Enviva Pellets, LLC – Ahoskie Plant Hearing Officer's Report and Recommendations

September 27, 2022

Public Comment Period: July 13, 2022 through August 19, 2022 Public Hearing: August 16, 2022

Pertaining to Permit Application No. 4600107.17A and 4600107.20B and Draft Air Permit No. 10121T06 for:

Enviva Pellets, LLC – Ahoskie Plant 142 NC Route 561 East Ahoskie, NC Hertford County Facility ID No. 4600107 Fee Class: Title V

PSD Class: Minor

Hearing Officer

Denise Hayes, Regional Compliance Supervisor

Mooresville Regional Office

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I. Background

Enviva Pellets, LLC – Ahoskie Plant (Enviva) is a wood pellet manufacturing facility located at 142 NC Route 561 East in Ahoskie, North Carolina, that is currently operating under permit No. 10121T05, issued on April 25, 2022, with an expiration date of February 28, 2027. Enviva produces wood pellets using the following process equipment: green wood hammermills, bark hog, wood-fired rotary dryer, dried wood handling, dry hammermills, pellet presses, pellet coolers, product loadout operations, and other ancillary activities. The facility is currently permitted to process up to 420,480 oven-dried tons (ODT) of wood from the wood-fired dryer system and up to 357,408 ODT of wood from the dry wood hammermill system with both systems utilizing up to 30% softwood on a 12-month rolling basis. The facility is also currently permitted to process up to 481,800 ODT of wood pellets utilizing up to 45% softwood on a 12-month rolling basis.

The initial permit (No. 10121R00) for construction and operation of the Enviva facility was issued on December 7, 2010, as a Title V and a minor source under Prevention of Significant Deterioration (PSD).

On January 3, 2012, the facility was issued permit No. 10121R01 as a modification to add dry wood handling equipment including a hammermill with associated fabric filter, add a pellet cooler with associated cyclone, and to modify control systems for the coarse hammermills, pellet coolers, and other wood handling sources. The facility was classified as a minor source under PSD.

On March 20, 2014, the facility was issued permit No. 10121R02 as a renewal with modification to add process handling equipment with associated control systems to reduce dust emissions. The facility also submitted the initial fugitive dust plan for this permit. The facility was classified as a minor source under PSD.

On May 22, 2015, the facility was issued permit No. 10121R03 as a modification for increases in production rates and to limit the facility-wide VOC emissions to the baseline VOC emissions plus 249 tons per year to avoid PSD review [142.64 ton/yr (baseline emissions) + 249 ton/yr (modification allowance to remain minor for PSD) = 391.64 tons/yr (limit to avoid being subject to PSD)]. This limit classified the facility as a major source under PSD. The facility also performed modeling to demonstrate compliance with 15A North Carolina Administrative Code (NCAC) 02D .1100, "Control of Toxic Air Pollutants" at the new production rates.

On July 6, 2016, the facility was issued permit No. 10121T04 as a first time Title V permit. The facility remained a major source for PSD with the avoidance condition to limit VOC emissions to 391.64 tons per year.

On April 25, 2022, the facility was issued permit No. 10121T05 for a name change. The facility remained a major source for PSD.

II. Air Quality Permit Application and Review

The mission of the Division of Air Quality (DAQ) is to work with the state's citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit, and economic well-being of all. To accomplish this mission, DAQ requires facilities, in certain situations, to apply for and receive air quality permits prior to construction and operation or modification of its air pollution sources to ensure compliance with all appliable federal and state regulations.

The purpose of this permitting action is the processing of two applications as follows:

- 1. On August 14, 2017, DAQ received Enviva's application No. 4600107.17A to replace the transfer cyclone associated with the wood dryer with a similar transfer cyclone. A letter from DAQ dated August 23, 2017, indicated the change qualified as a 502(b)(10) change per 15A NCAC 02Q .0523. A modified permit was not issued at that time pursuant to the off-permit procedures. The change and its associated technical review would be incorporated into the next renewal or modification.
- 2. On September 1, 2020, DAQ received Enviva's application No. 4600107.20B for permit renewal and associated modifications to increase production. Upon request from the DAQ, the facility resubmitted the full application on December 23, 2021. The proposed modifications include a request to install air pollution control devices, increase pellet production from 481,800 oven dried tons to 630,000 oven dried tons per year, and increase the percentage of softwood to a maximum of 100%. To increase production, the facility will be adding truck tippers, hoppers, green hammermills, dry hammermills, pellet mills, and one pellet cooler system. To reduce volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions associated with the facility expansion and to reclassify the facility as PSD and HAP minor, the facility proposes to install a regenerative thermal oxidizer and a regenerative catalytic oxidizer among other controls.

