

Hearing Officer's Report and Recommendations

Enviva Pellets Hamlet, LLC Public Hearing
November 8, 2018
Richmond Community College, Cole Auditorium
Hamlet, NC

Public Comment Period: October 2, 2018 through November 15, 2018

Pertaining to Permit Application No. 7700096.18A and
Draft Air Permit No. 10635R03 for:

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

Hearing Officer
Bruce Ingle, Regional Supervisor, Mooresville Regional Office

Background

On May 14, 2018, the North Carolina Department of Environmental Quality (NC DEQ), Division of Air Quality (DAQ) received an air quality permit application (App. No. 7700096.18A from Enviva Pellets Hamlet, LLC (Enviva) for the modification of its facility located at 1125 North NC Highway 177 in Hamlet, North Carolina. The facility produces wood pellets through the use of 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 permit application requests the following operational modifications:

1. Increase pellet production rate from 537,625 oven-dried tons (ODT) per year to 625,011 ODT per year by upgrading pellet dies with a new prototype while increasing the amount of softwood processed from a maximum of 75% to a maximum of 85%;
2. Incorporate a permit condition that allows Enviva to operate either up to 625,011 ODT/yr at 85% softwood or at a higher production rate if the softwood percentage is lower such that the total facility-wide annual emissions stay below the potential to emit (PTE) emissions set forth in this application;
3. Add a regenerative thermal oxidizer (CD-RTO-1) following the currently permitted Dryer wet electrostatic precipitator (CD-WESP) for volatile organic compound (VOC), HAP (Hazardous Air Pollutant) and particulate matter (PM) emissions control;
4. Remove the Green Wood Hammermill cyclones from the permit and recirculate the exhaust to either the inlet of the Dryer furnace or directly to the WESP/RTO system (CD-WESP/CD-RTO-1) to reduce VOC, HAP and PM emissions;
5. Following the six (6) Pellet Cooler product recovery cyclones, install one wet scrubber (CD-WSB) to reduce PM emissions;
6. Add a regenerative catalytic oxidizer (CD-RCO), to control combined emissions of VOC, HAP and PM from the Pellet Coolers and Pellet Mills
7. Decrease the amount of wood that can bypass the Dry Hammermills from 25% to 15%;
8. Incorporate construction of a baghouse (CD-HMC-BH) installed to control fugitive emissions that escape from the Hammermill Collection Conveyor (ES-HMC).

These changes are being requested to meet new customer softwood percentage and production rate demands and to incorporate emission reduction efforts. Because of these changes, the Enviva plant will take a Prevention of Significant Deterioration (PSD) avoidance limit and potential emissions for all criteria pollutants will be less than the PSD major source threshold of 250 tons per year. The facility will continue to be classified as a major source under the 40 CFR Part 70, Title V and 40 CFR Part 63, Maximum Achievable Control Technology (MACT) programs. This application is being submitted to modify the existing PSD permit to incorporate the proposed changes and to reclassify the facility as a PSD Minor stationary source.

These modifications will result in net emissions changes as indicated in the following table:

Pollutant	Existing Permit Estimated Emissions (in tons per year)	Draft Permit Estimated Emissions (in tons per year)
Decreases		
VOC including fugitives	606	248
Total hazardous air pollutants (HAP)	82.9	34
Total toxic air pollutants (TAP)	31.6	20.5
PM including fugitives	178	100
PM-10 including fugitives	101	70
PM-2.5 including fugitives	58	39
Carbon Monoxide (CO)	231	231 (no change)
Increases *		
Nitrogen Oxides (NOx)	220	236
Sulfur Dioxide (SO ₂)	27	28
Carbon Dioxide equivalent (CO _{2e})	229,961	264,666

On October 2, 2018, a notice of public hearing was posted in the Richmond Daily Journal and on the DAQ website. The public hearing was held on November 8, 2018 at the Richmond Community College, Cole Auditorium. The public comment period was October 2, 2018 through November 15, 2018. Copies of the permit application review and draft air permit were also posted on the Division of Air Quality 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.

