (919) 707-8480.

Sincerely,

Donald van der Vaart, Ph.D., P.E., J.D.

Chief, Permits Section

cc: Washington Regional Office Files

Comprehensive Application Report for 4600107.13A Enviva Pellets Ahoskie, LLC - Ahoskie (4600107)

Hertford County

Permit/Latest Revision: 10121/R01 General Information:

State Permit code:

Completeness Due

12/10/2013 Received

Calculated Issue Due

Kevin Godwin/RCO Modification Engineer/Rev. location: Application type:

Clock Start

Application Dates

03/10/2014

Yongcheng Chen Regional Contact:

Initial amount:

Fee Information

Add. Amt Rcv'd: Date Rcv'd: Date received: Amount Due:

> Washington Regional Office Title V Facility classification: Facility location:

12/10/2013 Fund type: \$867.00

Location rec'd:

22.00

Deposit Slip #:

Location deposited:

Application is INCOMPLETE

Clock is OFF

Status is:

Pending acceptance

2333

Completeness Criteria

(301) 357-5560 (252) 209-6032

Bethesda, MD 20814 Ahoskie, NC 27910

7200 Wisconsin Ave. Suite 1100

Address

142 NC Route 561 East

City State ZIP

Telephone

Complete Item Description Received?

Contact Information

Name Authorized

Type

Peter Najera, VP of Operations Technical/Permit

Joseph Harrell, EHS Manager

Acceptance Criteria

Acceptance Criteria Description Application fee Received?

Appropriate number of apps submitted Zoning Addressed

Yes Yes N/A Yes Yes

Source recycling/reduction form

Authorized signature PE Seal Application contains toxic modification(s)

Comprehensive Application Report for 4600107.13A Enviva Pellets Ahoskie, LLC - Ahoskie (4600107)

Hertford County

| <u>Staff</u> kmhash | | |
|--|---------------------------------------|---|
| Due Complete Comments 01/09/2014 Need \$22 | | Regulation Description Particulates Miscellaneous Industrial Processes Sulfur Dioxide Emissions Combustion Sources Control of Visible Emissions |
| Application Events Event TV - Acknowledgment/Incomplete add info requested 0/2013 01/09/2014 | Regulations Pertaining to this Permit | Reference Rule .0515 2D .0516 2D .0516 2D .0521 |

Editor

New Value

Old Value

Column Name Date Changed

Audit Information Pertaining to this Application



One Copley Parkway, Suite 310, Morrisville, North Carolina 27560 U.S.A. = (919) 462-9693 = Fax (919) 462-9694

December 6, 2013

Mr. Charles Hammond Planning and Zoning Director Town of Ahoskie Planning and Zoning 201 West Main Street Ahoskie, NC 27910 Keith

Air Perning Section

Subject:

Air Permit Application Zoning Consistency Determination Request

Enviva Pellets Ahoskie, LLC

Dear Mr. Hammond,

This letter is a request for a determination of whether planned installation for the addition of one fines bin with bin vent filter control device for particulate matter (PM) control; and the addition of a finished product handling bagfilter (CD-FPH-BF) that will control existing emissions from a collection of transfer points, the pellet loadout bins, and truck pellet loadout operations is consistent with current local zoning requirements. A copy of the air permit application being submitted to the North Carolina Division of Air Quality (NCDAQ) is attached.

Your confirmation of zoning consistency is needed by the NCDAQ prior to issuance of the air quality construction permit. Please complete the attached form and send to the address shown on the form as soon as possible. In the interim, we would appreciate it if you would stamp this cover letter with your department's seal, sign and date next to your seal and return the sealed cover letter via FAX to my attention at (919) 462-9694. This stamp is needed to be considered administratively complete by the NC Division of Air Quality. Should you require additional information to complete your review, please do not hesitate to contact me at (919) 462-9693.

Sincerely,

Dale Overcash, PE Principal Consultant

Attachments

REVIEWED FOR CODE

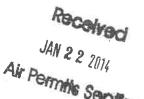
COMPLIANCE

DATE: 1-10-14

Kers R. TRUMS

TOWN OF AHOSRIE

Zoning Consistency Determination



| Facility Name | Enviva Pellets Ahoskie, LLC | - CMD | | | | | |
|--|--|-------|--|--|--|--|--|
| Facility Street Address | 142 N.C. Rt. 561 East | | | | | | |
| Facility City | Ahoskie, NC | | | | | | |
| Description of Process | Plant will produce pelletized wood | | | | | | |
| SIC/NAICS Code | 2499 (Wood Products, Not Elsewhere Classified) | | | | | | |
| Facility Contact | Joe Harrell | | | | | | |
| Phone Number | (252) 209-6032 | | | | | | |
| Mailing Address | Same as facility | | | | | | |
| Mailing City, State Zip | | | | | | | |
| Based on the information given | above: | | | | | | |
| I have received a copy of the | e air permit application (draft or final) AND | | | | | | |
| There are no applicable zon | ing ordinances for this facility at this time | | | | | | |
| The proposed operation IS consistent with applicable zoning ordinances | | | | | | | |
| The proposed operation IS NOT consistent with applicable zoning ordinances | | | | | | | |
| | (please include a copy of the rules in the package sent to the air quality office) | | | | | | |
| | g further information and can not be made at this time | | | | | | |
| Other: | | | | | | | |
| | | | | | | | |
| Agency | TOWN OF AHOSKIE | | | | | | |
| Name of Designated Official | TOWN OF AHOSKIE KEITH R. TRUMAN | | | | | | |
| Title of Designated Official | ZONING OFFICER | | | | | | |
| Signature | Led R. Tom | | | | | | |
| Date | 1-10-14 | | | | | | |
| Please forward to the facility ma at the appropriate address as che | iling address listed above and the air quality office | | | | | | |

Courtesy of the Small Business Environmental Assistance Program toll free at 1-877-623-6748 or on the web at www.envhelp.org/sb

Zoning Consistency Determination

JAN 2 2 2014 Air Permile Section

| Facility Name | Enviva Pellets Ahoskie, LLC | | | | |
|--|--|---|--|--|--|
| Facility Street Address | 142 N.C. Rt. 561 East | | | | |
| Facility City | Ahoskie, NC | | | | |
| Description of Process | Plant will produce pelletized wood | | | | |
| SIC/NAICS Code | 2499 (Wood Products, Not Elsewhere Classified) | | | | |
| Facility Contact | Joe Harrell | | | | |
| Phone Number | (252) 209-6032 | | | | |
| Mailing Address | Same as facility | | | | |
| Mailing City, State Zip | · | | | | |
| Based on the information giver | | | | | |
| | he air permit application (draft or final) AND | | | | |
| | | | | | |
| ppeasie ze | oning ordinances for this facility at this time | | | | |
| The proposed operation IS consistent with applicable zoning ordinances The proposed operation IS NOT consistent with applicable zoning ordinances | | | | | |
| | of the rules in the package sent to the air quality office) | | | | |
| | ng further information and can not be made at this time | | | | |
| Other: | but the same same so the same same | | | | |
| | | _ | | | |
| Agency | Tows of AAOSKIE | | | | |
| Name of Designated Official | Charles A Hommon | | | | |
| Title of Designated Official | Town Marrager | | | | |
| Signature | Odlb micel | | | | |
| Date | 1/8/14 | | | | |
| Please forward to the facility m at the appropriate address as che | ailing address listed above and the air quality office ecked on the back of this form. | | | | |

Courtesy of the Small Business Environmental Assistance Program toll free at 1-877-623-6748 or on the web at www.envhelp.org/sb

Division of Air Quality Washington Regional Office December 16, 2013

DEC 1.9 ZN13

DE F

TO:

Kevin Godwin, RCO Permits

FROM:

Betsy Huddleston BH

SUBJECT:

Recommendations and Comments on Air Permit Application

Enviva Pellets Ahoskie, LLC

Hertford County, Facility ID 4600107 Air Permit 10121R01, APP 4600107.13A

Fee Class: Title V

Contacts:

Mr. Joe Harrell, EHS Manager, office (252) 209-6032 ext. 202, cell (252) 370-3181

Dale Overcash, Trinity Consultants, (919) 462-9693

1. Introduction:

WaRO has substantiated dust complaints at Enviva, with the most recent resulting in an approved modified dust control plan on 9/13/2013. When they were working on the revision, they came to the conclusion that a significant portion of the dust leaving the site was not actually fugitive. It is coming from the pellet cooler cyclones. The emissions are very fine. During one inspection Rob Fisher and I observed the emissions at close to 20% opacity.

This purpose of this application is to install equipment for dust control:

- Fines from the hammermill, conveyors from the hammermill to the pellet feed mill silo, and screens will be collected and sent to a compressed air receiver. The receiver exhausts to a fines bin (ES-FB) with bagfilter control. It is my understanding that by collecting fines prior to the sized wood entering the pelletizing process, they are hoping fines emissions from the pellet cooler cyclones will be dramatically reduced.
- There are four pellet truck loadout bins that feed two truck loadouts. Enviva wishes to install a bagfilter to control fines from the loadout bins as they fill trucks. The pellets will go down covered chutes, and there will be a slight negative pressure in the building from an induced draft fan. Enviva is installing this baghouse for safety purpose as well.

2. Facility Compliance Status:

The most recent full facility permit inspection was 11/27/2012. I did not observe any fugitive dust leaving the site at the time of the inspection. Enviva did have some issues with meeting their recordkeeping requirements associated with their dust management plan. WaRO periodically performed surveillance and responded to complaints throughout 2013. DAQ required a modification of the dust management plan following my observations of dust travelling off-site during a complaint investigation on 4/11/2013 (finalized 9/13/2013).

3. Regional Concerns, Comments and Recommendations:

- WaRO has been eagerly anticipating this application, as we hope the additions will provide measurable relief to the residents located immediately north of the facility. We ask this permit modification be processed as expeditiously as possible.
- The permit does not have a condition for 2D.0540. Considering the company has a dust management plan that was triggered by this rule, and there are several residents impacted by dust, we must add the condition to the permit with this revision. Please include

- language that recognizes Enviva has an approved and active dust management plan. They've titled their plan "Fugitive Dust/Emissions Control Plan."
- Jenny Kelvington emailed me that the residents and a third party representing them may soon contest the zoning for the Enviva property. I read through our requirements for zoning determinations with respect to application processing. It doesn't appear that a contestment would necessarily slow issuance of this permit.
 - WaRO would like to review the draft permit before it is issued.

-47

(k:\hertford46\00107\permits\20131216p02.doc)

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Comprehensive Application Report for 4600107.13A Enviva Pellets Ahoskie, LLC - Ahoskie (4600107)

Hertford County

Permit/Latest Revision: 10121/R02 General Information:

Permit code:

Modification Application type:

Russell Braswell/RCO Engineer/Rev. location:

Yongcheng Chen Regional Contact:

Washington Regional Office Facility location:

Title V Facility classification:

Application is COMPLETE

Clock is ON

Issued Status is:

Contact Information

Name

Application Dates

Clock Start Completeness Due

Calculated Issue Due

12/17/2013

01/31/2014

12/10/2013 Received

03/25/2014

Fee Information

Date received: Amount Due:

Add. Amt Rcv'd: Date Rcv'd: 22.00

22.00 01/02/2014

Location deposited:

Deposit Slip #:

Fund type: \$867.00

12/10/2013

initial amount:

Location rec'd:

2333

Telephone

Address

Kevin Kernan, Chief Operating Officer

Joseph Harrell, EHS Manager

Technical/Permit

Authorized

Type

7200 Wisconsin Avenue, Suite 100@Bethesda, MD 20814 City State ZIP 142 NC Route 561 East

Ahoskie, NC 27910

(252) 209-6032

Acceptance Criteria

Acceptance Criteria Description Received?

