

Enviva Pellets Hamlet, LLC  
Hearing Officer's Report and Recommendations

Virtual Public Hearing  
June 28, 2021

Public Comment Period: May 29, 2021 through June 30, 2021

Pertaining to Permit Application Nos. 7700096.20B and 7700096.20C  
and draft Air Permit No. 10635R06 for:

Enviva Pellets Hamlet, LLC  
1125 North NC Highway 177  
Hamlet, NC, Richmond County  
Facility ID No. 7700096  
Fee Class: Title V  
PSD Class: Minor

Hearing Officer  
Jennifer Womick, Environmental Engineer, Mooresville Regional Office

## **I. Background**

Enviva Pellets Hamlet, LLC (Enviva) is a wood pellet manufacturing facility located at 1125 North NC Highway 177 in Hamlet, North Carolina, which is currently operating under permit No. 10365R05, issued on July 20, 2020. Enviva produces wood pellets using the following process equipment: Log Debarker, Log Chipper, Bark Hog, Green Wood Hammermills, Rotary Dryer, Dry Hammermills, Pellet Presses and Coolers, Product Loadout operations and other equipment. The facility is permitted to produce up to 625,011 oven-dried tons (ODT) per year of wood pellets utilizing up to 85% softwood on a 12-month rolling basis.

The initial permit for construction of the Enviva facility was issued on March 29, 2016, as a Title V and a major source under Prevention of Significant Deterioration (PSD). On July 20, 2020, the facility was issued permit No. 10365R05, which authorized the construction of additional control equipment to classify the facility as a minor source under PSD.

## **II. Air Quality Permit Application and Review**

DAQ's mission is to work with the state's citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health and benefit of all. To accomplish this mission, DAQ requires industrial facilities to apply for and receive air quality permits prior to construction and operation or modification of the air pollution sources to ensure compliance with all applicable federal and state regulations.

On July 24, 2020, the North Carolina Department of Environmental Quality (NC DEQ), Division of Air Quality (DAQ) received Enviva's first time Title V air quality permit application (App. No. 7700096.20B). The facility commenced operation on July 24, 2019, and therefore, the application for the first time Title V permit was submitted within 12 months of commencing initial operation as required.

On November 25, 2020, DAQ received an air quality permit application (App. No. 7700096.20C) for renewal of Permit No. 10365R05 with requested modifications. Enviva also provided verification by the Planning Director of Richmond County that the requested modifications are in compliance with all local zoning ordinances and requirements for this permit modification.

In addition to changes affecting activities classified as insignificant, the following requested modifications to the existing permit are outlined below:

- Update potential emissions to reflect the results of compliance testing completed in January 2020 and to reflect an hourly throughput increase from 80 ODT to 120 ODT.
- The addition of two (2) propane vaporizers to aerosolize fuel received by truck for combustion by the RTO burners, RCO/RTO burners, and burners for the dryer system double ducts.
- Modifications to optimize operation of the RTO (CD-RTO), the addition of two (2) canisters with combustion zone and additional burners, and increase the heat input of the RTO from 32 MMBtu/hr to 54.4 MMBtu/hr.
- Allow diesel fuel to be used as an accelerant for cold start-up of the furnace.
- Provide clarification on use of the dryer bypass stack.
- Update the process description for Green Wood Handling (IES-GWH) to reflect the facility more accurately as constructed.
- Update the fraction of particulate matter (PM) that is PM<sub>2.5</sub> for the Finished Product Handling baghouse (CD-FPH-BH) to more accurately reflect emissions based on a review of National Council for Air and Stream Improvements (NCASI) particle size distribution data for similar baghouses in the wood products industry.
- Modify the permit to reflect that the dryer furnace is not considered a control device.
- Reflect the use of steam in the pellet production process using an electric boiler.

These modifications will result in net emissions changes. The following table, which was taken from the draft permit review, provides a comparison summary of facility-wide potential criteria pollutant and CO<sub>2</sub>e emissions (including fugitives) for the existing permit (R05) and the proposed permit (T06).