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. The initial permit for construction of the Enviva facility was issued on March 29, 2016 as a Title V/PSD major facility. On May 14, 2018, Enviva submitted an application to DAQ requesting an air permit modification for the facility as discussed in "Background" above. Enviva Pellets Hamlet, LLC 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.

Kevin Godwin, permit engineer in the DAQ's RCO, reviewed the application submitted by Enviva and determined that the modifications requested by the facility would comply with all applicable federal and state air quality requirements. This facility is under construction and not yet operational. The facility is requesting a permit to add additional controls to the facility. 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 proposed 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 Pellets Hamlet, LLC. The following hearing officer's responses to written and oral public comments will address issues raised in light of these requirements.

Public Comments

At the public hearing on November 8, 2018, 105 people were in attendance. Seventeen spoke in favor of the project. Twenty-six spoke against and one individual addressed none of the issues concerning the permit. Additionally, thirty-three written comments and informational materials were received as well as 581 emails during the public comment period.

The comments received, both written and oral, addressed many of the same issues. In order to make this report concise, address all issues and minimize redundancy, I have summarized and addressed the issues of concern below.

Comment Category #1

Approximately 390 emails referenced the paragraph below:

The wood pellet industry is destroying and degrading tens of thousands of acres of North Carolina forests. We need standing, diverse, healthy forests to store carbon, protect us from flooding and storms, and provide us with clean air and water. Any expansion of this industry hampers North Carolina's ability to meet its commitment on climate mitigation and adaptation, as well as communities' ability to rebound and recover after storms like Hurricane Florence.

Other comments expressed similar concerns:

- *We need our forests! The wood pellet industry is a mistake from beginning to end. The trees being cut for burning (creating GHG emissions in Europe) are not "low grade" exclusively, and in fact the notion of "low grade" should be reexamined. ALL trees function as the 'lungs' of the planet. They also are vital parts of wetlands, nature's tool against flooding.*
- *It's worse for the climate than burning coal and destocking our wetlands and forests. The people of Richmond county already live with several polluting industries. North Carolina will not stand for any expansion of this harmful industry.*
- *Burning wood pellets is harmful to our environment, and not a clean source of energy. NC forests are being destroyed, and marginalized communities are bearing the brunt of the impacts of Enviva's operations.*
- *I care about protecting forests, air quality, environmental justice and climate change because I care about the future of our planet and leaving the planet for generations to enjoy as I did.*
- *I care about protecting forests, air quality, climate change etc. because our world depends on us to defend it.*

- *Along with destroying our forests, it is destroying our communities and as a North Carolinian from a rural community, I feel it my responsibility to protest against any expansion of this harmful industry.*
- *Already, tens of thousands of North Carolina forests are clear cut each year, turned into wood pellets and shipped overseas to the EU. It is immoral to continue destroying our natural resources.*
- *I care about the environmental safety and regulation of carbon emissions, because I want to be able to keep the Earth and all of its inhabitants safe from the dangerous effects of climate change. The deforestation of North Carolina forests by Enviva does not fall in line with the well-being of North Carolina citizens. I don't want to see an expansion of their mills as it infringes on the communities that are living in those areas, and emits more carbon than coal burning industries.*
- *I care about protecting forests, air quality, environmental justice and climate change because I care about the future of our planet and leaving the planet for generations to enjoy as I did.*
- *I care about climate change because it is affecting our state, nation, and world and underserved communities are feeling this burden the most seriously.*

Hearing Officer's Response to These Comments

The commenters above are concerned with the effects to the local and world-wide community of the harvesting of trees. Trees are rightly understood to be a vital part of a mutually beneficial ecosystem. The removal of trees concerns many regarding the impacts on the ecosystem including the quality of life and potential negative environmental impacts.

As part of a "Responsible Wood Supply Program" as described on the Enviva website, the company manages a Track & Trace program:

"Enviva does not own or manage timberland, but instead supplies its pellet-making facilities with sawmill residuals and wood harvested from other landowners. In order to ensure that our suppliers provide us with wood that meets our sustainability requirements, Enviva has developed Track & Trace, a one-of-a-kind monitoring program that tracks all the wood we receive from the forest to its harvest origin. Before selling wood to Enviva, a supplier must provide detailed data on the specific forest tract being considered for harvest, including each individual tract's precise geographic location, acreage, forest type, species mix, age, and the share of wood from each harvest that goes to Enviva versus other consumers. We do not accept any wood from a harvest without this information, we keep record of the data, and we verify the accuracy of our procedures through third-party audits. Our T&T program provides Enviva with an exceptionally detailed understanding of the wood we use, and that understanding will enable us to continue refining our sustainable sourcing policies as we go forward."