Appropriate number of apps submitted Application fee

Yes

Source recycling/reduction form Zoning Addressed

> N/A Yes

%

Authorized signature

PE Seal

Application contains toxic modification(s)

Completeness Criteria

Complete Item Description Received?

Comprehensive Application Report for 4600107.13A Enviva Pellets Ahoskie, LLC - Ahoskie (4600107)

Hertford County

| | Comments | 3 Need \$22 | 3 ethuddleston | 02/10/2014 02/13/2014 03/06/2014 Rcvd comments from region (2/7) falcibitism(2124) Cuilla (3/6) | 02/17/2014 03/19/2014 02/24/2014 Facility asked for more time to reviewbrance till | 4 kmhash |
|--------------------|---------------------|--|--|---|--|---------------|
| | <u>Due</u> Complete | 01/09/2014 12/17/201 | 12/10/2013 01/09/2014 12/16/2013 | 02/13/2014 03/06/201 | 03/19/2014 02/24/201 | 03/10/2014 |
| | Start | equested 0/2013 | 12/10/2013 | 02/10/2014 | 02/17/2014 | 03/10/2014 |
| Application Events | Event | TV - Acknowledgment/Incomplete add info requested 0/2013 01/09/2014 12/17/2013 Need \$22 | Regional technical review completed/mailed | Draft to coordinator/supervisor for review | Technical Add Info - for Compliance Info | Permit issued |

Comprehensive Application Report for 4600107.13A Enviva Pellets Ahoskie, LLC - Ahoskie (4600107) Hertford County

Hertford County

| Outcome Information | | | | |
|--|-----------------------------|-------|---|----|
| Class before: Title V | Class after: Title V | | Permit/Revision: 10121/R02 | |
| 2Q.0711: No 2D.1100: No | No | | Revision Issue Date: 03/10/2014 | |
| NSPS: No NESHAPS/MACT: No | No PSD/NSR: | No | Accumulated process days (includes public notice periods): 75 | |
| PSD/NSR Avoid: No | Prohibitory Small: | No | Public notice/hearing/add info after 80 days: | |
| PSD/NSR Status After: Minor | General permit: | No | Manager's discretion: Appealed? No | |
| Multi-site permit: No | Multi. permits at facility: | No | Current Dermit Information | l |
| Quarry permit: No | HAP Major (10/25 tpy): | Minor | Teens Repertive Devices Devices # | |
| 2Q.0705 Last MACT/Toxics: NO | NESHAPS/GACT: | NO | 2014 03/10/2014 11/30/2015 | |
| New Source RACT/LAER: NO | Existing Source RACT: | NO | | |
| RACT/LAER Added Fee: NO | RACT Avoidance: | NO | | |
| 2Q .0702 (a)(18) - Toxics/Combustion Source(s) After 07/10/10: | Source(s) After 07/10/10: | NO | | n' |

| | | cesses | urces | | |
|---------------------------------------|------------------------|---|---|------------------------------|--|
| | Regulation Description | Particulates Miscellaneous Industrial Processes | Sulfur Dioxide Emissions Combustion Sources | Control of Visible Emissions | |
| Regulations Pertaining to this Permit | | .0515 | .0516 | .0521 | |

| 57 | |
|--|--|
| 2 | <u>Editor</u> Kevin Godwin |
| | New Value 4750 (Russell Braswell) |
| Audit iniormation Fertaining to this Application | Old Value 763 (Kevin Godwin) |
| mation Pertainin | Date Changed 01/31/2014 |
| Audit mior | Column Name Date Changee engineer 01/31/2014 |



1 Copley Parkway | Suite 310 | Morrisville, NC 27560 | P (919) 462-9693 | F (919) 462-9694

trinityconsultants.com

Trinity A Consultants

December 6, 2013

Mr. Donald Van der Vaart, PhD, PE, Esq. North Carolina Division of Air Quality (NC DAQ) 217 West Jones Street Raleigh, NC 27603 Received

DEC 1 0 2013

Al Comits Section

RE: Permit Application to Add Fines Bin and Bin Vent Filter and Finished Product Handling Bagfilter -- Enviva Pellets Ahoskie, LLC Current Permit No. 10121R01

Dear Don.

Enviva Pellets Ahoskie, LLC (Enviva) was issued a construction and operating permit, DAQ Permit Number 10121R01 on January 3rd, 2012. Enviva is submitting this air quality permit application that addresses the addition of one fines bin with bin vent filter control device for particulate matter (PM) control; and the addition of a finished product handling bagfilter (CD-FPH-BF) that will control existing emissions from a collection of transfer points, the pellet loadout bins, and truck pellet loadout operations.

Contents of this application are as follows:

- 1. Three (3) copies of the permit application
- 2. Permit application fee of \$867
- 3. Required permit application forms (Attachment 1)
- 4. Updated emission calculations (Attachment 2)
- 5. Local Zoning Consistency Determination (Attachment 3)
- 6. General discussion of permit application (see below)

DESCRIPTION OF PROCESS CHANGES

Fines Bin (ES-FB)

Sized wood from the permitted hammermills is transported on a set of conveyors to the permitted pellet mill feed silo (ES-PMFS) prior to pelletization. Fine pellet material from the hammermill pollution control system and screening operation will then be collected in the proposed fines bin (ES-FB) which will be controlled with a compressed air receiver. The compressed air receiver receives the fines, exhaust the air, and fines are trapped by the bin vent filter. The fines are then blown off onto a rotary seal valve and transferred into the bin. Particulate emissions from the filter are calculated assuming a manufacturer guaranteed grain loading factor and the maximum nominal stack flow rate.

Mr. Donald van der Vaart, PhD, PE, Esq December 6, 2013 Page 2

Received

DEC 1 6 2013

Air Permin Section

Finished Product Handling and Loadout Bagfilter (ES-FPH-BF)

Pelletized product is conveyed to four pellet truck loadout bins (ES-PB) that feed two pellet truck loadout operations (ES-PL). Emissions from the Pellet Loadout Bins are controlled by a bagfilter. Pellet Loadout is accomplished by gravity feed of the pellets through a covered chute that telescopes during the loadout process to maintain constant contact with product as it is loaded to prevent emissions. Although emissions to the atmosphere from conveyance from the storage bins are minimal because dried wood fines have been removed in the pellet screener, a slight negative pressure is maintained in the loadout building as a fire prevention measure to prevent any buildup of dust on surfaces within the building. The slight negative pressure is produced via an induced draft fan that exhausts to the same bagfilter that controls minor dust emissions from loading of the pellet press silo.

Particulate emissions from finished product handling and loadout are calculated assuming a manufacturer guaranteed grain loading factor and the maximum nominal stack flow rate for the bagfilter. Emission estimates for emission units included in this application are provided in Attachment 1.

EMISSIONS ESTIMATES

As indicated earlier, emissions estimates for the new fines bin and finished product handling bagfilter are provided in Attachment 1. Attachment 1 also contains revised facility-wide criteria emissions showing the revised facility-wide PM potential emissions due to these additions.

REGULATORY APPLICABILITY

The facility will remain a PSD minor source after operation of the system with facility-wide emissions remaining well below 250 tpy. The following regulations will be triggered by the Fines bin and Finished Product Handling operation, the same as for the other fabric filter controlled sources, as noted in section 2.1.A of the Ahoskie operating permit:

- 15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes and
- 15A NCAC 2D .0521, Control of Visible Emissions.

15A NCAC 02D .0515 Particulates from Miscellaneous Industrial Processes

Particulate emissions from all emissions sources subject to permitting, including the wood pellet dryer are regulated under 15A NCAC 2D .0515. This regulation limits the particulate emissions based on process throughput using the equation $E = 4.10 \times P^{0.67}$, for process rates (P) less than 30 tons per hour (ton/hr) and $E = 55 \times P^{0.11}$ -40 for process rates greater than 30 tons per hour.

All emissions from particulate matter sources will be well-controlled as a result of these fabric filter control devices.

Mr. Donald van der Vaart, PhD, PE, Esq December 6, 2013 Page 3

15A NCAC 02D .0521 Control of Visible Emissions

Under this regulation, for sources manufactured after July 1, 1971, visible emissions cannot be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity under the following conditions:

No six-minute period exceeds 87 percent opacity, No more than one six-minute period exceeds 20 percent opacity in any hour, and No more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

This rule applies to all processes that may have a visible emission, including particulate matter emissions sources controlled by a bagfilter or bin vent filter.

APPLICATION FORMS AND LOCAL CERTIFICATION FORM

Permit application forms for the new source is provided in Attachment 2.

The local zoning certification form, provided in Attachment 3, is being submitted in conjunction with this application. Enviva will forward a copy of the proof of receipt from the local zoning department as soon as it has been received.

CLOSING

Enviva would greatly appreciate prompt processing of this application. Feel free to contact me at 919-462-9693 or Joe Harrell of Enviva at (252) 209-6032 with any questions or comments.

Sincerely

Dale Overcash, PE Principal Consultant

Attachments

ATTACHMENT 1

UPDATED EMISSIONS CALCULATIONS

FACILITY-WIDE CRITERIA AND OTHER NON-HAPS EMISSIONS SUMMARY ENVIVA PELLETS AHOSKIE, LLC

| CO _{2e} (tpy) | 33.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3 | 129 100,000 No |
|------------------------|--|--|
| VOC (tpy) | 20.25 5.59E-04 4.79E-04 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 | 250 250 No |
| SO2 (tpy) | 19.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 250 No |
| PM-2.5 (tpy) | 24.48 0.03 0.02 30.03 0.82 0.41 4.00 12.20 56.78 0.00 0.00 | 250 No |
| PM-10 (tpy) | 24.48 0.03 0.02 30.03 0.82 0.41 4.00 12.20 56.78 0.00 0.00 | 250 No |
| TSP (tpy) | 24.48 0.03 0.02 30.03 0.82 0.41 12.20 56.78 0.00 0.00 | 250 No |
| NOx (tpy) | 182.91 0.58 0.49 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 250 No |
| CO (tpy) | 45.00 0.50 0.50 0.00 0.00 0.00 0.00 0.00 | 250 No |
| Unit ID | ES-DRYER BS-BG ES-FWP ES-CHM ES-PMFS ES-PMFS ES-PFB ES-PFB ES-CHP ES-FPH ES-FPH ES-FPH ES-FPH ES-CHP ES-CHM ES-FPH ES-CHM ES- | PSD Significant Emission Rates PSD Review Required? |
| Source Description | Dryer System Emergency Generator Fire Water Pump Dry Wood Hammermills Pellet Press Silo Pellet Fines Bin Pellet Fines Bin Ground Wood Handling & Loadout Ground Wood Handling Pellet Coolers Chipper and Re-Chipper Debarker Diesel Storage Tanks | PSD S |