<b>Pollutant</b>	<b>Potential Emissions (R05) (tpy)</b>	<b>Potential Emissions (T06) (tpy)</b>
CO	235	187
NOx	238	153
PM	96.8	95.3
PM-10	62.0	65
PM-2.5	43.5	50.3
SO2	27.6	27.7
VOC	121	108
CO <sub>2</sub> e	277,556	273,878

Kevin Godwin, permit engineer in the DAQ's RCO, reviewed the applications submitted by Enviva and determined that the modifications requested by the facility would comply with all applicable federal and state air quality requirements. The emission of toxic air pollutants was modeled in 2015 as a review of the initial permit application. The facility was found to be in compliance with all rules for toxic air pollutants (TAPs). This modification proposes a reduction of overall TAPS. No individual TAP will exceed previously modeled levels due to this modification, therefore, no modeling is required.

Unless the public comments received during the public hearing reveal that DAQ was in error or incomplete in its evaluation of the wood pellets plant from an air quality standpoint, and if the applicant has met all federal and state laws, regulations, and rules for the-protection of the environment, the division is obligated to issue an air permit to Enviva. The following hearing officer's responses to written and oral public comments will address issues raised in light of these requirements.

### **III. Notice of Public Hearing**

On May 29, 2021, a notice of public hearing was posted in the Richmond Daily Journal and on the DAQ website. The public comment period was noted as May 29, 2021, through June 30, 2021. Copies of the permit application review and draft air permit were also posted on the DAQ website for public review. Copies of the air quality permit application and related documents were available for public review in DAQ's Raleigh Central Office (RCO) and Fayetteville Regional Office (FRO) throughout the public comment period.

The public hearing was conducted virtually on June 28, 2021, via Webex to allow for public participation while protecting public health to prevent the spread of COVID-19. In addition to the public hearing, the DAQ accepted comments concerning the draft permit via mail, electronic mail, and voicemail during the public comment period. A designated email address and phone number for comments were provided in the DAQ notice for the public hearing.

#### **IV. Public Comments**

At the virtual public hearing on June 28, 2021, 47 people were in attendance, and eleven spoke in favor of the project and sixteen spoke against. There were thirty-three additional comments received during the public comment period including thirty emails, a written letter, a voice mail, and a chat message. Sixteen comments were in opposition, sixteen were in favor, and one was neutral. Overall, of the sixty comments received, twenty-seven were in favor of the project, thirty-two were against it, and one was neutral.

All comments received during the public comment period, both oral and written, have been evaluated and copies of all written comments and the summary of the oral comments are provided in this report's supporting documents. The hearing was recorded and transcribed and is available by request. The comments addressed many of the same issues. To make this report more practical and efficient as well as address all the issues and minimize redundancy, some of the comments are summarized and grouped to address similar concerns. The following is a summary of comments. Quoted comments are verbatim and identified in *italics*.

##### **A. Comment Category – Environmental Justice and Cumulative Impacts**

Seventeen citizens commented about the lack of environmental justice because the facility's location is in an area that is predominantly minority and with a high poverty rate. Further, the comments indicated that there are already many other pollution emitting sources in the area and that cumulative impacts need to be assessed. Comments include:

*Both the city of Hamlet and municipality of Dobbins Heights are already home to plastics manufacturers, solid waste landfills, inactive hazardous sites, steel fabricators, a biochar facility, and industrial animal operations. Despite this, the*

*draft air permit for Enviva Hamlet fails to identify or assess the cumulative air emissions impacts this operation would pose on neighboring communities.*

*The North Carolina Department of Environmental Quality is failing in its duties to protect the health and safety of its citizens by permitting facilities without taking cumulative impacts into account.*

*The poor communities stay poor and suffer from multiple health issues due to this Industry. The wealthy, profit. There is no Environmental Justice.*

#### Hearing Officer's Response to Environmental Justice and Cumulative Impacts

NCDEQ conducted an extensive Environmental Justice Report for the Enviva Hamlet facility that analyzed sociodemographic data (race, ethnicity, and poverty, county health data, and state designated Tribal statistical areas) in conjunction with an overview of the draft air quality permit. In addition to a one-mile radius from the facility, the two nearest towns (Hamlet and Dobbins Heights) were evaluated in the report in response to previous commenters requesting the analysis of these areas. The data from this report reveal higher percentages for Non-White populations as well as elevated poverty levels overall, consistent with the points made by multiple commenters. Given these results, DEQ conducted additional outreach and engagement in this area. NCDEQ is committed to environmental justice (EJ) and equity, however there is no state air quality law or regulation that either mandates or directs NCDEQ perform the cumulative impact analysis envisioned by the commenters.