These modifications will result in net emissions changes over the current baseline emissions. The following table taken from the draft permit review provides a comparison summary of facility-wide potential criteria pollutants and CO₂e (carbon dioxide equivalent) emissions, including fugitive emissions, for the existing permit (T05) and the proposed permit (T06).

Enviva's Estimated PTE	VOC (tpy)	NO _x (tpy)	PM (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)	SO ₂ (tpy)	CO (tpy)	CO ₂ e (tpy)	Total HAPs (tpy)
Baseline Permit 10121T05	391.60	183.98	129.66	129.63	129.63	19.2	45.09	162,292	29.88
12/29/2021 Proposed Modification Addendum	125.43	146.04	55.95	53.63	45.49	19.42	173.65	238,661	23.5
Change in Estimated PTE	-266.17	-37.94	-73.71	-76.00	-84.14	+0.22	+128.56	+76,369	-6.38

Richard Simpson, Environmental Engineer in DAQ's Permitting Section in the Raleigh Central Office, reviewed the applications. He determined that the facility is expected to comply with all applicable federal and state air quality requirements following the issuance of the renewed/modified permit. The permit application review is available on the DAQ website.

The Division is obligated to issue an air quality permit to Enviva if the applicant has met all federal and state laws, regulations, and rules for the protection of the environment, unless the public comments received during the public comment period reveal that DAQ was in error or incomplete in its evaluation of the wood pellets plant from an air quality standpoint, or if after the 45-day EPA review period, the EPA objects to the permit as specified in 40 CFR 70.8(c)(1). The following hearing officer's responses to written and oral public comments will address issues raised in light of these requirements (Section IV).

III. Notice of Public Hearing

The public hearing announcement was published in the Roanoke-Chowan News Herald and on the DAQ's website on July 13, 2022. The public comment period ran from July 13, 2022 through August 19, 2022. The required duration for a comment period is 30 days per the 15A NCAC 02Q .0500 rules. The comment period for this draft permit was a total of 37 days.

Copies of the permit application review, draft air permit, and draft Environmental Justice (EJ) report were posted on the DAQ website for public review. Copies of the air quality permit application and related documents were available for public review in the DAQ's Raleigh Central Office (RCO) and Washington Regional Office (WaRO) throughout the public comment period. In addition to the public hearing, the DAQ accepted comments concerning the draft permit via regular 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

All comments were given equal consideration, whether they were made orally at the public hearing, submitted in written form via regular mail or email, or left in the voicemail box designated for comment. Fifty-one individuals were registered to speak at the public hearing on August 16, 2022. Of those fifty-one individuals, forty-seven individuals submitted oral comments during the public hearing. Eighteen speakers were in favor of the issuance of the permit, and twenty-nine speakers were against the issuance of the permit in its draft form. During the public comment period from July 13, 2022 through August 19, 2022, ninety-eight written comments were received via email and another twelve comments were received via voicemail.

All email comments with attachments have been saved to an Adobe file. The voicemail comments were transcribed to a Word document. The hearing was recorded, and the attendance list and registered speakers list were saved to an electronic file. These electronic documents are available by request.

For the purpose of this report, the comments have been grouped by subject matter as it relates to environmental concerns with the issuance of the permit to Enviva. Note that the comments shown below are a summary of the full oral or written comment submitted. Section A, summarizes and addresses comments related to concerns about fugitive dust and the possibility to enhance the facility's fugitive dust plan. Section B. summarizes and addresses comments related to concerns about installing continuous emissions monitors or ambient air quality monitoring sites around the facility to obtain emissions data. Section C. summarizes and addresses comments related to concerns about requiring additional controls to be installed at the facility. Section D. summarizes and addresses comments related to concerns about emissions calculations, specifically for HAPs and toxic air pollutants (TAPs), and stack testing. Section E. summarizes and addresses comments related to concerns about increases in carbon dioxide/greenhouse gas (GHG) emissions. Section F. summarizes and addresses comments related to concerns about inadequate monitoring, recordkeeping, and reporting requirements. Section G. summarizes and addresses comments related to environmental justice and cumulative impacts. Section H. summarizes and addresses comments related to concerns about the facility's compliance history. Section I. summarizes and address requested permit changes from Enviva. Section J. summarizes and addresses comments made in support of the issuance of the permit.