Dust Control Systems PM Emissions

| | | Filter. Vent -or- | | Pollutant | Annual | | | | 4 | Potential Emissions | missions | | |
|---------------------------------------|----------------------|-------------------|----------|----------------------|-----------|------------------|---------|---------|--------|---------------------|------------|-------------------|--------|
| | Emission | Cyclone | Flowrate | Loading ² | Operation | % PM that is | that is | PM | 38 | PM ₁₀ | " e | PM _{2.5} | . S. |
| Emission Unit | Source ID | . A | (dscfm) | (gr/dscf) | (hours) | PM ₁₀ | PM2.5 | (lb/hr) | (tpy) | (lb/hr) | (tpy) | (lb/hr) | (tpy) |
| Dried Wood Day Silo | ES-DWDS | CD-DWS-BV | 2,186 | 0.01 | 8,760 | 100% | 100% | 0.19 | 0.82 | 0.19 | 0.82 | 0.19 | 0.82 |
| Dry Wood Hanmermills 1 & 2 | ES-CHM | CD-CHM-FF1 | 40,000 | 0.01 | 8,760 | 100% | 100% | 3.43 | 15.02 | 3.43 | 15.02 | 3.43 | 15.02 |
| Dry Wood Hammermills 3 & 4 | ES-CHIM | CD-CHIM-FF2 | 40,000 | 0.01 | 8,760 | 100% | 100% | 3,43 | 15.02 | 3.43 | 15.02 | 3.43 | 15.02 |
| Tommermill Area and Hammermill 5 | ES-HAF | CD-HAF-FF | 32,500 | 10.0 | 8,760 | 100% | 100% | 2.79 | 12.20 | 2.79 | 12.20 | 2.79 | 12.20 |
| Pellet Mill Feed Silo Bin Vent Filter | ES-PMFS | CD-PMFS-BV | 2,186 | 0.01 | 8,760 | 100% | 100% | 0.19 | 0.82 | 0.19 | 0.82 | 0.19 | 0.82 |
| Fines Bin | ES-FB | CD-FB-BV | 3,600 | 0.003 | 8,760 | 100% | 100% | 60.0 | 0.41 | 0.09 | 0.41 | 0.09 | 0.41 |
| Finished Product Handling | ES-FPH, ES-PL, ES-PB | CD_FPH-BF | 35,500 | 0.003 | 8,760 | 100% | 100% | 0.91 | 4.00 | 0.91 | 4.00 | 0.91 | 4.00 |
| | 20,000 | 10 010 00 | 27 500 | 0.000 | 092.8 | 100% | 100% | 5.19 | 22.71 | 5.19 | 22.71 | 5.19 | 22.71 |
| Pellet Coolers Cyclone 1 & 2 | ES-CLKI & 2 | CD-CLR-CI | 27.500 | 0.022 | 8 760 | 100% | 100% | 5.19 | 22.71 | 5.19 | 22.71 | 5.19 | 22.71 |
| Pellet Coolers Cyclone 3 & 4 | ES-CLK3 & 4 | CD-CLR-C2 | 13.750 | 0.022 | 8.760 | 100% | 100% | 2.59 | 11.36 | 2.59 | 11.36 | 2.59 | 11.36 |
| Fellet Coolers-Cyclone 3 | SULT SET | CD CT R-C4 | 13.750 | 0.022 | 8 760 | 100% | 100% | 2.59 | 11.36 | 2.59 | 11.36 | 2.59 | 11.36 |
| Peller Coolers Cyclone o | ES-CLING | CD-CENCOT | 10,000 | | | | TOTAT | 26.59 | 116.42 | 36 58 | 116.42 | 26 58 | 116.42 |

Filter, Vent, and Cyclone inlet flow rate (cfm) provided by design engineering firm.
 Unless otherwise specified, pollutant (PM) loading conservatively assumed to be 0.01 gr/dscf
 It was conservatively assumed that PM₁₀ and PM_{2,5} equal PM emissions.

ATTACHMENT 2
FACILITY AND SOURCE FORMS



FORM A1

FACILITY (General Information)

| REVISED 11/0 | 01/02 | | NCDEN | R/Division of Air | Quality - Appli | cation for Alı | Permit to Cons | struct/Operate | | | A1 |
|---|--|-------------------|---------------|---------------------|-----------------|--|-----------------------|-------------------|---|------------------|--|
| 30 10 Page 10 | STREET, STREET | NOT | E- APPL | CATION WILL | NOT BE P | ROCESSE | D WITHOUT | THE FOLLO | WING: | | |
| | √ Lo | cal Zoning Consi | stency Dete | rmination (if requi | red) 🗸 Facili | ty Reduction | & Recycling Sur | vey Form (Form | A4) 🗸 A | Application Fee | |
| | √ R | esponsible Offici | al/Authorize | ed Contact Signatu | re 🗹 Appro | priate Numbe | er of Copies of A | pplication 🗹 | P.E. Seal | (if required) | |
| S. VISELER | Fundamental and | este de la rece | | A feet of the | GENERAL | INFORMA" | TION | 印第三篇:21 | "国际" | THE STREET | A SECTION |
| Legal Corpor | ate/∩wner Na | me. | | Pellets, LLC | | | | | | | |
| Site Name: | | ets Ahoskie, LL | | , | | | | | | | |
| | 911 Address) ! | | | C. Rt 561 East | | | | | | | |
| Site Address L | | | 1-1-101 | | | | | | | | |
| City: | Ahoskie | | | | | State: | North Card | olina | | | |
| Zip Code: | 27910 | | | | | County: | Hertford | | | | |
| | 4 54 | VACE BU | -26F-091 | | CONTACT | | | | | | Albert Bearing |
| Permit/Techn | | | | | | | ection Contact | : | | | |
| Name/Title: | Joe Harrell | | | | | Name/Title: | Joe Harrel | | | | |
| Mailing Addres | | 142 N.C. Ro | ute 561 Fa | st | | Mailing Addr | | 142 N.C. Rou | ıte 561 Ea: | st | |
| Mailing Addres | | 142 14.0.110 | dic 501 Ed | J | | Mailing Addr | | | | | |
| City: | Ahoskie | State: | NC | Zip Code: | 27910 | | Ahoskie | State: | NC | Zip Code: | 27910 |
| Phone No. (an | | | | . (area code) | 2.0.0 | Phone No. (| | (252) 209-603 | _ | (area code) | |
| | | @envivabiomas | | . (arda obdo) | | | ss: Joe.Harrel | | | | |
| | | rized Contact: | 3.00111 | | | Invoice Con | | | | | |
| Name/Title: | Pete Najera | | | | | Name/Title: | Joe Harrel | 1 | _ | | |
| | | 7200 Wisco | neln Avenu | | | Mailing Addr | | 142 N.C. Rou | ite 561 Fa: | st | |
| Mailing Addres | | Suite 1100 | nşin Avenu | ie | | Mailing Addr | | 142 14.0. 100 | ALC CO I La | •• | |
| Mailing Addres | | | 140 | Zip Code: | 20814 | | Ahoskie | State: | NC | Zip Code: | 27910 |
| City: | Bethesda | State: | MD | . (area code) | 20014 | Phone No. (a | | (252) 209-60 | | | 2,010 |
| Phone No. (an | | a@envivabioma | | . (area code) | | | ss: Joe.Harrel | <u> </u> | | . (alea code) | |
| Email Address | : Pete.Najera | aggenvivabioma | ss.com | ADDI | ICATION IS | | | I GETVITADIONIA | 33.00111 | a contractions | |
| SAME DE DES | Alexa Maria | on-permitted Faci | lib./Cransfi | | Modification of | and the second s | Control of the second | Rer | news! with | Modification | No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa |
| | Mew IN | on-permitted raci | iity/Greeniit | au 🗀 i | _ | ral (TV Only) | (104) | | TOWNER THE | The amount | |
| - Vicenticopie 1 1 | Special Commission of the state | a the trade of | EACHIT | V CI ASSICIO | ATION AET | ED ADDI I | CATION (Ch | ack Only One | al teres to | Kara and Araba | CE SPECE |
| - 100 miles | | | Prohibi | | | Synthetic Min | | ✓ Title V | | rana anata | |
| | General | ☐ Small | Promibi | FACI | | | | | | CV-Col Sa | Selection in the |
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| | | | Facility ID | No.: N/A (To be | assigned) | | | | | | |
| Wood pellet r | nanufacturing | facility | | | | | | | | | |
| | | | | | | | | | | | 11/30/2015 |
| Primary SIC/N | | | | Not Elsewhere C | Classified) | | ious Air Permit! | | UT | Expiration Date: | 11/30/2015 |
| Facility Coordi | | Latitude: | | 5.1 UTM E | | Longitude: | 4,015,554. | 4 UTM N | | | |
| Does this appl | lication contain | confidential data | ? | YES | U | NO NO | ED ADDI IOA | TION | | | |
| | | | | PERSON OR | FIRM THA | | | | | | |
| Person Name | | Dale Overc | | | | Firm Name: | | nsultants, Inc. | | | |
| Mailing Addres | ss Line 1: | One Copley | Parkway | | | Mailing Addr | | Suite 310 | | | |
| City: | Morrisville | | State: | North Carolin | a | Zip Code: | 27560 | | County | | |
| Phone No. | 919-462-96 | 93 | Fax No | | | Email Addres | | daversash@, | | orants-com. | |
| | | | SIGNA | TURE OF RES | PONSIBLE | OFFICIAL | AUTHORIZE | D CONTACT | | | |
| Name (typed): | | Pete Najera | | | | Title: · | Vice Presi | dent of Operation | ons · | Α | |
| X Signature(E | Blue Ink): | A. | 1 | | | Date: | 15.1 | / . 2 | | | |
| | | men | 1alu | _ | | | 10/6 | 0/13 | | | |
| Vi | | | 1 | Attach / | Additional | Sheets A | s Necessar | y ⁽¹⁾ | | | |

FORMS A2, A3 EMISSION SOURCE LISTING FOR THIS APPLICATION - A2

| 112r APPLICABILITY INFORMATION - A3 | 112r | APPL | ICABII | ITY INFO | DRMAT | ION - A | 3 |
|-------------------------------------|------|------|---------------|----------|-------|---------|---|
|-------------------------------------|------|------|---------------|----------|-------|---------|---|

| REVISED 04/10/07 | | oplication for Air Permit | to Construct/Operate | A2 |
|--------------------|-------------------------------------|---------------------------|---------------------------------|--------------------------|
| | EMISSION SOURCE LISTING: New, Mod | dified, Previously U | npermitted, Replaced, Deleted | Bass |
| EMISSION SOURCE | EMISSION SOURCE | CONTROL DEVIC | | |
| ID NO. | DESCRIPTION | ID NO. | DESCRIPTION | |
| Equ | uipment To Be ADDED By This Applica | ation (New, Previou | sly Unpermitted, or Replacement | |
| ES-FB | Fines Bin | CD-FB-BV | Bin Vent Filter | |
| ES-FPH | Finished Product Handling | | | |
| ES-PB | Pellet Loadout Bins | CD-FPH-BF | Finished Product Handling Bag | filter |
| ES-PL | Pellet Mill Loadout | | | |
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| MENNINGE (NA | | T S MODIFIED | | the second second should |
| ta atelitenescoji. | Existing Permitted Equipment | TO BE MODIFIED | By This Application | 对"走进"。第25 |
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| Manufacture up, | Equipment To Be D | ELETED By This A | Application : * | THE STREET |
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| 112(r) APPLICABILITY INFORMATION A 3 |
|--|
| Is your facility subject to 40 CFR Part 68 "Prevention of Accidental Releases" - Section 112(r) of the Federal Clean Air Act? Yes /(No) |
| If No, please specify in detail how your facility avoided applicability: |
| Enviva Polieta Ahoskie, LLC will not handle any of the substances subject to 112(r) |
| If your facility is Subject to 112(r), please complete the following: |
| A. Have you already submitted a Risk Management Plan (RMP) to EPA Pursuant to 40 CFR Part 68.10 or Part 68.150? |
| Yes & No & Specify required RMP submittal date: If submitted, RMP submittal date: |
| B. Are you using administrative controls to subject your facility to a lesser 112(r) program standard? |
| Yes e No e If yes, please specify: |
| |