Additional information concerning the Track & Trace program is provided on the Enviva website. In an effort to verify this information I reached out to personnel with the North Carolina Forest Service (NCFS) to discuss the issues raised in the comments above. According to the Forest Service, the Track & Trace program is a means by which Enviva encourages its suppliers to participate in the NC Forest Service Certification program. This program deals with the "practice of forestry, growth of the product, harvesting of the product and ecological impacts associated with harvesting". Its aim is for "public awareness and

acceptance of forest management and for achieving environmental, social and economic benefits” through the Forest Service Certification. Suppliers who do not participate in the certification program are subject to the same forest management practices and are also subject to independent, third part audits.

During the public hearing and emailed comments, many citizens were concerned with deforestation as it impacts water issues such as flood control. According to the NCFS, harvesting forest timber requires consideration of post-harvest water and re-vegetation issues which are addressed in the forest management plan.

Many comments were concerned with the removal of trees for the benefit they provide in the adsorption of carbon in the form of CO₂. According to the NCFS, cleared vegetation may be allowed to regenerate naturally or through managed replanting. In either case, younger stands of vegetation absorb more carbon than the older stands of vegetation which were removed. In addition, the clearing of storm damaged tracts allow for the replanting of healthy managed timber stands where tracts that are not cleared will regrow mostly scrub vegetation for many additional years. In the Department of Environmental Quality's draft Greenhouse Gas Inventory (1990-2030) report published October 2018 for public review, Table 2-9 indicates that the carbon sink due to forestry activities increased 7% between 2005 and 2017. According to the report carbon sinks “are primarily due to increases in forest stocks and storage of carbon in wood products, reflecting North Carolina's increasing sustainable management of its forest and their economic uses”.

While the cutting of trees concerns many, the NCFS is ultimately charged with overseeing the sustainability of timber crops supplied to Enviva. The NCFS is familiar with Enviva's operation and expressed no concerns that the facility suppliers are operating outside generally accepted forest management practices.

Recommendation: No changes to the draft permit are deemed necessary to address Comment Category #1.

Comment Category #2

Approximately 390 emails referenced the paragraph below:

A shocking pattern of air quality violations and noncompliance with the Clean Air Act have been documented in the wood pellet industry throughout the South, particularly at Enviva's North Carolina facilities. These emissions are disproportionately harming communities of color and low-income communities, such as the communities of Dobbins Heights and Hamlet, who are already burdened by other polluting industries. Initial miscalculations and oversights of Enviva's emissions of harmful VOCs and other hazardous pollutants should not be rewarded with approval to expand yet again.

Other comments expressed similar concerns:

- *The people of Richmond County already live with several other polluting industries - it is unjust that Enviva is targeting overburdened areas and making the air quality even worse!*
- *The people of Richmond county already live with several polluting industries.*

- *NC forests are being destroyed, and marginalized communities are bearing the brunt of the impacts of Enviva's operations.*
- *This issue is already hurting our communities in North Carolina and has the potential to hurt even more people, especially in Richmond County. It is unjust that Enviva is targeting overburdened areas and compounding air quality issues.*
- *The EJ snapshot is inadequate to inform the EJ issues and impacts to nearby communities. The snapshot arbitrarily restricts its focus to a 2-mile radius of the Enviva facility without providing any explanation or documentation for supporting such a decision*
- *DEQ must initiate a study to assess the cumulative impacts of the wood pellet industry and perform full EJ study.*

Hearing Officer's Response to These Comments

Concerning the compliance record of existing Enviva facilities, there are four Enviva facilities in North Carolina in addition to the Hamlet facility -three manufacturing and one transport facility. They are located in Ahoskie, Northampton, Sampson and Wilmington. The compliance history for these facilities is as follows:

- Ahoskie
- a Notice of Violation (NOV) for a late Annual Compliance Certification (2017)
 - An NOV for 31 days of downtime for grid No. 1 on the WESP due to malfunctions. Grids 2 and 3 continued to operate as designed (2016)
 - Notice of Deficiency (NOD) for a late report (9/2014)
 - NOD for recordkeeping deficiencies (7/2014)
 - NOV for fugitive dust plan deficiencies (2013)
- Northampton
- NOD for late permit renewal (2016)
 - NOD for late report (2014)
- Sampson
- Notice of Violation with Recommendation for Enforcement (NRE) (6/2018) for failed source test in March 2017 for VOC
 - NRE (11/2017) for failed source test in March 2017 for CO
 - NOV for visible emissions monitoring and recordkeeping (2017)
- Wilmington
- no violations (transport facility only)

Of the 10 letters issued to the 3 existing pellet manufacturing plants, two pertained to issues of emission exceedances (Sampson 2017 and 2018). An initial stack test (March 2017) was performed by the Sampson facility prior to the permit required deadline (May 1, 2017) to assure compliance with designed performance specification for dryer ES-DRYER. The dryer had been installed but had not yet reached full production rate. The stack test indicated an exceedance of the permit limit for CO and was inconclusive for VOC. Operational changes were made by Enviva to maintain CO within permit limits. In November 2017 the DAQ required Enviva to retest for VOCs. A second test was performed in March 2018 for VOC and indicated non-compliance with the permit limit. Enviva attributed both stack test failures to the wood dryer (ES-DRYER) not meeting design specifications. The company responded that "It was only when production was increased for the compliance testing that it was realized the furnace was not designed to

adequately operate at the elevated production rates for extended periods.” As a result, the Sampson facility will install and test a Regenerative Thermal Oxidizer (RTO) as a control device for the dryer.

The oversight inspections by the DAQ staff have identified and adequately addressed all issues for all facilities. The same oversight will be given to the Hamlet facility.

Recommendation: No changes to the draft permit are deemed necessary to address this section of Comment Category #2.

With regard to the impact on “communities of color and low-income communities” and other similar comments, DEQ Environmental Justice staff provided the following response:

The environmental justice snapshot contains information within a determined radius by the Department, (decennial census year – race and poverty, most current ACS census range - per Capita income and Ability to speak English), current NC Commerce county tier, and yes/no – native American territory. The snapshot is created as part of the process to encourage EJ Report suggestions from the surrounding community, industry, and environmental groups during the comment period.

The complete environmental justice report incorporates suggestions by the local community and is completed after the public hearing process.

As part of the permit application process, an ambient air dispersion modeling analysis was conducted for the Enviva Hamlet facility. The modeling analysis followed all applicable guidance as recommended by 40 Code of Federal Regulations – Appendix W and the U.S. Environmental Protection Agency.

Due to the level of the emissions and initial screening measures (Class II Significance Modeling results), a full impact analysis was required, which included evaluating the impacts from the Enviva Hamlet facility as well as the contributions from other sources (facilities) of the same pollutants within a radius of approximately 38 miles.

The table below (from Table 5-9 of the applicant's modeling report) shows the maximum impact for each pollutant and averaging period evaluated. The maximum impact for each pollutant was obtained by combining the onsite (Enviva) and offsite (surrounding sources) impacts with a background concentration obtained from representative ambient monitoring data. Also shown is the distance to each maximum impact in miles.

Table 4-1. NAAQS Modeling Results

Pollutant	Averaging Period	Modeled Enviva + Surrounding Source Impacts (ug/m³)	Background Concentration (ug/m³)	Total Impact (ug/m³)	NAAQS (ug/m³)	% NAAQS	Distance to Maximum (miles)
PM ₁₀	24-hour	29.67	25.00	54.67	150	36	0.78
PM _{2.5}	24-hour	4.56	17.3	21.86	35	62	0.83
	annual	0.99	8.87	9.86	12	82	0.81
NO ₂	1-hour	68.91	32.10	101.01	188	54	0.74
	annual	2.37	5.30	7.67	100	8	0.75

The furthest distance to the maximum impact for any of the pollutants is 0.83 miles for the PM_{2.5} 24-hour averaging period. Since the Class II Significance Model sets the PM_{2.5} Significant Impact Area at 3.0 km (or 1.86 miles), the Division of Air Quality permitting staff suggested a radius of 2 miles for initial EJ analysis.