#### **B. Comment Category – Visible Emissions**

At least three comments were received regarding the visible emissions requirement. The comments noted that the readings only had to establish whether emissions were “normal” and were only required once a month, which commenters believed was insufficient. Quoted comments include:

*The draft permit as outlined is far too lax for controls and monitoring requirements of visible emissions as well. While visible emissions shall not exceed 20% opacity when averaged over a six-minute period, the six minute averaging periods can exceed the 20% opacity threshold once an hour, 5 times a day. Enviva can violate the visible emissions control four times a day, just as long as they don't exceed 87% opacity.*

*Enviva will only have to check whether visible emissions are exceeding the 20% opacity control measure once a month. So, there's no telling if visible emissions are exceeding the 20% opacity over the six minute averaging periods –unless it's being checked on that one day out of the month. It is unclear how DAQ expects to enforce this, or how Enviva expects to ensure they are in compliance with this rule.*

*Draft Permit...allows an untrained individual to pick any time during the first 30 days of the permit's effective period to subjectively determine a "normal" opacity level from the sources. The draft permit provides no further requirements for how normal opacity is determined.*

*The draft permit does not require the original observer to record his or her qualitative description of the normal level of opacity and provides no mechanism for the original observer to communicate to any future observer what normal opacity looks like. Likewise, the recordkeeping requirement fails to require the monthly observers to record any description of their observations, the methods they used to make the observation, or the conditions at the time the observation was made.*

#### Hearing Officer's Response to Visible Emissions

The air permit will require the facility to conduct monthly visible observations and establish "normal" within 30 days following commencement of operation of the equipment. If future visible emissions are above normal, the appropriate action must be taken to correct the above normal emissions as soon as practicable and record the action taken or demonstrate that the percent opacity from the emission point is below the opacity limit in accordance with 15A NCAC 02D .2610 (Method 9).

The facility must record the following visible emission observation information:

- 1) the date and time of each recorded action;
- 2) the results of each observation and/or test noting those sources with emissions that were observed to be noncompliance along with any corrective actions taken to reduce visible emissions; and
- 3) the results of any corrective actions performed.

The visible observation procedures are long established by DAQ and are sufficient to ensure compliance with 15A NCAC 02D .0521. The EPA periodically conducts audits of DAQ's Title V permitting program and routinely reviews Title V permits. The EPA has not indicated DAQ's visible observation procedures are deficient nor fail to meet the intent of the Title V monitoring requirements. In addition, during DAQ's annual full compliance evaluation inspection, the DAQ inspector, who is Method 9 certified, observes emission release points to determine compliance with the visible emission standard and reviews the facility's records to ensure the proper information is being recorded.

### **C. Comment Category – Fugitive Dust Plan**

At least fifteen comments were received concerning the need for the permit to contain a fugitive dust plan based on the excessive dust/particulates generated by the facility. Quoted comments include:

*Enviva produces massive amounts of PM 2.5 but isn't required to do a fugitive dust control plan.*

*Fugitive dust contains particulate matter with heavy metals and toxic aromatic hydrocarbon which have been shown to cause health problems. Require Enviva to develop and implement a fugitive dust control plan to mitigate the impact.*

*The emissions from pellet plants are producing dangerous levels of particulate matter. Develop and implement a fugitive dust control plan to protect the Richmond County community.*

*The local citizens have complained of the excessive dust.*

#### Hearing Officer's Response to Fugitive Dust Plan

As required by 15A NCAC 02D .0540 "Particulates From Fugitive Dust Emissions Sources," Enviva Hamlet shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. Enviva shall submit a fugitive dust plan within 30 days of receiving written notification from the Director of two substantive complaints in a 12-month period. Enviva shall also submit a fugitive



dust plan if DAQ observes excessive fugitive dust emissions from the facility beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A).