| FORM A4 | Y OF AIR EMISSION | NS AND FACILITY - WI | DE REDUCTION & | RECYCLING ACTIVIT | IFS . | | and the state of | | |
|---------------------------|-----------------------------|--------------------------|-------------------------|-----------------------|-------------------------------|---------------------------------|------------------------------|--|--|
| DATE: | Does facility have | an environmental man | igement system in | place? () YES (X) | IO If so, is facility ISO 140 | 000 Certified? () YES (X) | NO | | |
| Facility Name: | Enviva Pellets Ahoskie, LLC | | | | Permit Number: 10121R01 | | | | |
| Facility ID: | N/A (to be County: Hertford | | | | Environmental Contact: | Joe Harrell | | | |
| Mailing Address | | 142 N.C. Rt 561 East | | | Phone No. () | (252) 209-6032 | Fax No. () | | |
| Mailing Address | | | | | Zip Code: | 27910 | County: Hertford | | |
| City: | Ahoskie | State: | North Carolina | | Email Address: | Joe.Harrell@envivabiom | ass.com | | |
| August Warren | novement province | iosio. | A Ale Emissions | Source Paductions | n the past year? () YES. | (X) NO | | | |
| AIR EMISSIONS | SOURCE REDUCT | Enter Code for | Date Reduction | Quantity Emitted | Quantity Emitted | Has reduction activity been | Addition detail about source | | |
| Source Description and | Air Pollutant | Emission Reduction | . Option Implemented | from prior annual | from current annual | discontinued? If so, when | | | |
| ID | | Option (See Codes) | (mo/yr) | report to DAQ (lb/yr) | report to DAQ (lb/yr) | was it discontinued? | | | |
| N/A | | | | | | | | | |
| | | | | | | | | | |
| Comments: | REDUCTIONS & R | FCYCLING ACTIVITIE | S | Any Reductions or S | Recycling Activities in the a | nast year? / TYFS / X TNO | | | |
| | Pollutant | Enter Code for | Date Reduction | Quantity Emitted | Quantity Emitted | Has reduction activity been | Addition detail about source | | |
| Source Description or | or | Emission Reduction | Option Implemented | from prior annual | from current annual | discontinued? If so, when | | | |
| Activity | Recycled or Reduced | Option (See Codes) | (mo/yr) | report | report | was it discontinued? (mo/yr) | | | |
| N/A | | | | | | | | | |
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| | | 1, | | | | | | | |
| The requested i | nformation above | shall be used for fulfil | ling the requireme | nts of North Carolina | General Statute 143-215. | 108(g). The permit holder | shall submit to the | | |

The requested information above shall be used for fulfilling the requirements of North Carolina General Statute 143-215.108(g). The permit holder shall submit to the Department a written description of current and projected plans to reduce the emissions of air pollutants by source reduction or recycling. The written description shall accompany any application for a new permit, modification of an existing permit and for each annual air quality permit fee payment. Source reduction is defined as reducing the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal. If no activity has taken place since the previous report, simply indicate so by checking the no box in that section. Once completed, this form should be submitted along with your fee payment. Examples are listed on the first line of each section of the form for your benefit.



REVISED 1/07

FORM D1

FACILITY-WIDE EMISSIONS SUMMARY

| REVISED 12/01/01 NCDENE | A AID DOLLLI | Quality - Applicat | ion for Air Permit | to Construct | /Operate | | D1 |
|--|--------------------|--------------------|-------------------------------|---------------|-----------------------|--------------|--------------------------------------|
| A. CRITERI | A AIR PULLU | TEXPECTED AC | IS INFORMATION TUAL EMISSIONS | N - FACILIT | Y-WIDE | DOTELIE | LEMONA |
| | | (AFTER C | CONTROLS / ATIONS) | (BEFORE | CONTROLS / ATIONS) | (AFTER | L EMISSION: CONTROLS / ATIONS) |
| AIR POLLUTANT EMITTED | | | ns/yr | | ns/yr | | ns/yr |
| PARTICULATE MATTER (PM) | | See Attachmen | | | | | |
| PARTICULATE MATTER < 10 MICRONS (PM | 10) | | | | | | |
| PARTICULATE MATTER < 2.5 MICRONS (PM | 1 _{2.5}) | | | | | | |
| SULFUR DIOXIDE (SO2) | | | | | | | |
| NITROGEN OXIDES (NOx) | | | | | | | |
| CARBON MONOXIDE (CO) | | | | | | | |
| VOLATILE ORGANIC COMPOUNDS (VOC) | | | | Ī | | | |
| LEAD | | | | | | | |
| OTHER | | | | | | | |
| HAZARDO | US AIR POLLU | JTANT EMISSIO | NS INFORMATIO | ON - FACILI | TY-WIDE | No participa | THE PROPERTY |
| | | EXPECTED AC | TUAL EMISSIONS | POTENTIA | EMISSIONS | | L EMISSIONS |
| | | | ONTROLS / | | CONTROLS / | | ONTROLS / |
| | | LIMITA | ATIONS) | LIMITA | ATIONS) | | ATIONS) |
| HAZARDOUS AIR POLLUTANT EMITTED | CAS NO. | to | ns/yr | to | ns/yr | | ns/yr |
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| TOXIC | IR POLLUTAN | NT EMISSIONS | NFORMATION - | FACILITY-V | VIDE CONTRACT | Charles V | AL TOTAL |
| INDICATE REQUESTED ACTUAL EMISSIONS | AFTER CONTR | ROLS / LIMITATION | NS. EMISSIONS A | BOVE THE T | OXIC PERMIT E | MISSION RA | TE (TPER) IN |
| 15A NCAC 2Q .0711 MAY REQUIRE AIR DISP | ERSION MODEL | JNG. USE NETTI | NG FORM D2 IF N | ECESSARY. | | | |
| | | | | | Modeling F | Required? | 1 |
| TOXIC AIR POLLUTANT EMITTED | CAS NO. | lb/hr | lb/day | lb/year | Yes | No | |
| | | See Table 3-3 in | the accompanying | g application | document | | |
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| COMMENTS: | | | | | | | |
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| | Attach Ac | ditional She | ets As Neces | sarv | | | |



FORM D TECHNICAL ANALYSIS TO SUPPORT PERMIT APPLICATION

| DE | EVISED: 12/01/01 NCDENR/Division of Air Quality - Application for Air Permit to Construct/Operate | D5 | | | | |
|------|--|--|--|--|--|--|
| IXE. | PROVIDE DETAILED TECHNICAL CALCULATIONS TO SUPPORT ALL EMISSION, CONTROL, AND REGUL DEMONSTRATIONS MADE IN THIS APPLICATION. INCLUDE A COMPREHENSIVE PROCESS FLOW DIAGRED NECESSARY TO SUPPORT AND CLARIFY CALCULATIONS AND ASSUMPTIONS. ADDRESS THE FOLLOWING SPECIFIC ISSUES ON SEPARALE PAGES: | KAM AS | | | | |
| | SPECIFIC EMISSIONS SOURCE (EMISSION INFORMATION) (FORM B) - SHOW CALCULATIONS USED, INCLUDING EMISSION FACTOR AND/OR OTHER METHODS FROM WHICH THE POLLUTANT EMISSION RATES IN THIS APPLICATION WERE DERIVED. INCLUDE CALC BEFORE AND, WHERE APPLICABLE, AFTER CONTROLS. CLEARLY STATE ANY ASSUMPTIONS MADE AND PROVIDE ANY REFERENCE SUPPORT MATERIAL BALANCE CALCULATIONS. | CES AS NEEDED TO | | | | |
| В | SPECIFIC EMISSION SOURCE (REGULATORY INFORMATION)(FORM E2 - TITLE V ONLY) - PROVIDE AN ANALYSIS OF ANY REGULAT INDIVIDUAL SOURCES AND THE FACILITY AS A WHOLE. INCLUDE A DISCUSSION OUTING METHODS (e.g. FOR TESTING AND/OR MERCUIREMENTS) FOR COMPLYING WITH APPLICABLE REGULATIONS, PARTICULARLY THOSE REGULATIONS LIMITING EMISSIONS RATES OR OTHER OPERATIONAL PARAMETERS. PROVIDE JUSTIFICATION FOR AVOIDANCE OF ANY FEDERAL REGULATIONS (PRESIGNIFICANT DETERIORATION (PSD), NEW SOURCE PERFORMANCE STANDARDS (NSPS), NATIONAL EMISSION STANDARDS FOR EPOLLUTANTS (NESHAPS), TITLE V), INCLUDING EXEMPTIONS FROM THE FEDERAL REGULATIONS WHICH WOULD OTHERWISE BEFACILITY. SUBMIT ANY REQUIRED TO DOCUMENT COMPLIANCE WITH ANY REGULATIONS. INCLUDE EMISSION RATES CALCULAT | EVENTION OF PROCESS EVENTION OF HAZARDOUS AIR APPLICABLE TO THIS | | | | |
| С | CONTROL DEVICE ANALYSIS (FORM C) - PROVIDE A TECHNICAL EVALUATION WITH SUPPORTING REFERENCES FOR ANY CONTRON SECTION C FORMS, OR USED TO REDUCE EMISSION RATES IN CALCULATIONS UNDER ITEM "A" ABOVE. INCLUDE PERTINENT PARAMETERS (e.g. OPERATING CONDITIONS, MANUFACTURING RECOMMENDATIONS, AND PARAMETERS AS APPLIED FOR IN THIS TO ENSURING PROPER PERFORMANCE OF THE CONTROL DEVICES). INCLUDE AND LIMITATIONS OR MALFUNCTION POTENTIAL FOR THE CONTROL DEVICES AS EMPLOYED AT THIS FACILITY. DETAIL PROCEDURES FOR ASSURING PROPER OPERATION OF THE CONTROL DEVICES AS EMPLOYED AT THIS FACILITY. DETAIL PROCEDURES FOR ASSURING PROPER OPERATION OF THE CONTROL | S APPLICATION) CRITICAL FOR THE PARTICULAR | | | | |
| D | PROCESS AND OPERATIONAL COMPLIANCE ANALYSIS - (FORM E3 - TITLE V ONLY) - SHOWING HOW COMPLIANCE WILL BE ACHIE PROCESS, OPERATIONAL, OR OTHER DATA TO DEMONSTRATE COMPLIANCE. REFER TO COMPLIANCE REQUIREMENTS IN THE RE ITEM "B" WHERE APPROPRIATE. LIST ANY CONDITIONS OR PARAMETERS THAT CAN BE MONITORED AND REPORTED TO DEMON | GODALOKI VINVELDIO IIA | | | | |
| E | PROFESSIONAL ENGINEERING SEAL - PURSUANT TO 15A NCAC 2Q .0112 "APPLICATION REQUIRING A PROFESSIONAL ENGINEER REGISTERED IN NORTH CAROLINA SHALL BE REQUIRED TO SEAL TECHNICAL PORTIONS OF THIS A NEW SOURCES AND MODIFICATIONS OF EXISTING SOURCES. (SEE INSTRUCTIONS FOR FURTHER APPLICABILITY). | EERING SEAL," PPLICATION FOR | | | | |
| | In the engineering plans, calculations, and all other supporting documentation to the best of my knowledge. I further attest that to the best of my knowledge the proposed design has been prepared in accordance with the applicable regulations. Although certain portions of this submittal package may have been developed by other professionals, inclusion of these materials under my seal signifies that I have reviewed this material and have judged it to be consistent with the proposed design. Note: In accordance with NC General Statutes 143-215.6A and 143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed \$10,000 as well as civil penalties up to \$25,000 per violation. | | | | | |
| | (PLEASE USE BLUE INK TO COMPLETE THE FOLLOWING) NAME: M. Dale Overcash DATE: COMPANY: Trinity Consultants One Copley Parkway, Suite 310 ADDRESS: TELEPHONE: SIGNATURE: PAGES CERTIFIED: Entire Application PLACEAGRIH CARGLINA SEA SEA- 12627 Morrisville, NC 27560 12627 LE OV. | AL HERE | | | | |
| | (IDENTIFY ABOVE EACH PERMIT FORM AND ATTACHMENT THAT IS BEING CERTIFIED BY THIS SEAL) | | | | | |