DEQ Environmental Justice staff also provided the following responses:

Within the proposed permit modification, the proposed production rate is requested to increase, however, modifications to air pollution control devices will be included to decrease the air emissions by almost half. The PSD avoidance limit will require the facility to remain below 250 tons per year (tpy) for each criteria pollutant. The six criteria pollutants as deemed by U.S. Environmental Protection Agency (EPA) are carbon monoxide, lead, ground level ozone, nitrogen dioxide, sulfur dioxide, and particulate matter.

The Department's environmental justice analysis is already underway and the final environmental justice study will be issued at the end of that process, and will include feedback from community member comments. In addition to an environmental justice study, a quality of the air report which looks at cumulative impacts of emissions has also been prepared. A cumulative impact of the wood pellet industry is outside of the purview of the Department.

Concerning comments to consider impacts in the Hamlet and Dobbin Heights communities. The following additional analysis was received from DAQ staff regarding emission impacts up to a 7-mile radius from the facility:

Area of Interest for Criteria Pollutant Impacts from Enviva – Hamlet Facility

As part of the permit application process, an ambient air dispersion modeling analysis was conducted for the Enviva Hamlet facility. The modeling analysis followed all applicable Environmental Protection Agency and 40 CFR – Appendix W. Due to the level of the emissions and initial screening measures (Class II Significance Modeling results), a NAAQS full impact analysis was required, which included evaluating the impacts from the Enviva-Hamlet facility as well as the contributions from other surrounding sources (facilities) of the same pollutants within a radius of approximately 38 miles (60 kilometers).

Table 1 below shows the NAAQS full impact analysis results evaluated in the direction of the Town of Dobbins Heights and City of Hamlet at 2, 3, 4, 5, 6, and 7 miles away from the Enviva Hamlet Facility. The results include modeled impacts and monitored background concentrations for each pollutant and averaging period evaluated. The modeled impacts represent the combined emissions impacts from both Enviva and other surrounding facilities. Monitored background concentrations were taken from data collected at representative ambient monitoring stations. The total impacts for each pollutant and averaging period were calculated by summing Enviva and surrounding source modeled impacts with the appropriate monitored background concentrations. The total impact was compared to the NAAQS for each pollutant and averaging period and is shown in Table 1 as a percentage of the respective NAAQS. As shown, the total air quality impacts were below the NAAQS for each pollutant and averaging period evaluated at all distances from Enviva to Dobbins Heights and Hamlet out to 7 miles.

<i>Pollutant</i>	<i>Averaging Period</i>	<i>Modeled Enviva + Surrounding Source Impacts (µg/m³)</i>	<i>Monitored Background Concentration (µg/m³)</i>	<i>Total Modeled + Background Impacts (µg/m³)</i>	<i>NAAQS (µg/m³)</i>	<i>% NAAQS</i>	<i>Distance from Enviva to Dobbins Heights and Hamlet (miles)</i>
<i>PM₁₀</i>	<i>24-hour</i>	2.46	25.0	27.5	150	18	2
		1.63		26.6		18	3
		1.21		26.2		17	4
		1.04		26.0		17	5
		0.93		25.9		17	6
		0.86		25.9		17	7
<i>PM_{2.5}</i>	<i>24-hour</i>	0.544	17.3	17.8	35	51	2
		0.457		17.8		51	3
		0.433		17.7		51	4
		0.412		17.7		51	5
		0.396		17.7		51	6
		0.424		17.7		51	7
	<i>annual</i>	0.122	8.87	8.99	12	75	2
		0.097		8.97		75	3
		0.084		8.95		75	4
		0.076		8.95		75	5
		0.071		8.94		75	6
		0.067		8.94		74	7
<i>NO₂</i>	<i>1-hour</i>	15.6	32.1	47.7	188	25	2
		16.2		48.3		26	3
		16.1		48.2		26	4
		17.0		49.1		26	5
		17.1		49.2		26	6
		16.7		48.8		26	7
	<i>annual</i>	0.521	5.3	5.82	100	6	2
		0.464		5.76		6	3
		0.413		5.71		6	4
		0.428		5.73		6	5
		0.322		5.62		6	6
		0.283		5.58		6	7

Recommendation: No changes to the draft permit are deemed necessary to address this section of Comment Category #2.