A. Fugitive Dust Concerns and Requests to Enhance the Fugitive Dust Plan

Oral and written comments were made concerning fugitive dust originating from Enviva and the need to enhance the fugitive dust plan requirement in the permit.

Thirty (30) commenters submitted the same form email which stated, "It will create more dust emissions polluting surrounding residents."

Ms. Nancy Carter submitted comments via email which stated, "The dust pollution produced is impacting the health of the local residents (see public health stats)."

Ms. Emily Zuchinno of Dogwood Alliance was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "Enviva's air pollution controls will not lower dust. Enviva's increased pollution will create increased amounts of dust that blow into the surrounding community, coating cars and porches and causing a wide range of health problems. Wood dust can get deep into the lungs, causing respiratory illness, heart disease, and cancer."

A representative of the North Carolina Wildlife Federation was a speaker at the hearing held on August 16, 2022 and submitted comments via email. The emailed comments stated, "Expansions in production could also be expected to increase odors and fugitive dust emissions. Many residents who live near pellet plants in the Southeast express concerns relating to dust. Fugitive dust is a type of particulate matter (PM), and exposure to PM can irritate respiratory tracts and exacerbate existing conditions such as asthma or cardiovascular disease. We hope this issue will be addressed."

A representative of Clean Water for North Carolina submitted comments via email which stated, "Enviva's expanded production will create more dust that blows into the surrounding community. The dust covers cars and porches, and is harmful for human health when inhaled particularly for the elderly, children and those with preexisting health conditions. Considering the clear risks to identified sensitive receptors and many nearby polluting sources, DAQ should also ... adjust Ahoskie's Fugitive Dust Plan to preemptively address potential concerns for nearby neighbors and community locations in close proximity."

Comments were submitted via email through the Environmental Integrity Project (Conservation Groups), which includes ten Conservation Groups including North Carolina Sierra Club, Dogwood Alliance, Clean Water for North Carolina, Southern Forests Conservation Coalition, Coastal Plain Conservation Group, Partnership for Policy Integrity, Natural Resources Defense Council, Our Children's Earth, the Rachel Carson Council, and the Southern Environmental Law Center. Representatives from some of these groups were also speakers at the hearing held on August 16, 2022. The emailed comments stated, "Enviva plans to

expand the facility by 30%; it is reasonable to expect that the sources of fugitive dust—chip piles, trucks, loading and unloading, and so on, will also increase by 30%. One example of the impacts the community will face: with the expansion, Enviva estimates there will now be 300 truck trips to the facility per day, or one truck visiting the plant every 4.5 minutes." The commenter also stated, "To prevent worsening fugitive dust issues, DAQ should proactively strengthen Enviva Ahoskie's Fugitive Dust Plan. For instance, DAQ could require new windbreaks, paving of plant haul roads, and increased housekeeping and maintenance requirements."

Hearing Officer's Response

Specific Limitation and Condition No. 2.2 – A.10. of the draft permit No. 10121T06 contains the requirement to show compliance with 15A NCAC 02D .0540, "Particulates from Fugitive Dust Emission Sources." The condition states that Enviva shall comply with all aspects of the most recent DAQ approved fugitive dust plan. There are no further requirements listed in this condition.

According to the draft permit review, the facility is currently operating under the fugitive dust plan that was approved by Michael Abraczinskas, Director of DAQ, on August 12, 2019. The review describes the purpose of the plan, the list of sources that are subject to the plan, specific responsibilities of plant personnel, best management practices, and all required recordkeeping and reporting. Based on the most recent full compliance evaluation conducted on March 15 and 16, 2022, the facility was operating in compliance with this condition. There were no fugitive dust emissions observed during the inspection. Also, there have been no complaints specific to fugitive dust emissions received by the Washington Regional Office since September 20, 2017.

Recommendation: It is the recommendation of the hearing officer to include language in the permit that requires Enviva to submit an updated fugitive dust plan to include all new fugitive dust emission sources and any new strategies to reduce fugitive dust emissions. The language should also include a submittal deadline date.

B. Continuous Emissions Monitoring & Establishment of Ambient Air Quality Monitoring Sites

Oral and written comments were made concerning the installation of continuous emissions monitoring systems and/or the establishment of ambient air quality monitoring sites to analyze emissions near the facility.