FORM D4 EXEMPT AND INSIGNIFICANT ACTIVITIES SUMMARY

| REVISED: 12/01/ NCDENR/Division of Air Quality - Application for Air Permit to Construct/Operate D4 | | | | | | |
|---|--|-------------------------------|--|--|--|--|
| ACTIVITIES EXEMPTED PER 2Q .0102 OR | | | | | | |
| | | | R TITLE V SOURCES | | | |
| DESCRIPTION OF EMISS | | SIZE OR PRODUCTION RATE | BASIS FOR EXEMPTION INSIGNIFICANT ACTIVI | | | |
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FORM E1

TITLE V GENERAL INFORMATION

| REVISED: 12/01/01 | Division of Air Quality - Application for Air P | |
|--|--|--|
| | ACILITY IS CLASSIFIED AS "MAJOR" | FOR TITLE V YOU MUST COMPLETE |
| Indicate here if your facility is sub | eject to Title V by: X Emissions | Other . |
| If subject to Title V by other, chec | ck or specify: 🛭 NSPS 🖟 NESHAF | S (MACT) Ø TITLE IV |
| Other, specify: | | |
| | v maximum achievable control technology sta ify below: EMISSION SOURCE | |
| EMISSION SOURCE ID | DESCRIPTION | MACT |
| ES-EG, ES-FWP | | Subpart ZZZZ |
| - | | · |
| <u> </u> | *************************************** | (= |
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| | | 3————————————————————————————————————— |
| List any additional regulation which | ch are requested to be included in the shield | and provide a detailed explanation as to why |
| the shield should be granted: REGULATION | EMISSION SOURCE (Include ID) | EXPLANATION |
| 40 CFR 63 Subpart DDDD | ES-Dryer | Potential HAP emissions are below major source thresholds. |
| 10 01 11 00 00B an BBBB | 20 51/61 | 7 Storitua 1771 Strassistic are policy major beared threathings. |
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| Comments: | | |

FORM E2

EMISSION SOURCE APPLICABLE REGULATION LISTING

| EMISSION | EMISSION | ODEDATING SCENADIO | or Air Permit to Co | |
|--------------|---------------------------------|-------------------------|---------------------|--|
| EMISSION | EMISSION | OPERATING SCENARIO | | ADDITIONE |
| SOURCE | SOURCE | INDICATE PRIMARY (P) | | APPLICABLE |
| ID NO. | DESCRIPTION | OR ALTERNATIVE (A) | POLLUTANT | REGULATION |
| See attached | d table following Form E3 for a | a summary of regulator) | / requirements | APPLICABLE REGULATION and associated compliance requirements |
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FORM E3 EMISSION SOURCE COMPLIANCE METHOD

| REVISED 12/01/01 | | | ation for Air Pe | rmit to Construct/Operate | | E3 |
|--|---|---------------------|-------------------|---------------------------------|-----------------------|--------|
| | y of regulatory requirements and | Regulate | ed Pollutant | | | |
| | pliance requirements | Applicab | le Regulation | | | |
| | g Scenario (AOS) NO: | | | | | |
| | ATTACH A SEPARATE P | AGE TO EXPAN | ID ON ANY O | THE BELOW COMMENT | S | |
| EDS-MOLES | | MONITORING R | REQUIREMEN | TS | | 16711 |
| Is Compliano | ce Assurance Monitoring (CAM) 40 CFR Part | 64 Applicable? | ₫ Yes | ₫ No | | |
| Describe Mo | M Plan Attached (if applicable, CAM plan mus initoring Device Type: | st be attached)? | | ₫ No | | |
| | nitoring Location: | | | | | |
| Other Monito | oring Methods (Describe In Detail): | | | | | |
| | e frequency and duration of monitoring and he ten to produce an hourly average): | ow the data will be | recorded (i.e., e | very 15 minutes, 1 minute insta | antaneous | |
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| ** | | | | | | |
| | gan darrigerez annerazioneren RE | CORDKEEPING | REQUIREME | NTS | Early (Schalles, Carl | GIN) |
| , | eter) being recording: | * | | | | |
| Frequency of | f recordkeeping (How often is data recorded? | ?): | | | | |
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| N. Flatens | | REPORTING RI | QUIREMENT | S was a f | | 974.01 |
| Generally des | scribe what is being reported: | | | | | |
| | | | | | | |
| | | | | | | |
| - | | | | | | |
| Frequency: | ∮ MONTHLY OTHER (DESCRIBE): | ∂ QUARTE | RL | ♠ EVERY 6 MONTHS | | |
| mals/Allsalijk | 以中国。1915年,1915年,第二年 | TEST | ring - | ally adaption by | 特别的 | E L |
| | ference test method: | - | | | | |
| Specify reference te: Specify testing frequ | st method rule and citation: | ** | | | | |
| | rency: FE - Proposed test method subject to | approval and po | ossible chang | e during the test protocol | process | |
| | | · | _ | | | |

Summary of Title V Applicable Regulations and Compliance Demonstration Procedures Enviva Pellets Ahoskie, LLC

| Emission Source Description and ID No. | Pollutant | Regulation | Monitoring Method/Frequency/Duration | Recordkeeping | Reporting | |
|--|-----------|-------------------|---|---|------------------------------|--|
| Wood-fired dryer system (ID No. ES-DRYER), dried wood day silo (ID No. DWDS), four coarse hammermills (ID Nos. ES-CHM-1, 2, 3, and 4), Hammermill area and Hammermill No.5 (ID No. ES-HAF), pellet mill food silo (ID No. ES-PMFS), and five pellet coolers (ID Nos. ES-CLR 1, 2, 3, 4, and 5), Pellet Fines Bin (ES-PFB), and Finished Product Handling (ES-FPH) | | | Inspections and maintenance, including monthly inspection of ductwork and annual internal inspection of bagfilter integrity | Written or electronic log of date and time of each inspection, results of inspection and maintenance, and variance from manufacturer's recommendation | report and annual compliance | |
| Wood-fired dryer system (ID No. ES-DRYER), dried wood day silo (ID No. DWDS), four coarse hammermills (ID Nos. ES-CHM-I, 2, 3, and 4), Hammermill area and Hammermill No. (ID No. ES-HAF), pellet mill feed silo (ID No. ES-PMFS), and five pellet coolers (ID Nos. ES-CLR I, 2, 3, 4, and 5) Pellet Fines Bin (ES-PFB), and Finished Product Handling (ES-PFB), and Finished Product Handling (ES-PFB). | Opacity | 15A NCAC 2D. 0521 | Monthly visibile observation for "normal." If above normal, correct action or Method 9 observation required | Written or electronic log of date/time/result of each observation, results of each non- compliant observation and actions taken to correct, and results of the corrective action | | |

FORM E4 EMISSION SOURCE COMPLIANCE SCHEDULE

Revised 12/01/01

NCDENR/Division of Air Quality - Application for Air Permit to Construct/Operate

| | | | , , , , | | | | | |
|----|--|-------------------|--|----|--|--|--|--|
| | COMPLIANCE | STATUS WI | TH RESPECT TO ALL APPLICABLE REQUIREMENTS | | | | | |
| | Will each emission source at your factorinue to comply with these requi | facility be in co | ompliance with all applicable requirements at the time of permit issuance a | nd | | | | |
| | | No | If NO, complete A through F below for each requirement for which compliance is not achieved. | | | | | |
| | Will your facility be in compliance w | ith all applica | ble requirements taking effect during the term of the permit and meet such | | | | | |
| | requirements on a timely basis? X Yes No | | If NO, complete A through F below for each requirement for which compliance is not achieved. | | | | | |
| | If this application is for a modification of existing emissions source(s), is each emission source currently in compliance with al | | | | | | | |
| | applicable requirements? X Yes | No | If NO, complete A through F below for each requirement for which compliance is not achieved. | | | | | |
| A. | Emission Source Description (Inclu | de ID NO.) | | | | | | |
| В. | Identify applicable requirement for v | which complia | ance is not achieved: | | | | | |
| | | | | | | | | |
| | | | | _ | | | | |
| | | | | | | | | |
| C. | Narrative description of how compli- | ance will be a | chieved with this applicable requirements: | | | | | |
| | | | | _ | | | | |
| | | | | | | | | |
| D. | Detailed Schedule of Compliance: Step(s) | | Data Function | | | | | |
| | | | Date Expected | | | | | |
| | | | | _ | | | | |
| | | | | _ | | | | |
| | | | | _ | | | | |
| E. | Frequency for submittal of progress | reports (6 mg | onth minimum): | | | | | |
| F. | Starting date of submittal of progres | s reports: | - | _ | | | | |
| | | | | | | | | |

FORM E5

TITLE V COMPLIANCE CERTIFICATION (Required) NCDENR/Division of Air Quality - Application for Air Permit to Construct/Opera

| Revised 0 1/0 1/07 | NCDEMINDIVISION OF AIR QUAINTY - App | ication for Air Permit to Construct | /Operate - | E5 | | |
|---|--|---|---|----|--|--|
| In accordance wit | th the provisions of Title 15A NCAC 20 | .0520 and .0515(b)(4) the r | esponsible company official of: | | | |
| SITE NAME: | Enviva Pellets Ahoskie, LLC | | | | | |
| SITE ADDRESS: | 142 N.C. Route 561 East | | icecel/ed | | | |
| CITY, NC: | Ahoskie, NC | | DEC 10 TO | | | |
| COUNTY: | Hertford | | 200 10 2013 | | | |
| PERMIT NUMBER : | 10121R01 | | AN POTTING Spring | | | |
| X The facility is in In accordance the proposed reflese procedure. The facility is not accordance to the proposed reflese procedure. | k the appropriate statement(s): n compliance with all applicable requirem with the provisions of Title 15A NCAC 20 minor modification meets the criteria for u res he used to process the permit applica not currently in compliance with all applica red, you must also complete form E4 "Emission South | 2 .0515(b)(4) the responsible sing the procedures set out in tion the continuation. | company official certififies that n 2Q .0515 and requests that | | | |
| The undersigned certifies under the penalty of law, that all information and statements provided in the application, based on information and belief formed after reasonable inquiry, are true, accurate, and complete. Signature of responsible company official (REQUIRED, USE BLUE INK) | | | | | | |
| Pete Najera, Vice Presid Name, Title of respon | dent of Operations usible company official (Type or print) | | | | | |