There have been no substantive fugitive dust complaints regarding the Hamlet facility. In addition, the DAQ inspector has not observed any evidence of fugitive dust beyond the property boundaries during the full compliance evaluation inspections. If there are substantive fugitive dust complaints or excessive fugitive dust emissions from the facility, the facility may be required to submit a fugitive dust plan as described in 15A NCAC 02D .0540.

#### **D. Comment Category – Fugitive Dust Condition is Deficient**

One comment was received that indicated the current condition for fugitive dust is deficient because it does not contain the requirements to assure compliance. The comment indicated:

*The existing fugitive dust condition at Draft Condition MM does not include sufficient monitoring, recordkeeping, and reporting requirements to ensure compliance with the condition's terms... Title V permits must contain adequate periodic monitoring, recordkeeping, and reporting requirements to assure compliance with all applicable requirements for the facility... the draft permit is completely devoid of any monitoring, recordkeeping, or reporting requirements related to Condition MM or fugitive dust more generally. This renders the permit deficient and DEQ must modify the Title V permit to include adequate periodic monitoring, recordkeeping, and reporting requirements to assure that the facility complies with Condition MM.*

#### Hearing Officer's Response to Fugitive Dust Condition is Deficient

The facility is required to comply with the fugitive dust control requirement per 15A NCAC 02D .0540 listed in General Condition MM. However, until the facility triggers a fugitive dust plan as specified in the rule, a general condition is sufficient. This is consistent with other EPA rulings and court cases where the applicable requirement does not have specific actions listed to ensure compliance. In addition, the EPA periodically conducts audits of DAQ's Title V permitting program and routinely reviews Title V permits, and the EPA has not indicated DAQ's fugitive dust procedures are deficient or fail to meet the intent of the Title V monitoring requirements. It should be noted that if Enviva were to trigger

applicability of a fugitive dust plan as described in the rule, then a condition would need to be added to the permit that contained adequate monitoring, recordkeeping, and reporting to ensure compliance.

**E. Comment Category – Inadequate Monitoring/Recordkeeping/Reporting**

At least seven people voiced concerns that the draft air permit lacks adequate recordkeeping and reporting requirements. Quoted comments include:

*This first-time TV permit requires stronger (and more practical) monitoring and reporting requirements.*

*We are urging the DAQ to require stricter monitoring and reporting. Enviva is required to inspect the regenerative thermal oxidizer and wet electrostatic precipitator only once annually. Results of inspection and maintenance shall be maintained in a logbook and made available to DAQ upon request. For a company that has shown its complete disregard for the Clean Air Act time and again at its Southeast facilities, there must be far stricter monitoring and reporting requirements for particulate matter.*

*The structural integrity of the bagfilters is only required to be inspected once annually by Enviva.*

Hearing Officer's Response to Inadequate Monitoring/Recordkeeping/Reporting

The draft permit requires parametric operational values to be monitored and recorded continuously for the RTO/RCO and daily for the wet electrostatic precipitator. It also requires maintenance as recommended by the manufacturer including a minimum of monthly visual inspections and annual internal inspection for all control devices. The facility must report a summary of all monitoring and recordkeeping activities semiannually. In addition, the facility is periodically subject to unannounced inspections by air quality personnel. The hearing officer does not recommend any additional reporting and recordkeeping requirements.