Mr. Will Hendrick was a speaker at the hearing held on August 16, 2022, and commented, "Ideally, the permit would include the use of continuous emissions monitoring systems. At minimum, we urge more frequent stack testing than is proposed. Also, stack testing should not overlook important hazardous air

pollutants like hydrochloric acid." [Note: Concerns for stack testing of hydrochloric acid (hydrogen chloride or HCL) are addressed in Section IV.D. of this report.]

Ms. Ann Stewart was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "Place independently verifiable continuous air quality monitors, not controlled by Enviva, within a two mile radius of the plant to assess the real impacts on the adjacent communities. The fox in the henhouse is not a reliable source of independent data. Collect independent data on those little particles at the 2.5 micron range, the ones that go deep into your lungs and cause irreparable damage."

Mr. Jack Spruill was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "If Enviva expects this expansion will be 'hugely accretive to their earnings,' it is entirely appropriate for DEQ to require them to fund independently placed monitored and analyzed air quality monitors placed both close to the plant and an appropriate distance away."

Reverend Mack Ledgerton was a speaker at the hearing held on August 16, 2022 and submitted additional comments via voicemail. The voicemail comments stated, "I'm calling to recommend that DAQ install and perform single-facility daily monitoring of all the emissions at the Enviva Ahoskie facility and place the monitoring equipment within one ... mile of the facility."

Hearing Officer's Response:

DAQ establishment of ambient air quality monitoring sites: The DAQ is committed to fulfilling its mission statement to the fullest of its abilities. The DAQ's Ambient Monitoring program is extremely resource intensive. Not only does it take up a significant portion of DAQ's budget, but it also requires extensive staffing resources to site, operate, troubleshoot, calibrate, quality assure, analyze, and report the data. Having extremely limited resources, the DAQ devotes itself to distributing those resources in a manner that best supports its mission statement and serves the citizens of the State of NC. In the case of the Ambient Monitoring Network, the number, types, and location of the monitoring sites are determined by discussions between the Planning Section. which includes modelers/meteorologists, the Ambient Monitoring Section, and DAO management. Allocation of monitoring resources are reviewed annually by staff and Annual Network Review Plans are put out for public/EPA comment each year. A more extensive review is conducted every five years, which is also put out for public/EPA comment. Ambient monitoring siting requirements and National Ambient Air Quality Standards (NAAQS) determinations are governed by 40 CFR Part 58 Appendices A, D, & E and 40 CFR Part 50 Appendices H, I, K, N, P, R, S, T, & U respectively. Rarely does a facility or conglomeration of facilities warrant source specific monitoring. The Hearing Officer has full confidence in DAQ's management and sections which allocate monitoring resources each year in NC. Commenters are urged to provide input regarding the location and type of monitors in any area during the Annual Network Review comment period each year. The current comment period is open from September 19, 2022 through October 19, 2022. The link is: https://deq.nc.gov/news/events/public-comment-period-2022-2023-annual-monitoring-network-plan-north-carolina-air-quality.

Commenters noted that ambient air quality monitors were installed near the Enviva Pellets, LLC – Northampton Plant. Those monitors were installed to gather baseline data for Northampton County for the natural gas pipeline project that was proposed in close proximity to that facility. Those monitors were not installed due to any rules or regulations, or conditions associated specifically with the Northampton Plant's air quality permit.

Enviva installation of continuous emission monitors: The draft air permit as proposed does not warrant that Enviva install and operate continuous emissions monitoring systems for VOCs or other criteria pollutants. There are no rules or regulations applicable to this facility that require the installation of continuous emissions monitoring systems to show compliance.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

C. Installation of Additional Controls

Oral and written comments were received concerning requirements for Enviva to install additional controls for pollutant emissions.

Mr. Sheel Patel submitted comments via email. The emailed comments stated, "Pollution control[s] are very expensive. Enviva has saved 30 to 60 million dollars by not installing these controls."

Ms. Jeannie Ambrose submitted comments via email. The emailed comments stated, "Enviva should install thermal oxidizers to better control their existing HAPs and VOCs pollutant levels."

Ms. Tina Katsano submitted comments via email. The emailed comments stated, "Pollution controls should have been put in place over 10 years ago. Air pollution controls are only being put in place now because of a lawsuit brought to a Richmond County facility – because of the lack of the pollution controls, Enviva has pocketed 30 to 60 million in operational savings. This permit has no provision for how to rectify Enviva's operational savings with the air quality costs."