FORM B

SPECIFIC EMISSIONS SOURCE INFORMATION (REQUIRED FOR ALL SOURCES)

| REVISED 12/01/01 NCDENR/Division o | f Air Quality - | Application f | or Air Permit | to Construct | /Operate | | В | |
|---|---------------------|------------------|------------------------|-------------------|-------------------|-------------------------|--------------------|--|
| EMISSION SOURCE DESCRIPTION: | | | | | | ES-FPH, ES-PB1 thru 12, | | |
| Finished Product Handling/ Pellet Loadout Bins / Pellet Lo | adout | | EMISSION SOURCE ID NO: | | | ES-PL1 and 2 | | |
| | | | - | DEVICE ID NO | | CD-FPH-BF | | |
| OPERATING SCENARIO 1 OF | 1 | | EMISSION P | POINT (STACE | () ID NO(S): | EP-13 | | |
| DESCRIBE IN DETAILTHE EMISSION SOURCE PROCESS ES-FPH: Collection of transfer points, pellet screening op | erations, and | pellet convey | ing. | | | | | |
| ES-PB: Pellet loadout bins are used to store pellets for shi | ipping. Pellet: | s are then loa | ided from the | bins directly | r into trucks in | n either of the | two pellet | |
| loadout areas. ES-PL: Final product is loaded into trucks in either of the t | wo (2) pellet l | oadouts. The | e trucks are f | illed directly t | from the pelie | t loadout bins | 5. | |
| TYPE OF EMISSION SOURCE (CHECK A | ND COMPLET | E APPROPR | IATE FORM E | 31-B9 ON THE | E FOLLOWING | PAGES): | | |
| Coal,wood,oii, gas, other burner (Form B1) Woodwo | rking (Form B4 | 1) | | t. of chemicals | coatings/inks | (Form B7) | | |
| ☐ Int.combustion engine/generator (Form B2) ☐ Coating/ | finishing/printin | g (Form B5) | ☐ Incinerat | ion (Form B8) | | | | |
| | ilos/bins (Form | • • • | Other (Fe | | | | | |
| START CONSTRUCTION DATE: TBD OPERATION | | | DATE MANU | | | TBD | | |
| MANUFACTURER / MODEL NO.: TBD | | | | LE: 24 HR | /DAY 7 | | 2 WK/YR | |
| IS THIS SOURCE SUBJECT TO? NSPS (SUBPART?): | | AP (SUBPAR | | | SUBPART?):_ | D. (1) (1) (1) | 7717711 | |
| | 25% MAR-N | | JUN-AUG | | SEP-NOV | 25% | | |
| | VISIBLE STA | | | | | | CITY | |
| CRITERIA AIR POLLUTA | | | | | | | | |
| | SOURCE OF | | D ACTUAL | | | L EMSSIONS | | |
| | EMISSION | (AFTER CONT | ROLS / LIMITS) | (BEFORE CON | TROLS / LIMITS) | (AFTER CON | TROLS / LIMITS) | |
| AIR POLLUTANT EMITTED | FACTOR | lb/hr | tons/yr | lb/hr | tons/yr | lb/hr | tons/yr | |
| PARTICULATE MATTER (PM) | See Emission | n Calculation | s in Attachm | ent | | | | |
| PARTICULATE MATTER<10 MICRONS (PM ₁₀) | | | | | | | | |
| PARTICULATE MATTER<2.5 MICRONS (PM2.5) | | | | | | | | |
| SULFUR DIOXIDE (SO2) | | | | | | | | |
| NITROGEN OXIDES (NOx) | | | | | | | | |
| CARBON MONOXIDE (CO) | | | | | | | | |
| VOLATILE ORGANIC COMPOUNDS (VOC) | | | | | | | | |
| LEAD | | | | | | | | |
| OTHER | | | | | | | | |
| HAZARDOUS AIR POLLU | TANT EMIS | SIONS INF | ORMATIC | N FOR TH | IS SOURCE | 920438 64 | ATTORNA I I | |
| | SOURCE OF | EXPECTE | D ACTUAL | | POTENTIAL | LEMSSIONS | | |
| | EMISSION | (AFTER CONTI | ROLS / LIMITS) | (BEFORE CONT | TROLS / LIMITS) | (AFTER CONT | TROLS / LIMITS) | |
| HAZARDOUS AIR POLLUTANT AND CAS NO. | FACTOR | lb/hr | tons/yr | lb/hr | tons/yr | lb/hr | tons/yr | |
| N/A | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| TO///O 4/5 50/4 UT41 | IT-FIMORIO | NO WEAR | III TOU | | 0.110.00 | | | |
| TOXIC AIR POLLUTAN | | | | | | DESIGNATION | N //pasions let | |
| INDICATE EXPECTED | | | | | | | , | |
| TOXIC AIR POLLUTANT AND CAS NO. | EF SOURCE | lb/ | 'hr | lb/e | day | - It | o/yr | |
| N/A | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Attachments (4) emissions coloulations and outproduce described | (2) indicate of re | accorded state - | and Santanal a -5- | saabla saas 2 C | - No. 10 m. house | | lantan antan karat | |
| Attachments: (1) emissions calculations and supporting documentation; describe how these are monitored and with what frequency; and (3) des | (z) indicate all re | ring devices co | mu rederal entor | reable permit lif | mus (e.g. nours c | operation, em | ission rates) and | |
| describe now trees are monitored and with what frequency; and (5) des | Cribe any monito | ang devices, ga | uges, or lest po | THE POLICE | DA FARA | FOR FAO | U COUDOE | |

COMPLETE THIS FORM AND COMPLETE AND ATTACH APPROPRIATE BT THROUGH B9 FORM FOR EACH SOURCE
Attach Additional Sheets As Necessary

FORM B9 EMISSION SOURCE (OTHER)

| REVISED: 12/01/01 NCDENR/Division of Air Quality | y - Application | for Air Permit to Construct/Operate | | B9 |
|--|-----------------|-------------------------------------|----------------|------------------|
| EMISSION SOURCE DESCRIPTION: Finished Product Handl | | EMISSION SOURCE ID NO: E | S-FPH | |
| CONTROL DEVICE ID NO(S): CD-FPH-BF | | | | |
| OPERATING SCENARIO: 1 OF 1 | | EMISSION POINT (STACK) ID NO(S |): EP-13 | |
| DESCRIBE IN DETAIL THE PROCESS (ATTACH FLOW DIAGRAM): | | | | |
| Collection of transfer points, pellet screening operations, and | pellet convey | ring. | | |
| Controlled transfer points, poner concounting operations, and | | • | | |
| | | | | |
| | | | | |
| MATERIALS ENTERING PROCESS - CONTINUOUS PROCE | SS | MAX. DESIGN | REQUESTED | |
| TYPE | UNITS | CAPACITY (UNIT/HR) | LIMITATION | UNIT/HR) |
| Dried Wood | Tons | 48 tons per hour | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| MATERIAL O CHIERING PROCESS. DATOU ORCRATIO | N | MAX. DESIGN | REQUESTED | CAPACITY |
| MATERIALS ENTERING PROCESS - BATCH OPERATIO | UNITS | CAPACITY (UNIT/BATCH) | LIMITATION (U | |
| TYPE | UNITS | CAPACIT (UNITIDATOR) | LIMITATION | THE STATE OF THE |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| MAXIMUM DESIGN (BATCHES / HOUR): | | | | |
| REQUESTED LIMITATION (BATCHES / HOUR): | (BATCHES/Y | | | |
| FUEL USED: N/A | TOTAL MAXI | MUM FIRING RATE (MILLION BTU/H | R): N/A | |
| MAX. CAPACITY HOURLY FUEL USE: N/A REQUESTED CAPACITY ANNUAL FUEL USE: | | | N/A | |
| COMMENTS: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Attach Addit | ional Shor | ts as Necessary | | |
| Attach Addit | ional silee | ilo ao inecessai y | | |

FORM B6 EMISSION SOURCE (STORAGE SILO/BINS)

| REVISED 12/01/01 | NCDENR/DIV | ision of Air Qual | ity - Application | on for Air Permit to Co | nstruct/Operate | | B6 |
|--|---------------------|----------------------------|-------------------|------------------------------|-----------------------------|------------------|----------|
| EMISSION SOURCE DESCRIPTION: Pelle | | llet Loadout Bins | | EMISSION SOURCE ID NO: ES-PB | | | |
| | | | | CONTROL DE | VICE ID NO(S): | CD-FPH-BF | |
| OPERATING SCENARIO: | 1111 | OF | 1 | EMISSION PO | INT(STACK) ID NO(S): | EP-1: | 3 |
| DESCRIBE IN DETAIL THE P Pellet loadout bins as loadout areas. | , | , | ellets are ther | l loaded from the bins | directly into trucks in eit | her of the two p | ellet |
| MATERIAL STORED: Pell | et Product | | | DENSITY OF MATER | IAI (I B/FT3): | 10 | |
| CAPACITY | CUBIC FEET: | | TONS: | | | | |
| DIMENSIONS (FEET) | HEIGHT: | DIAMETER: | 12 (OR) | LENGTH: | WIDTH: HEIGH | rr. | |
| ANNUAL PRODUCT THE | | ACTUAL: | , , | | SIGN CAPACITY: | 48 tph | |
| PNEUMATICALLY I | | | HANICALLY F | ILLED | | D FROM | ATTENDED |
| BLOWER | 9 | SCREW CONV | | | RAILCAR | | |
| OTHER: | 9 | BELT CONVEY BUCKET ELEV | OR | MOTOR HP: | d TRUCK d STORAGE PILE | | |
| NO EN L'ELEC | | OTHER: | | | OTHER: | Conveyor | |
| NO. FILL TUBES: | | | | | | | |
| MAXIMUM ACFM: 750 MATERIAL IS FILLED TO: | each | | | | | | |
| BY WHAT METHOD IS MATE | RIAL UNLOADED FROM | M SILO? | | | | | |
| MAXIMUM DESIGN FILLING F | RATE OF MATERIAL (T | ONS/HR): | | | | | |
| MAXIMUM DESIGN UNLOADI | NG RATE OF MATERIA | L (TONS/HR): | | | | | |
| COMMENTS: | | | | | | | |
| | | | | | | | |