**F. Comment Category – Violations**

At least five comments were received concerning violations from Enviva plants throughout the state. The comments indicated that the violations show the facilities have emissions above allowable limits, that DAQ is not enforcing the air

quality rules, and that the violations at the Hamlet plant indicate they cannot meet the PSD avoidance condition requirements. Quoted comments include:

*Please realize that Enviva facilities have a history of air quality violations in spite of the fact that not nearly enough of these air protection restrictions exist. And those that do, aren't being enforced. As you know, Enviva had numerous air quality permit violations at several of its North Carolina facilities during the past 5 years, thereby demonstrating that it does not adequately control its hazardous air emissions.*

*DAQ granted the use of "Avoidance of Condition" to avoid meeting more stringent PSD requirements. Since Enviva cannot meet the avoidance requirements, Enviva should not be granted a Title V permit based on less stringent conditions – conditions that they cannot meet. Enviva must be required to meet all the PSD requirements.*

*At their Sampson site alone, Enviva has accumulated five air quality violations since 2017, and was recently fined by DEQ in civil penalties for equipment failures. The Ahoskie plant has been cited for failure to control dust and equipment failures, and the facility in Hamlet – the subject of this permit review – was fined more than \$11,000 in 2020 for equipment malfunctions that led to violations of its air permit.*

#### Hearing Officer's Response to Violations

A review of the compliance history for existing Enviva facilities indicate there has been one Notice of Violation with Recommendation for Enforcement (NOV/NRE) at the Enviva Hamlet facility since the facility began operations.

Hamlet:

- Notice of Violation with Recommendation for Enforcement (NOV/NRE) issued on August 12, 2020, for operating the RTO and RCO below the minimum firebox temperature established during the source testing in January 2020

In addition to the Hamlet facility, Enviva has one transport and three other manufacturing facilities in North Carolina. The facilities are located in Wilmington, Ahoskie, Northampton, and Sampson. The compliance history for these facilities is as follows:

Wilmington - no violations or deficiencies (transport facility only)

Ahoskie:

- NOV issued March 14, 2017 for a late Annual Compliance Certification
- NOV issued July 21, 2016 for 31 days of downtime for grid No. 1 on the WESP due to malfunctions. Grids 2 and 3 continued to operate as designed
- Notice of Deficiency (NOD) issued September 3, 2014 for a late report
- NOD issued July 28, 2014 for recordkeeping deficiencies
- NOD issued August 12, 2013 for late report
- NOV issued May 2, 2013 for fugitive dust plan deficiencies.

Northampton:

- NOD issued December 7, 2016 for late permit renewal
- NOD issued August 22, 2014 for late report

Sampson:

- NOV/NRE issued on August 12, 2020, for operating the RTO below the minimum firebox temperature established during the source testing in December 2019.
- NOV issued on May 5, 2020 for failed source test in December 2019 for particulate matter (PM) and PM10
- NOV/NRE issued on June 5, 2018, for failed source test in March 2017 for VOC.
- NRE issued November 3, 2017 for failed source test in March 2017 for CO
- NOV issued February 3, 2017 for visible emissions monitoring and recordkeeping violations.

The Enviva facilities in North Carolina have had a number of deficiencies and violations. However, this seems to be evidence that DAQ is doing a thorough job of identifying and addressing all compliance issues for these facilities through onsite inspections, emissions testing, monitoring, recordkeeping, and reviewing reports submitted.

To address the Hamlet plant's NOV/NRE and the comments received that the violation indicates the facility cannot meet the requirements of the PSD avoidance condition, the emissions did not exceed PSD limit thresholds even if zero control

efficiency was assumed during all periods the RTO or RCO temperature fell below the minimum temperature established during the stack test. In addition, these violations occurred within a year of the facility beginning operation. So, the facility has not established a pattern of recurring violations and inability to meet the requirements in their permit.

No changes to the draft permit are deemed necessary to address these comments at this time. However, if the facility continues to have violations for not maintaining operating parameters on their control devices, then the monitoring required may need to be revisited and addressed in the future.