Ms. Martha Brimm was a speaker at the hearing held on August 16, 2022 and also submitted additional comments via email. The emailed comments stated, "Enviva has saved itself millions by NOT installing air pollution control so far. Under this permit, they'll add controls that will bring about a decrease in some harmful pollutants, but the planned expansion will INCREASE wood dust emissions overall."

Hearing Officer's Response

With this application, Enviva has proposed to install new equipment for the control of volatile organic compounds (VOCs), hazardous air pollutants (HAP), and particulate matter (PM) to offset and reduce the overall expected emission increases for the facility expansion project. These include multicyclones, a regenerative thermal oxidizer, and a regenerative catalytic oxidizer. Enviva has also proposed to route emissions from some of the existing sources, including the green hammermills and dry shavings hammermills, through the existing wet electrostatic precipitator and on through the new regenerative thermal oxidizers. With these new controls, the estimated potential emissions will be reduced for all criteria pollutants except sulfur dioxide and carbon monoxide as noted in the table above, while still allowing for the expansion of the facility.

Furthermore, unless an applicable rule or regulation stipulates a specific control device or method of control, or an applicable regulation grants authority to the state to determine what control is required, a facility may request permitting of chosen equipment that will control emissions such that compliance is demonstrated with emission standards. For this permit modification, no applicable rule or regulation required specific control devices or granted authority to DAQ to require certain controls.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

D. Emissions Calculations and Stack Testing

Oral and written comments were received concerning the calculations for HAP and TAP emissions. Some comments encouraged DAQ to change emission limits for acrolein and to add stack testing requirements for hydrogen chloride (HCL) emissions.

Ms. Emily Zuchinno of Dogwood Alliance was a speaker at the hearing held on August 16, 2022 and also submitted additional comments via email. The emailed comments stated, "Enviva Ahoskie will emit one particular HAP, called acrolein, at harmful levels. Their acrolein emission levels are under North Carolina's threshold, but are double what EPA deems safe. NC's threshold is too high. NC should adopt EPA's standard to reduce this harmful pollutant."

Comments were submitted via email through the Environmental Integrity Project (Conservation Groups). Representatives from some of these groups were also speakers at the hearing held on August 16, 2022. When discussing HAP emissions calculations, the emailed comments stated, "Enviva calculates the emission rates of these six HAPs using emission factors that are 'based on process information and an appropriate contingency based on engineering judgement,' without further elaboration. The lack of detailed information on how Enviva derives these emission factors is a separate deficiency..., but more importantly, it appears that Enviva's emission factors for the six HAPs are outdated and far lower than what Enviva has more recently utilized for a similar pellet plant in Georgia (which Enviva itself reclassified as a major source of HAPs based on the new emission factors) it appears Enviva or Enviva's consultant, Trinity, is not using the 'emission factor updates based on recent engineering reviews' for the Ahoskie permit." Also, "In sum, because PTE calculations are a 'worst case emissions calculation,' DAQ must require Enviva to utilize its updated emission factors for the Ahoskie application, which would result in the facility being a major source of HAPs."

Furthermore, the representative of the Conservation Groups stated when discussing acrolein pollutant emissions calculations, "... even assuming Enviva's emission estimates are correct, Enviva's own modeling shows that the facility will emit harmful levels of the toxic air pollutant acrolein. DAQ must adopt newer, more stringent health-based standards for acrolein used in other states and ensure Enviva's emissions do not cause exceedances of that standard." "Although Enviva's modeling did show that its emissions would not cause exceedances of any of North Carolina's AALs, North Carolina's AAL for acrolein is far higher than EPA and other states have established as safe concentrations of acrolein. In sum, North Carolina's acrolein standard is outdated, and Enviva's own modeling and prior reliance on the OEHHA health-based concentration show that Enviva Ahoskie's acrolein emissions will cause harmful concentrations of acrolein beyond the facility's fence line. To protect the public who live and work in extreme proximity to the facility, DAQ must require modifications—either increased control efficiencies or reduced production limits—that ensure acrolein concentrations do not exceed the OEHHA standard of 2.5 µg/m3."