FORM B9 EMISSION SOURCE (OTHER)

| | | for Air Permit to Construct/Operat | е В9 | |
|---|---|---------------------------------------|---|--|
| MISSION SOURCE DESCRIPTION: Pellet Loadout EMISSION SOURCE ID NO: ES-F | | | ES-PL | |
| | | CONTROL DEVICE ID NO(S): | CD-FPH-BF | |
| OPERATING SCENARIO: 1 OF 1 | | EMISSION POINT (STACK) ID NO(S | S): EP-13 | |
| DESCRIBE IN DETAIL THE PROCESS (ATTACH FLOW DIAGRAM): Final product is loaded into trucks in either of the two (2) pell bins. | et loadouts. T | he trucks are filled directly from th | e pellet loadout | |
| MATERIALS ENTERING PROCESS - CONTINUOUS PROCE | SS MARKET | MAX. DESIGN | REQUESTED CAPACITY | |
| TYPE | UNITS | CAPACITY (CFM) | LIMITATION(UNIT/HR) | |
| Dried Wood | CFM | 35,500 | | |
| MATERIALS ENTERING PROCESS - BATCH OPERATIO TYPE | Nesses execution of the Units | MAX. DESIGN CAPACITY (UNIT/BATCH) | REQUESTED CAPACITY LIMITATION (UNIT/BATCH) | |
| | | | | |
| MAXIMUM DESIGN (BATCHES / HOUR): | | | | |
| REQUESTED LIMITATION (BATCHES / HOUR): | (BATCHES/Y | | | |
| FUEL USED: N/A | TOTAL MAXIMUM FIRING RATE (MILLION BTU/HR): N/A | | | |
| MAX. CAPACITY HOURLY FUEL USE: N/A | REQUESTED CAPACITY ANNUAL FUEL USE: N/A | | | |
| COMMENTS: | | | | |

| REVISED 12/01/01 NCDENR/Division of Air Quality CONTROL DEVICE ID NO: CD-FBH-BF CONTROLS EMI | SSIONS FROM WHICH EMISS RIES OF CONTROLS MODEL NO: 13.5 RA PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | O Construct/Operate SION SOURCE ID NO(S): NO AW 268-10 DATE: 3/1/2014 TRUCTION DATE: R 20 .0112)? 4 | TBD YES 0 | I UNITS |
|--|--|---|-------------------|---------------------|
| REVISED 12/01/01 NCDENR/Division of Air Quality CONTROL DEVICE ID NO: CD-FBH-BF CONTROLS EMIS EMISSION POINT (STACK) ID NO(S): EP-13 POSITION IN SE MANUFACTURER: Aircon DATE MANUFACTURED: TBD OPERATING SCENARIO: 1 OF 1 DESCRIBE CONTROL SYSTEM: This bagfilter will be utilized to control particulate form the finished product handling | - Application for Air Permit to SSIONS FROM WHICH EMISS RIES OF CONTROLS MODEL NO: 13.5 RA PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | O Construct/Operate SION SOURCE ID NO(S): NO AW 268-10 DATE: 3/1/2014 TRUCTION DATE: R 20 .0112)? 4 | TBD YES | B, ES-PL I UNITS |
| CONTROL DEVICE ID NO: CD-FBH-BF CONTROLS EMIS EMISSION POINT (STACK) ID NO(S): EP-13 POSITION IN SE MANUFACTURER: Aircon DATE MANUFACTURED: TBD OPERATING SCENARIO: 1 OF 1 DESCRIBE CONTROL SYSTEM: This bagfilter will be utilized to control particulate form the finished product handling | SSIONS FROM WHICH EMISS RIES OF CONTROLS MODEL NO: 13.5 RA PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | SION SOURCE ID NO(S): NO AW 268-10 DATE: 3/1/2014 TRUCTION DATE: R 2Q .0112)? 4 | TBD YES | B, ES-PL I UNITS |
| EMISSION POINT (STACK) ID NO(S): EP-13 POSITION IN SE | RIES OF CONTROLS MODEL NO: 13.5 RA PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | NO AW 268-10 DATE: 3/1/2014 TRUCTION DATE: R 2Q .0112)? | TBD YES | I UNITS |
| EMISSION POINT (STACK) ID NO(S): EP-13 POSITION IN SE | RIES OF CONTROLS MODEL NO: 13.5 RA PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | NO AW 268-10 DATE: 3/1/2014 TRUCTION DATE: R 2Q .0112)? | TBD YES | I UNITS |
| MANUFACTURER: Aircon DATE MANUFACTURED: TBD OPERATING SCENARIO: | MODEL NO: 13.5 RAPPROPOSED OPERATION D PROPOSED START CONST | AW 268-10 NATE: 3/1/2014 TRUCTION DATE: 2 QQ .0112)? | TBD YES 0 | ł NO |
| DATE MANUFACTURED: TBD OPERATING SCENARIO: 1 OF 1 DESCRIBE CONTROL SYSTEM: This bagfilter will be utilized to control particulate form the finished product handling | PROPOSED OPERATION D PROPOSED START CONST P.E. SEAL REQUIRED (PER | DATE: 3/1/2014 TRUCTION DATE: R 2Q .0112)? | YES d | |
| OPERATING SCENARIO: | PROPOSED START CONST | TRUCTION DATE: R 2Q .0112)? | YES d | |
| | P.E. SEAL REQUIRED (PER | R 2Q .0112)? | YES d | |
| DESCRIBE CONTROL SYSTEM: This bagfilter will be utilized to control particulate form the finished product handling | | | | |
| This bagfilter will be utilized to control particulate form the finished product handling | pellet conveyers and screen | ns as well as the pellet load | d out operation (| consisting of |
| | pellet conveyers and screen | is as well as the pellet load | dout operation (| consisting of |
| | | | | |
| POLLUTANT(\$) COLLECTED: | PM PM- | -10 PM-2.5 | | |
| BEFORE CONTROL EMISSION RATE (LB/HR): | See calculations in Append | (ix B | | _ |
| CAPTURE EFFICIENCY: | -99.9 % | ~99.9 % ~99.9 | % | % |
| CONTROL DEVICE EFFICIENCY: | % | % | - <u></u> | - % |
| | - | | | - " |
| CORRESPONDING OVERALL EFFICIENCY: | % | | -% | - % |
| EFFICIENCY DETERMINATION CODE: | | i | | - |
| TOTAL EMISSION RATE (LB/HR): | See calculations in Append | lix B | | н |
| PRESSURE DROP (IN. H₂0): MIN: MAX: 6" GAUGE | YES I NO | WARNING ALARM? | YES | NO |
| BULK PARTICLE DENSITY (LB/FT³): 1.43E-06 | INLET TEMPERATURE (°F): | 120 | | |
| POLLUTANT LOADING RATE: 0.01 d LB/HR €GR/FT®) | OUTLET TEMPERATURE (° | °F): 100 | | |
| INLET AIR FLOW RATE (ACFM): 35,500 | FILTER MAX OPERATING T | EMP. (°F): N/A | | |
| NO. OF COMPARTMENTS: 1 NO. OF BAGS PER COMPARTM | ENT: | LENGTH OF BAG (| IN.): 144 | |
| DIAMETER OF BAG (IN.): 5.75 DRAFT: ₺ INDUCED/NE | G. FORCED/POS | FILTER SURFACE | | 4,842 |
| AIR TO CLOTH RATIO: 7.30 FILTER MATERIAL: Polyester o | r equivalent | # WOVEN | FELTE | |
| DESCRIBE CLEANING PROCEDURES: | | | LE SIZE DISTRIE | |
| ₫ AIR PULSE ₫ SONIC | | SIZE | WEIGHT % | CUMULATIVE |
| REVERSE FLOW SIMPLE BAG | COLLAPSE | (MICRONS) | OF TOTAL | % |
| | OLLAPSE | 0-1 | Unk | nown |
| ð OTHER | | 1-10 | | |
| DESCRIBE INCOMING AIR STREAM: | | 10-25 | | |
| The air stream will contain wood dust particles. | | 25-50 | | |
| | | 50-100 | | |
| | | >100 | | |
| | | | TOTA | AL = 100 |
| METHOD FOR DETERMINING WHEN TO CLEAN: | | | | |
| AUTOMATIO d MANUAL | | | | |
| METHOD FOR DETERMINING WHEN TO REPLACE THE BAGS: | | | | |
| # ALARM # INTERNAL INSPECTION # VISIBLE EMIS | SION & OTHER | | _ | |
| SPECIAL CONDITIONS: None | A OTHER | | | |
| MOISTURE BLINDING | ♦ OTHER | | | |
| EXPLAIN: DESCRIBE MAINTENANCE PROCEDURES: Per manufacturer recommendations | | | | |
| DESCRIBE WAIN LENANCE PROCEDURES: Fer manufacturer recommendations | | | | |
| | | | | |
| | | | | |
| ON A SEPARATE PAGE, ATTACH A DIAGRAM SHOWING THE RELATIONSHIP OF TH | | | | |

Attach Additional Sheets As Necessary

¹Final equipment selection has not yet occurred but will be similar in design to specifications shown.

FORM B

SPECIFIC EMISSIONS SOURCE INFORMATION (REQUIRED FOR ALL SOURCES)

| REVISED 12/01/01 NCDENR/Division o | f Air Quality - / | Application f | or Air Permit | to Construct | Operate | , | В |
|---|-----------------------|-----------------|------------------|-------------------|--------------------|---|--------------------|
| EMISSION SOURCE DESCRIPTION: | | | EMISSION S | OURCE ID NO | O: | ES-PFB | |
| Pellet Fines Bin | | | CONTROL D | EVICE ID NO | (S): | CD-PFB-BV | |
| OPERATING SCENARIO 1 OF | 1 | | EMISSION P | OINT (STACK |) ID NO(S): | EP-12 | |
| DESCRIBE IN DETAILTHE EMISSION SOURCE PROCESS | (ATTACH FLC | W DIAGRAM | i): | | | | |
| Fine pellet material from hammermill pollution control sys | stem and scree | ening operati | on is collecte | ed in the pelle | et fines bin w | hich is contr | olled by a |
| bin vent filter. | | | | | | | |
| | | | | | | | |
| TYPE OF EMISSION SOURCE (CHECK A | ND COMPLETE | APPROPRI | ATE FORM B | 1-B9 ON THE | FOLLOWING | PAGES): | |
| Coal,wood,oil, gas, other burner (Form B1) Woodwo | orking (Form B4 | 1) | | t. of chemicals | s/coatings/inks | (Form B7) | |
| Int.combustion engine/generator (Form B2) Coating/ | finishing/printin | g (Form B5) | Incinerat | ion (Form B8) | | | |
| ☐ Liquid storage tanks (Form B3) ■ Storage | silos/bins (Forr | n B6) | Other (F | orm B9) | | | |
| START CONSTRUCTION DATE: TBD OPERATION | N DATE: | 3/1/2014 | DATE MANU | FACTURED: | | TBD | |
| MANUFACTURER / MODEL NO.: TBD | | EXPECTED | OP. SCHEDU | LE: 24 HR | DAY 7 | DAY/WK 5 | 2 WK/YR |
| IS THIS SOURCE SUBJECT TO? NSPS (SUBPART?): | NESH | AP (SUBPAR | T?): | · MACT (| SUBPART?): | | |
| PERCENTAGE ANNUAL THROUGHPUT (%): DEC-FEB | 25% MAR-N | 1AY 25% | JUN-AUG | 25% | SEP-NOV | 25% | |
| EXPECTED ANNUAL HOURS OF OPERATION 8,760 | VISIBLE STA | CK EMISSION | NS UNDER N | ORMAL OPER | RATION: <2 | | CITY |
| CRITERIA AIR POLLUTA | ANT EMISSI | ONS INFO | RMATION | FOR THIS | SOURCE | are Verification | |
| | SOURCE OF | EXPECTE | D ACTUAL | | POTENTIAL | EMSSIONS | |
| | EMISSION | (AFTER CONT | ROLS / LIMITS) | (BEFORE CON | TROLS / LIMITS) | (AFTER CONT | ROLS / LIMITS) |
| AIR POLLUTANT EMITTED | FACTOR | lb/hr | tons/yr | lb/hr | tons/yr | lb/hr | tons/yr |
| PARTICULATE MATTER (PM) | See Emission | 1 Calculation | s in Attachm | ent | | | |
| PARTICULATE MATTER<10 MICRONS (PM10) | | | | | | | |
| PARTICULATE MATTER<2.5 MICRONS (PM _{2.5}) | | | | | | | |
| SULFUR DIOXIDE (SO2) | | | | | | | |
| NITROGEN OXIDES (NOx) | | | | | | | |
| CARBON MONOXIDE (CO) | | | | | | | |
| VOLATILE ORGANIC COMPOUNDS (VOC) | | | | | | | |
| LEAD | | | | | | | |
| OTHER | 1 | 010110 1115 | OBLICTIO | LI FOR THE | 0.0011005 | 2 - 4 A L L C O D | DECEMBER OF STREET |
| HAZARDOUS AIR POLLU | | | | NFORTHI | SSOURCE | . W. 184 8. | HERVINE HA |
| | SOURCE OF | | D ACTUAL | | | EMSSIONS | |
| l | EMISSION | | ROLS / LIMITS) | | TROLS / LIMITS) | | ROLS / LIMITS) |
| HAZARDOUS AIR POLLUTANT AND CAS NO. | FACTOR | lb/hr | tons/yr | lb/hr | tons/yr | lb/hr | tons/yr |
| N/A | | | | | | | |
| | . | | | | | | |
| | | | | | | | |
| | 1 | | | | | | |
| | 4 | | | | - | | - |
| | + | | | | | | - |
| | 1 | | | | | | |
| TOXIC AIR POLLUTAN | IT EMISSIO | NS INFOR | MATION F | OR THIS S | OURCE | (和) 头。第 | all D.S. ROULE |
| INDICATE EXPECTED | ACTUAL EMIS | SIONS AFTE | R CONTROL | S/LIMITATIO | NS | 400 to 100 to | 100 107 07 107 107 |
| TOXIC AIR POLLUTANT AND CAS NO. | IEF SOURCE | | /hr | | day | li li | o/yr |
| N/A | El COGINGE | - 12 | 7111 | 10, | uuy | | |
| | 1 | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| Attachments: (1) emissions calculations and supporting documentation | ; (2) indicate all re | quested state a | nd federal enfor | ceable permit lim | its (e.g. hours of | f operation, emis | sion rates) and |
| describe how these are monitored and with what frequency; and (3) des | | | | | | | |