#### **G. Comment Category – NAAQS Compliance**

One commenter was concerned about how potential emissions changes affect the PSD modeling received with the facilities' Greenfield application and cited two situations as shown below:

*Although the annual throughput will remain the same at 625,011 oven dried tons (ODT) per year of wood pellets utilizing up to 85% softwood on a 12-month rolling basis, we have concerns about increasing the hourly throughput by 50% from 80 ODT to 120 ODT. Will the new short-term increase of 50% throughput increase emission rates used in the PSD Modeling which DEQ received on January 15, 2014?*

*Enviva proposes to increase the fraction of PM that is PM<sub>2.5</sub> for the finished product handling baghouse (ID No. CD-FPH-BH). The previous permit application incorrectly calculated PM<sub>2.5</sub> emissions as 0.35% of PM emissions. This fraction results in an exit grain loading rate that is cleaner than ambient air and would require a sampling run of over 100 hours to quantify [0.000014 grains per standard cubic feet (gr/scf)]. The facility has not been able to find any documentation to support a value of 0.35% and, given that this results in a concentration that is cleaner than ambient air, Enviva believes this value was used in error. Based on a review of National Council for Air and Stream Improvement, Inc. (NCASI) particle size distribution data for similar baghouses used in the wood products industry, Enviva has determined the correct fraction of PM that is PM<sub>2.5</sub> is 40%. As such, Enviva is revising the potential emissions for the finished production handling baghouse to reflect an exit grain loading rate of 0.0016 gr/scf (filterable only). Needless to say, an error going from 0.35% to 40% is a significant error. We do inquire if the new PM<sub>2.5</sub> emissions are reflected in*

*the PSD Modeling which DEQ received on January 15, 2014? If the PM 2.5 emissions are different from the PSD Modeling, then the modeling should be redone to demonstrate NAAQS compliance.*

Hearing Officer's Response to NAAQS Compliance

The facility is not required to update the NAAQS modeling because the facility is not classified as a major source under PSD rules. However, the Air Quality Analysis Branch (AQAB) issued a memo dated February 6, 2014 as part of the processing of the greenfield application that reviewed the modeling analysis for Enviva, which was conducted in accordance with current PSD directives and modeling guidance. That memo included Table 1 as shown below, which shows the pollutants used in the modeling analysis.

**Table 1 - Pollutant Netting Analysis**

<b>Pollutant</b>	<b>Annual Emission Rate (tons/yr)</b>	<b>Significant Emission Rate (tons/yr)</b>	<b>PSD Review Required?</b>
<b>NO<sub>2</sub></b>	<b>164.61</b>	40	Yes
<b>PM<sub>10</sub></b>	<b>72.86</b>	15	Yes
<b>PM<sub>2.5</sub></b>	<b>53.62</b>	15	Yes
<b>TSP*</b>	<b>179.46</b>	25'	Yes*
<b>SO<sub>2</sub></b>	<b>17.57</b>	40	No
<b>CO</b>	<b>75.88</b>	100	No
<b>VOC's</b>	<b>2,219</b>	40	Yes

\*N.C. requirement only.

Per the table, modeling was performed using 53.62 tons per year of PM2.5. The facility's modified potential PM2.5 emissions are calculated as 50.3 tons per year, which includes the additional PM2.5 emissions after correcting the error in the previous application. Therefore, the current potential PM2.5 emissions are less than the emissions used in the modeling.

In addition, Table 3 of the 2014 memo includes the NAAQS modeling results as shown below.

**Table 3 - Class II Area NAAQS Modeling Results**

<b>Pollutant</b>	<b>Averaging Period</b>	<b>Maximum Onsite &amp; Offsite Source Impacts (ug/m<sup>3</sup>)</b>	<b>Background Concentration (ug/m<sup>3</sup>)</b>	<b>Total Impact (ug/m<sup>3</sup>)</b>	<b>NAAQS (ug/m<sup>3</sup>)</b>	<b>% NAAQS</b>
PM <sub>10</sub>	24-hour	21.62	25.00	46.62	150	31
PM <sub>2.5</sub>	24-hour	3.65	17.3	20.95	35	23
	annual	1.01	8.87	9.88	15	66
NO <sub>2</sub>	1-hour	95.74	32.10	127.84	188	68
	annual	5.68	5.30	10.98	100	11

Per the table, the maximum 24-hour PM<sub>2.5</sub> impact was only 23% of the NAAQS. Therefore, increasing the hourly emissions by 50% would be expected to result in an impact that does not exceed the 24-hour PM<sub>2.5</sub> NAAQS.