Comment Category #3

Approximately 390 emails referenced the two following paragraphs:

The Enviva Hamlet facility, in particular, has a troubling history of flawed permits and lack of public input. DEQ must not only require Enviva to install the proper air quality controls to protect the community's health, but also restrict production to levels that realistically prevent the facility from exceeding key Clean Air Act limits.

While Enviva claims that new pollution controls would keep them under the emissions limit even with increased production capacity, independent estimates and testing at other Enviva plants show that Enviva would fail to remain below the major source threshold with their proposed increased production capacity. This would be a violation of the Clean Air Act. Therefore, DEQ must reject Enviva's request to expand and instead implement a production limit based on actual emissions testing rather than Enviva's baseless estimates.

Approximately 12 emails reference the sentence below:

I urge you to protect North Carolinians by rejecting Enviva's expansion and insuring Enviva implements the air quality controls that our communities deserve.

Other comments expressed similar concerns:

- *The draft permit does not ensure the company will operate in compliance with the CAA amendments on VOC emissions. It is likely to exceed relevant thresholds by several hundred tpy.*
- *Modify the permit to decrease production and install air quality controls on every unit at the plant. Increasing production will not allow Enviva to stay within the CAA.*
- *Modify the permit to reduce production levels and install proper air pollution controls.*
- *To reduce pollution the plant needs to upgrading emission control equipment and reducing production limits.*

Hearing Officer's Response to These Comments

The DAQ takes seriously its responsibility to inform those who may be impacted by air quality projects. Even when not required by regulation, this Division will notify private citizens, environmental groups and other stakeholders of pending projects which may be of concern. Materials for review are generally available on the DAQ website and hardcopies are available at the Raleigh Central Office and appropriate Regional Office. In addition, the Division has an extensive presence on many types of social media for the public to follow. Every effort is made to notify the public of pending projects of interest. Notices have been issued for the following Enviva facilities:

- A public notice was issued for the Enviva Ahoskie facility on April 19, 2016 and materials were available for review at the DAQ website and in the Washington Regional and Raleigh Central Offices. The public comment period ran from April 19, 2016 to May 19, 2016. No comments were received during the public comment period.

- A public notice was issued for the Enviva Northampton facility on September 20, 2017 and materials were available for review at the DAQ website and in the Raleigh Regional and Raleigh Central Offices. The public comment period ran from September 20, 2017 through October 20, 2017. During the comment period one comment package was received from the Environmental Integrity Project representing the following groups: Clear Air Carolina, Medical Advocates for Healthy Air, Dogwood Alliance, toxic Free North Carolina, Partnership for Policy Integrity, Natural Resources Defense Council, Our Children's Earth, Center for Biological Diversity, and James Woodley.
- A public notice was issued for the Enviva Sampson facility for the issuance of a Special Order by Consent (SOC) on August 16, 2018 for exceeding permitted emissions limits. Materials were available for review at the DAQ website and in the Fayetteville Regional and Raleigh Central Offices. The public comment period ran from August 16, 2018 through September 17, 2018. No comments were received during the public comment period.
- A public notice was issued for the Enviva Hamlet facility on December 15, 2015 and materials were available for review at the DAQ website and in the Fayetteville Regional and Raleigh Central Offices. The public comment period ran from December 15, 2015 through January 14, 2016. Approximately 300 comments were received as a result of this public notice.

Recommendation: No changes to the draft permit are deemed necessary to address this section of Comment Category #3.