COMPLETE THIS FORM AND COMPLETE AND ATTACH APPROPRIATE B1 THROUGH B9 FORM FOR EACH SOURCE

Attach Additional Sheets As Necessary

FORM B6 EMISSION SOURCE (STORAGE SILO/BINS)

| REVISED 12/01/01 | NCDENR | VDivision of Air Qua | lity - Application | on for Air Permit to Co | onstruct/C | perate | | B6 |
|---|----------------|----------------------|--------------------------|-------------------------|--|-------------------|------------------|------------|
| EMISSION SOURCE DESCRIPTION: Pellet Fines Bin | | | EMISSION SOURCE ID NO: | | | ES-PFB | | |
| | | | CONTROL DEVICE ID NO(S): | | | CD-PFB-BV | | |
| OPERATING SCENARIO: 1 OF 1 | | | EMISSION PO | OINT(STA | CK) ID NO(S): | EP-12 | | |
| DESCRIBE IN DETAIL THE PRO | | | em and screer | ning operation is colle | ected in th | e pellet fines bi | n which is contr | olled by a |
| bin vent filter. | | | | | | | | |
| MATERIAL STORED: Fine p | ellet material | | | DENSITY OF MATER | RIAL (LB/F | T3): | 40 | |
| CAPACITY | CUBIC FEET: | 2200 | | TONS: | - | | | |
| DIMENSIONS (FEET) | HEIGHT: | DIAMETER: | 12 (OR) | | WIDTH: | | HT: | |
| ANNUAL PRODUCT THRO | | ACTUAL: | | MAXIMUM DI | ESIGN CA | | TO FROM | TENETE IN |
| PNEUMATICALLY FI | LLED | | CHANICALLY F | ILLED | SELECTION OF SELEC | ₩ Y NEW FILL | ED FROM . · | 相同性語言用 |
| | | SCREW CON | | | - 0 | RAILCAR | | |
| d COMPRESSOR | | ₫ BELT CONVE | | MOTOR HP: | 9 | TRUCK | _ | |
| e OTHER: | | BUCKET ELE | VATOR | | _ | STORAGE PILE | | |
| | | OTHER: | | | | OTHER: | Conveyor | |
| NO. FILL TUBES: | | | | | | | | |
| MAXIMUM ACFM: | | | | | | | | |
| MATERIAL IS FILLED TO: | | | | | | | | |
| BY WHAT METHOD IS MATER MAXIMUM DESIGN FILLING R | | | | | | | | |
| | | | | | | | | |
| MAXIMUM DESIGN UNLOADIN COMMENTS: | IG RATE OF MA | TERIAL (TONS/HR): | | | | | | |
| | | | | | | | | |
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FORM C1 CONTROL DEVICE (FABRIC FILTER)

| REVISED 12/01/01 | NCDENR/Division of Air Qualit | ty - Application for Air P | ermit to Cons | struct/Operate | | - (|
|--|--------------------------------------|----------------------------|------------------|-------------------|----------------|----------|
| CONTROL DEVICE ID NO: | CD-FB-BC CONTROLS EMISSI | ONS FROM WHICH EMI | SSION SOUR | | ES-FB | |
| EMISSION POINT (STACK) ID NO(S): | TBD POSITION IN SERIE | S OF CONTROLS | | NO. | 1 OF 11 | JNITS |
| MANUFACTURER: Aircon | | MODEL NO: 36- | | | | |
| DATE MANUFACTURED: TBD | | PROPOSED OPERATION | | 3/1/2014 | TOD. | |
| OPERATING SCE | NARIO: | PROPOSED START CO | | | TBD ∕ES & N | 10 |
| 1OF1_ | | P.E. SEAL REQUIRED | (PER 2Q .011. | 2)? 6 | LEO & IA | |
| DESCRIBE CONTROL SYSTEM: A bin vent filter collects dust from whe | en wood enters or exits the silo and | displaces air. | | | | |
| POLLUTANT(S) COLLECTED: | | PM | PM ₁₀ | PM _{2.5} | | |
| BEFORE CONTROL EMISSION RATE (LB/HR): | : | See calculations in Ap | pendix B | | | |
| CAPTURE EFFICIENCY: | | -99 % | ~99 | % ~99 | % | % |
| CONTROL DEVICE EFFICIENCY: | | % | | % | % | % |
| CORRESPONDING OVERALL EFFICIENCY: | | % | | % | % | % |
| EFFICIENCY DETERMINATION CODE: | | | | | | |
| TOTAL EMISSION RATE (LB/HR): | | See calculations in Ap | pendix B | | | |
| PRESSURE DROP (IN. H ₂ 0): MIN: TBD M | MAX: TBD GAUGE? | d YES & NO | O WAF | RNING ALARM? | d YES d NO | |
| BULK PARTICLE DENSITY (LB/FT3): | 3.14E-06 | INLET TEMPERATURE | E(°F): Aml | olent | | |
| POLLUTANT LOADING RATE: 0.022 | d LB/HR GR/FT | OUTLET TEMPERATU | RE (°F): Ami | olent | | |
| INLET AIR FLOW RATE (ACFM): | 3,600 | FILTER MAX OPERATI | | | | |
| NO. OF COMPARTMENTS TBD NO |), OF BAGS PER COMPARTMENT: | TBD | | LENGTH OF BAG (| | |
| 30 1112 1211 31 31 31 31 | RAFT: 0 (NDUCEDDIEG. | . # FORCED/POS | 6. | FILTER SURFACE | | 325 |
| 1.00 | TER MATERIAL: | | | | | BUTION |
| DESCRIBE CLEANING PROCEDURES: | ₫ SONIC | | | SIZE | WEIGHT % | CUMULATI |
| AIR PULSE | OLLAPSE | | (MICRONS) | OF TOTAL | % | |
| REVERSE FLOW | LLAPSE | | 0-1 | | | |
| MECHANICAL/SHAKER | ELAPSE | | 1-10 | | | |
| 6 OTHER | | | | 10-25 | | |
| DESCRIBE INCOMING AIR STREAM: | AP. | | | 25-50 | | |
| The air stream will contain wood dust particle | ua . | | | 50-100 | | |
| | | | | >100 | | |
| | | | | | TOTA | AL = 100 |
| METHOD FOR DETERMINING WHEN TO CLE | EAN: | | | | | |
| AUTOMATIC & TIMED & | MANUAL | | | | | |
| METHOD FOR DETERMINING WHEN TO REL | | ION & OTHER | | | | |
| ALARM SPECIAL CONDITIONS: | PERTION & VISIBLE EMISS | ION TOTHER | | | V | |
| | MICAL RESISTIVITY | ₫ OTHER | | | | |
| DESCRIBE MAINTENANCE PROCEDURES: | | | | | | |
| Per manufacturer recommendations or commendations | mon industry practices. | | | | | |
| ¥ | | | | | | |
| | | | | | | |
| ON A SEPARATE PAGE, ATTACH A DIAGRAI | M SHOWING THE RELATIONSHIP C | OF THE CONTROL DEVI | CE TO ITS EA | ISSION SOURCE(| 5); | |
| | 844 | nol Chaste Ac No. | COCCORI | | | |

ATTACHMENT 3

LOCAL ZONING DETERMINATION REQUEST

Zoning Consistency Determination

| Facility Name | Enviva Pellets Ahoskie, LLC | | | | | |
|---|--|--|--|--|--|--|
| Facility Street Address | 142 N.C. Rt. 561 East | | | | | |
| Facility City Ahoskie, NC | | | | | | |
| Description of Process | Plant will produce pelletized wood | | | | | |
| SIC/NAICS Code 2499 (Wood Products, Not Elsewhere Classified) | | | | | | |
| Facility Contact | Joe Harrell | | | | | |
| Phone Number | (252) 209-6032 | | | | | |
| Mailing Address | Same as facility | | | | | |
| Mailing City, State Zip | | | | | | |
| Based on the information given al | pove: | | | | | |
| | air permit application (draft or final) AND | | | | | |
| | | | | | | |
| There are no applicable zoning ordinances for this facility at this time | | | | | | |
| The proposed operation IS consistent with applicable zoning ordinances | | | | | | |
| The proposed operation IS NOT consistent with applicable zoning ordinances | | | | | | |
| | the rules in the package sent to the air quality office) | | | | | |
| The determination is pending further information and can not be made at this time | | | | | | |
| Cother: | | | | | | |
| | | | | | | |
| Aganax | | | | | | |
| Agency | | | | | | |
| Name of Designated Official | | | | | | |
| Title of Designated Official | | | | | | |
| Signature | | | | | | |
| Date | | | | | | |
| Please forward to the facility mai | ling address listed above and the air quality office | | | | | |

Courtesy of the Small Business Environmental Assistance Program toll free at 1-877-623-6748 or on the web at www.envhelp.org/sb



One Copley Parkway, Suite 310, Morrisville, North Carolina 27560 U.S.A. = (919) 462-9693 = Fax (919) 462-9694

December 6, 2013

Mr. Charles Hammond
Planning and Zoning Director
Town of Ahoskie Planning and Zoning
201 West Main Street
Ahoskie, NC 27910

Subject:

Air Permit Application Zoning Consistency Determination Request

Enviva Pellets Ahoskie, LLC

Dear Mr. Hammond,

This letter is a request for a determination of whether planned installation for the addition of one fines bin with bin vent filter control device for particulate matter (PM) control; and the addition of a finished product handling bagfilter (CD-FPH-BF) that will control existing emissions from a collection of transfer points, the pellet loadout bins, and truck pellet loadout operations is consistent with current local zoning requirements. A copy of the air permit application being submitted to the North Carolina Division of Air Quality (NCDAQ) is attached.

Your confirmation of zoning consistency is needed by the NCDAQ prior to issuance of the air quality construction permit. Please complete the attached form and send to the address shown on the form as soon as possible. In the interim, we would appreciate it if you would stamp this cover letter with your department's seal, sign and date next to your seal and return the sealed cover letter via FAX to my attention at (919) 462-9694. This stamp is needed to be considered administratively complete by the NC Division of Air Quality. Should you require additional information to complete your review, please do not hesitate to contact me at (919) 462-9693.

Sincerely,

Dale Overcash, PE Principal Consultant

Attachments