**H. Comment Category – Enviva’s Requests**

A representative from Enviva submitted comments requesting two changes in the permit concerning the thermal oxidizers. The comments and my responses are as follows:

1. *Method of Average Firebox Determination Requirements – Enviva proposes use of a 3-hour block average temperature for RTOs and RCOs rather than a 3-hour rolling average. This averaging period is consistent with Enviva’s permits in other states and with NCDAQ permits issued to identical control devices used at wood product plants subject to the Plywood and Composite Wood Products MACT (40 CFR 63 Subpart DDDD), NCDAQ’s incinerator regulations, and other recently issued permits by NCDAQ.*

Hearing Officer’s Response to Enviva’s Requests, Part 1

NCDAQ has recommended maintaining the 3-hour rolling averages of RTO/RCO temperature at this time. However, the draft permit does not appear to contain language requiring a 3-hour rolling average.

The hearing officer recommends that language be added that specifies that the compliance should be verified using 3-hour rolling averages from temperature readings that have been reduced to 1-hour averages.

2. *Enviva requests the statement “(the second half of the oxidizer away from the flame zone),” which describes the location of the RTO’s temperature probe, be removed from the permit. Enviva contends that the language is not consistent with the equipment configuration as specified by the vendor design specifications and that it contradicts Sections 2.2 A.1.e.vi and 2.2 A.3.c.vi of the draft permit, which accurately reflect the location of the thermocouples. As described in Conditions 2.2 A.1.e.vi and 2.2 A.3.c.vi, the RTO and RCO/RTO are each comprised of multiple fireboxes, with each firebox containing two temperature probes. The minimum average firebox temperature for each firebox is based on the average temperature of the two temperature probes over the span of the compliance test runs. As such, Enviva requests that the language requiring monitoring in “the second half of the oxidizer away from the flame zone” be removed from Condition 2.2 A.1.g.*

Hearing Officer’s Response to Enviva’s Requests, Part 2

I agree that the statement “(the second half of the oxidizer away from the flame zone)” does not accurately describe the location of the RTO’s temperature probe. I recommend that this language be removed from the permit and replaced with language that accurately describes the temperature probe locations.

**I. Comment Category- Comments Not Addressed Elsewhere and Hearing Officer's Responses**

The following is a list of miscellaneous comments by citizens in italics with the Hearing Officer's specific responses:

- i. *No reporting is required by Enviva to DAQ for particulate emissions from these industrial processes.* The facility is required to submit the particulate emissions from all sources annually as required by 15A NCAC 02Q .0207 per General Condition X.
- ii. *Sulfur dioxide emissions from combustion sources at the Enviva Hamlet site are not required under this draft permit to be monitored, recorded, or reported to DAQ.* The draft permit review addressed compliance with 15A NCAC 02D .0516, “Sulfur Dioxide from Combustion Sources,” and the fuels used at the facility will have



emissions well below the limit. Therefore, monitoring, recordkeeping, and reporting is not necessary to ensure compliance.

- iii. *If the Community's comments at this public hearing do not constitute a substantive complaint, then DAQ needs to inform the community of what does.* Per the definition in 15A NCAC 02D .0540(a)(6), "Substantive complaints" means complaints that are verified by the Division with physical evidence of excess fugitive dust emissions.
- iv. *We point out that DAQ failed to include this NOV in the list of reviewable documents for Enviva in relation to this Title V Permit comment period.* Although DAQ did not list the NOV on the NC DEQ: Wood Pellet Industry Permitting Actions and Information website, it is not common practice to include all facility documents there. However, this document was available during the comment period on the NC DEQ: Air Quality Public Engagement website under the "Assessing Air Quality Permits and Records" link. In addition, all information and documents used during the permitting process are public information and are available upon request.
- v. *We have concerns about increasing the hourly throughput by 50% from 80 ODT to 120 ODT. To meet the annual throughput using the hourly increase, the facility would need to restrict its operation to 59% of the time. If the facility runs 24/7/365, they would generate a throughput of 1,051,200 ODT. The draft permit fails to restrict operations to meet NAAQS.* The draft permit contains a federally enforceable condition that limits annual production to 625,011 ODT per year. Exceeding this limit would constitute a violation of the air quality permit.