Also, when discussing hydrogen chloride emissions calculations, "...Enviva has consistently used the same AP-42 emission factor (paired with an assumed 90% control efficiency for WESP) at *every* Enviva plant we have data for – except now Enviva uses an arbitrarily lower emission factor for Ahoskie. ... In all other Enviva

applications we have reviewed, Enviva has appropriately used an emissions factor phrased as lb/MMBtu (specifically, 1.9E-02 lb/MMBtu), but with Ahoskie, Enviva now uses an emission factor phrased as lb/ODT 9 oven dried ton of pellets produced), and the result is readily apparent in the vastly lower emission estimate...". Also, "... the draft permit does not contain any stack testing requirements for HCL. Given the extremely narrow margin between Ahoskie's estimated emissions and the major source HAP threshold, DEQ must require stack testing to confirm Enviva's claimed 90% control efficiency."

Hearing Officer's Response

DAQ has compared HAP emission factors from similar Enviva facilities and noted some of the emission factors were higher, lower, or the about same. The potential emissions are estimated, and no two sources are exactly alike or perform the same way. The draft permit requires Enviva to develop site specific emission factors for ten different pollutants through stack testing after the modification.

Calculations of HAP emissions: The draft permit includes a HAP avoidance condition in Section 2.2 - A.3. In order to be classified as a minor source for HAP, the facility-wide HAP emissions will be limited to 25 tons per year for combined HAPs and 10 tons per year for each individual HAP. The estimated emissions of HAP submitted in the application received December 23, 2021 appear to be based on EPA Publication AP-42 Section 1.6 and site specific stack test data from other North Carolina and southern Virginia based Enviva facilities that operate in a similar manner as the Ahoskie facility will operate after the modification (with regenerative thermal oxidizer control). To verify these emission factors and to ensure compliance with these emission limits, the draft permit requires the facility to perform initial and periodic stack testing (no less than annually) for the top six HAP pollutants (acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde). Based on the comments received, it is recommended that this condition be updated to include testing for a seventh HAP, hydrogen chloride. These rigorous stack testing requirements will provide site specific data to ensure the facility is using the most current emission factors and will ensure the facility remains below the major source thresholds.

All stack testing and the associated parameters are reviewed by DAQ's Stationary Source Compliance Branch (SSCB) engineers to determine if the results of the stack testing are acceptable. With SSCB approved site specific emission factors, DAQ's Washington Regional staff will help ensure the approved emission factors are used for calculations in the required annual emissions inventory. Those emissions will then be compared to the threshold limits.

Also, to ensure the HAP emissions stay below the major source threshold before the modification, a new condition for avoidance of 15A NCAC 02D .1112, "112(g) Case-by-Case Maximum Achievable Control Technology" is recommended to be added to the permit for the time period of the issue date of the permit (current state of operation) through the completion of the construction phase of the project. This condition will limit the HAP emissions to 25 tons per year and each individual HAP to 10 tons per year. Testing requirements are recommended to obtain site specific emission factors for the seven HAP (including hydrogen chloride) that account for approximately 97% of the facility-wide HAP at current state of operations. This testing will be required to be completed and the test report submitted within 180 days of the issuance of the permit. For this test, the facility will be required to test the existing dryer system, the existing dry wood hammermills, the existing green wood hammermill, the existing dry wood day silo, and the existing pellet coolers to determine site specific HAP emission factors before the modification. Once DAQ has approved the stack test, the facility shall provide estimated facility-wide HAP emissions to ensure compliance with the additional condition during the construction phase for the proposed modification.

Stack testing for hydrogen chloride emissions: Enviva's estimated hydrogen chloride (HCL) emissions compared with dryer heat input are different compared to other facilities. It is recommended that DAQ add HCL to all required stack testing requirements throughout the permit for a total of seven HAPs to be tested. The testing will determine site specific emission factors for HCL without the need to know the exact control efficiency of the wet electrostatic precipitator. The addition of HCL to the testing requirements will increase the accuracy for calculating facility-wide HAP emissions.

Adopting new AALs: The Secretaries' Science Advisory Board (SAB) is comprised of thirteen experts in toxicology, public health, ecology, engineering, and other related fields. Their expertise assists the state departments of Environmental Quality and Health and Human Services by recommending reviews and evaluations of contaminants, acting as consultants on DEQ's determinations to regulate contaminants, and helping the agencies identify contaminants of concern and determine which contaminants should be studied further. The SAB continually reviews the scientific information that forms the basis of the Acceptable Ambient Levels (AALs) for toxic air pollutants. As this information changes, the SAB recommends updates to the AALs. Following any recommendation of the SAB, DAQ would be required to undergo formal rulemaking in order to change the AAL. Therefore, the use of a nonregulatory AAL as part of a permit modification is beyond the purview of DAQ's Permitting Section. To learn more about the SAB and hear recordings of past meetings, please visit: https://deq.nc.gov/about/boards- and-commissions/secretaries-science-advisory-board.