While not specified, comments concerning production levels are likely addressing the facility's proposed pellet production rate increase from 537,625 oven-dried tons (ODT) per year to 625,011 ODT per year by upgrading pellet dies with a new prototype and increasing the amount of softwood processed from a maximum of 75% to a maximum of 85%. If no additional controls were proposed the increased production would result in net emissions increases. However, the additional controls result in a net decrease of VOC, HAPS, TAPs and PM. NO_x, SO₂ and CO_{2E} will have a net increase. The increases in the three pollutants are not large enough to trigger additional permit requirements, and the increase in NO_x and CO_{2e} are primarily due to control device fuel use. It is the explicit purpose of the air permit to require the facility to install the proper air quality controls to protect the community's health and to restrict production to levels that realistically prevent the facility from exceeding key Clean Air Act limits. The permit engineer has reviewed all emission changes and considered all pertinent air quality rules for this project.

Recommendation: No changes to the draft permit are deemed necessary to address this section of Comment Category #3.

Regarding testing at other Enviva facilities, testing has been conducted at Northampton and Ahoskie and determined by the DAQ to be in compliance with emissions limits. It was testing at the Sampson facility that alerted both Enviva and the DAQ to the need to install additional controls. A requirement to stack test the Hamlet facility's oxidizers is included in the draft permit to verify if the facility is meeting the emissions limits required in the permit.

Comments were submitted indicating that North Carolina should review testing done in Georgia in 2012 and in Florida and Alabama in 2013 and 2014 respectively. It was stated that this testing indicated VOC emissions from sources other than the dryer and at levels that exceed the "Clean Air Act". Currently, an initial test for VOCs will be required for the RTO within 180 days of startup. Stack test data for any facility provides only data for that specific facility and the specific configuration of equipment and processes unique to that facility. Each of the facilities listed above performed stack testing to confirm that facility operation. Even though they are in the same industry, data specific to one Enviva facility should not be assumed to be applicable to another facility. The Hamlet facility will be required to test the equipment permitted unique to the Hamlet facility. To address the public concerns in this area, the DAQ may require additional testing over and above the initial test, if needed, to confirm operation compliance.

Recommendation: The draft permit requires testing for VOC, NO_x and CO for the regenerative thermal oxidizer and the regenerative catalytic oxidizer within 180 of startup to assess compliance with the permit emission limits. In addition to the initial test, it is recommended that these control devices be subject to annual testing for the same pollutants. In addition, testing for requested production increases in softwood above the current permitted maximum should be required. This test may be in lieu of the annual test for that cycle.

Comment Category #4

General comments not directly related to the expressed intent of the public hearing.

Sample comments paraphrased and in no particular order:

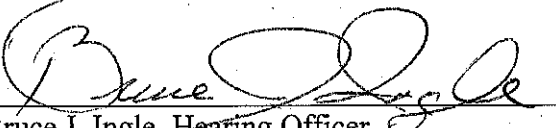
- *Enviva's goal is only to make a profit*
- *Enviva has been a good corporate citizen to this community*
- *The increase in logging trucks will damage our roads and create traffic problems.*

Hearing Officer's Response to These Comments

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, LLC 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.

Conclusions and Recommendations

After considering all the public comments addressing whether or not DAQ should issue an air quality permit to Enviva Pellets Hamlet, LLC to allow the modification of a wood pellet manufacturing facility at 1125 North NC Highway 177 in Richmond County, North Carolina, it is the recommendation of the hearing officer that, in addition to the initial testing required in the draft permit, testing for VOC, NO_x and CO for the regenerative thermal oxidizer and the regenerative catalytic oxidizer should be required annually for these pollutants. In addition, testing for requested production increases in softwood above the current permitted maximum should be required. This test may be in lieu of the annual test for that cycle.


Bruce J. Ingle, Hearing Officer

1-8-2019
Date

SUPPORTING DOCUMENTS

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

Air Quality Permit Application Review and Draft Permit
Public Hearing Attendance Forms
Audio Recording of November 8, 2018 Public Hearing
Summary of Public Hearing Comments
Emails received during the Public Comment Period
Written Comments received during the Public Comment Period
Environmental Justice Study

(The following documents are located on the DAQ IBEAM database)

Notice of Public Hearing
Hearing Officer's Report