#### **J. Comment Category- Not Directly Related to Hearing Scope**

Many commenters submitted emails and spoke at the public hearing to express their opposition of various aspects of the wood pelleting operation and did not address specific concerns with the current draft air quality permit or the permitting process involved in drafting the permit. Quoted comments include:

- *The wood being processed needs to be preserved in the forests in order that the carbon in the wood be sequestered.*

- *We are in a climate crisis now. Burning trees for energy is worse for the climate than burning coal. We must PROTECT our forests and keep them standing please!*
- *Living trees cannot be regrown at the rate this industry is consuming them.*
- *Our state should be striving to meet Gov. Cooper's Clean Energy Plan*
- *Job creation is a fallacy. After the trees are quickly cut , the jobs are gone.*
- *NC is the biggest producer of wood pellets , which are not used in the US but mostly in the UK for electricity. This further increases their carbon footprint. Trucks hauling and ships sailing the wood across the ocean is costly and polluting.*
- *Demands for the wood pellets in Europe are growing for their climate strategy, so the deforestation of North Carolina will be dramatic.*
- *It was only after environmental groups filed a lawsuit against DEQ alleging violations of the Clean Air Act that Enviva agreed to install adequate air pollution controls. Apparently, the health and lives of NC citizens do not matter to Enviva--it took a lawsuit to make them act responsibly.*

#### Hearing Officer's Response to Not Directly Related to Hearing Scope

While most of the comments received were thoughtful and worth considering in the proper forum, some of the comments received were not directly related to the Enviva Hamlet air quality permit application or the air quality permitting process. As such, these comments fall outside the purview of this public hearing and are therefore not directly addressed in this report. However, Barry New, North Carolina Forest Service, submitted a neutral comment containing a snapshot of information on North Carolina's forests with specific information on the area within a 75-mile radius around the facility, which provides facts on forestry/logging including tree growth and harvesting. This information appears useful to address the many concerns over deforestation from the wood pelleting industry, and it is available in this hearing report's supporting documents.


### **K. Comment Category – Support for Enviva**


As noted above, twenty-seven of the sixty comments were in support of Enviva Hamlet and issuance of the permit. The commenters in support of the project included several associated with the facility or in the forestry/logging industry. Additionally, there was support from Richmond Community College, Richmond County Economic Development, Richmond County Chamber of Commerce, the NC House of Representative for District 48 (Garland Pierce), a local Pastor with Faith Assembly Outreach Ministries, Roanoke Electric Corporative, and Habitat for Humanity.

### **V. Conclusions and Recommendations**

All the public comments regarding whether or not the Division of Air Quality should issue an air quality permit to Enviva Pellets Hamlet, LLC to allow for the renewal, modification, and first time Title V permit of a wood pellet manufacturing facility at 1125 North NC Highway 177, Hamlet, Richmond County, North Carolina, have been considered. It is the recommendation of the hearing officer that the Director issue the Air Quality permit after considering the following:

- It is recommended that the language requiring monitoring in “the second half of the oxidizer away from the flame zone” be removed from Condition 2.2 A.1.g. and replaced with language that accurately describes the temperature probe locations.
- The monitoring and recordkeeping requirements for the RTO/RCO do not specify the timing on how compliance should be verified. It is recommended that the permit add language specifying that the compliance should be verified using 3-hour rolling averages from temperature readings that have been reduced to 1-hour averages.

  
Jennifer Womick, Hearing Officer

  
Date

## SUPPORTING DOCUMENTS

(The following supporting documents are located on the DAQ SharePoint site)

- Air Quality Permit Application Review and Draft Permit
- Audio Recording of June 28, 2021 Digital Public Hearing
- Summary of Digital Public Hearing Comments
- Emails received during the Public Comment Period
- Written Comments received during the Public Comment Period
- Telephone messages received during the Public Comment Period
- Environmental Justice Snapshot