Recommendations: Add hydrogen chloride in all periodic testing conditions of the permit that involve HAP emissions. Also, include a new condition to avoid being a major source of HAP for the time period from the date of issuance of the permit (current state of operation) until the completion of the construction phase of the project. This condition should include a specific testing requirement to be completed and a test report submitted within 180 days of the issuance of the permit.

E. Increases in Carbon Dioxide/Greenhouse Gas (GHG) Emissions

Oral and written comments were received concerning the increase in carbon dioxide/greenhouse gas (GHG) emissions with the modification to increase production.

Thirty commenters submitted the same form email which stated, "Burning wood pellets puts more carbon into the atmosphere than coal. The production of wood pellets creates harmful pollution that can cause heart disease and cancer."

Ms. Marjorie Fish submitted comments via voicemail and email. The emailed comments stated, "The impact from permitting is more climate-warming carbon in the atmosphere."

Ms. Ann Stewart was a speaker at the hearing held on August 16, 2022 and also submitted additional comments via email. The emailed comments stated, "Burning wood pellets creates more GHG emissions than burning coal to create the same amount of energy. That's a fact."

Ms. Emily Zuchinno of Dogwood Alliance was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "The burning of wood pellets produces 50% more greenhouse gasses than an equivalent amount of coal."

A representative of the North Carolina Wildlife Federation was a speaker at the hearing held on August 16, 2022 and submitted comments via email. The emailed comments stated, "And as the permit itself indicates, the modification will result in a 68% expansion in greenhouse gas emissions (CO2e), or an increase from 162,292 tpy to 238,661 tpy – an amount equal to the annual emissions of more than 14,000 cars or the annual sequestration of more than 81,000 acres of forest in the U.S. This figure does not capture the additional emissions from fossil fuel-powered machinery used to harvest and transport the pellets to port and overseas."

A representative of Clean Water for North Carolina submitted comments via email which stated, "When considering the cradle to grave process of manufacturing and using wood pellets, science has shown that the production cycle of wood pellets actually creates more CO2 per unit energy than coal."

Hearing Officer's Response

The DAQ shares these concerns. The EPA's tailoring rule stipulates that a facility cannot be a Title V facility due to GHG emissions alone. As part of the application review, the DAQ has verified the emission factors and estimates, and the facility's characterization based on six gases and their applicable global warming potentials. However, it is important to note that there are currently no applicable requirements (as defined in 40 CFR 70.2) for GHG emissions for the current or future sources to be located at the facility; thus, there is no requirement (standard, stack testing, monitoring, recordkeeping, reporting) that must be added to the permit.

On a PSD standpoint, again the EPA's tailoring rule notes that a facility cannot trigger PSD solely because of GHG emissions, and because the modification itself does not reach the major source threshold of 250 tons per year for this non-listed category, it cannot trigger a PSD review. Basically, the modification must be a major modification for at least one non-GHG pollutant in order for any GHG increase of 75,000 tons per year CO₂e to trigger PSD.

It should be noted that while no specific permit condition for GHGs is included in the permit, the facility will be required to report to EPA its annual GHG emissions each year since it emits more than 25,000 metric tons per year CO₂e per 40 CFR 98 Mandatory Greenhouse Gas Reporting.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

F. Inadequate Monitoring, Recordkeeping, and Reporting Requirements

Oral and written comments were received concerning inadequate monitoring, recordkeeping, and reporting requirements.

Ms. Ann Stewart was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "DAQ should NOT approve this permit when Enviva has violated those it already has and has paid only a mere pittance of penalties or none at all, and the monitoring and reporting requirements in this draft permit amount to 'once a month visual inspection' or 'once a year to see if something is clogged up.'"

Ms. Lib Hutchby was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "Any facility that emits hazardous air pollutants (HAPs) and volatile organic compounds MUST be very closely monitored."

A representative of Clean Water for North Carolina submitted comments via email which stated, "DAQ must protect the air and water quality of Ahoskie residents, Enviva should comply with the permit provisions, but stronger monitoring and reporting requirements are necessary, especially given the company's poor compliance track record and disregard for environmental stewardship. Enviva estimates that the Ahoskie facility will be a minor source of HAPs after the modifications, however it is currently a major source of HAPs and while the draft permit contains limits, they are not adequately monitored, recorded or reported. DAQ should implement a compliance schedule and stricter monitoring requirements."

Comments were submitted via email through the Environmental Integrity Project (Conservation Groups). Representatives from some of these groups were also speakers at the hearing held on August 16, 2022. The emailed comments stated, "Although the draft permit contains limits on Ahoskie's PTE for HAPs, these limits are not coupled with adequate monitoring, recordkeeping, and reporting requirements. As a result, they are unenforceable as a practical matter and do not restrict Ahoskie's PTE."

Hearing Officer's Response

The draft permit contains specific monitoring requirements for control device inspection and maintenance, periodic monitoring for visible emissions, monitoring of the temperature for the thermal/catalytic oxidizers, monitoring of the voltage and current for the wet electrostatic precipitators, periodic stack testing requirements for various pollutant emissions, and calculating of emissions to show compliance with limits throughout the draft permit. These monitoring requirements are consistent with other permits across the state. Based on the most recent full compliance evaluation conducted on March 15 and 16, 2022, it appeared the facility has been performing the required monitoring under the existing permit. It is expected the facility will continue to perform the required monitoring in accordance with the draft permit.

The draft permit also contains specific recordkeeping requirements for control device inspection and maintenance, visible emissions observations, monthly production records, monthly emissions estimates, and malfunction plans for temperature monitoring systems. Based on the most recent full compliance evaluation conducted on March 15 and 16, 2022, it appeared the facility has been

maintaining the required recordkeeping under the existing permit. The most recent deficiency in recordkeeping was issued to the facility on July 6, 2017, for failure to maintain watering truck and dust observation logs. Based on a records review, the facility appears to have been in compliance since that time.

The draft permit also requires semiannual reporting of these monitoring and recordkeeping activities. The facility has consistently submitted required reports under the existing permit in a timely manner. There have been no instances of late or inadequate reporting by this facility.

The format of many of the conditions in this draft permit with respect to the monitoring, recordkeeping, and reporting requirements are consistent with most Title V permits. In each case, the EPA has not indicated DAQ's monitoring, recordkeeping, and reporting requirements are deficient or fail to meet the intent of the Title V requirements after conducting audits of DAQ's Title V permitting program and reviewing previous Title V permits for Enviva Pellets, LLC – Ahoskie Plant and other similar Title V permits.

Recommendation: The monitoring, recordkeeping, and reporting requirements are sufficient to ensure compliance with the emission limits of the permit. No changes to the draft air permit are recommended based on these comments at this time.

G. Environmental Justice and Cumulative Impacts

Oral and written comments were received concerning environmental justice and cumulative impacts for the surrounding community.

Mr. David Ames submitted comments via email which stated, "So important is the maintenance of healthy forests in North Carolina that I urge the Division of Environmental Quality to fully assess the threats associated with the increase in forest harvesting planned by Enviva. Such an assessment would be best done by the development of an Environmental Impact Statement."

Ms. Marjorie Fish submitted comments via voicemail and email. The emailed comments stated, "The impact in permitting is the African American and indigenous communities living around Enviva are forced to endure greater air pollution and greater susceptibility to disease."

Ms. Tina Katsano submitted comments via email. The emailed comments stated, "The DAQ is tasked with protecting communities impacted by environmental justice issues. Herford County ranks within the bottom 25% in NC health outcomes and consistently performs worse than state averages. The racial demographics

impacted: include 64% black folk within a mile of the processing facility; the Meherrin indigenous community is also impacted. Approval of the expansion permit will create a reputational problem for the NCDAQ."

Ms. Ann Stewart was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "Make the NC Office of Climate part of every discussion on every wood pellet permit going forward. You don't need a law to make that happen. Just do it. What good are they if they aren't considering the impacts of this industry? If they are not seriously addressing the impact of the emissions that will ensue from approving JUST THIS DRAFT PERMIT – 214,500 tpy, or the equivalent of 52,000 more cars on the road – how can they claim they are working to meet NC's climate goals to reduce economy-wide emissions 40% from 2005 levels by 2025 and at least 50% from 2005 levels by 2030."

Mr. Andy Wood with the Coastal Plain Conservation Group submitted comments via email. The emailed comments stated, "Given no cumulative impact study has been conducted to assess unintended consequences of the wood pellet to energy scheme ... CPCG hereby requests NCDEQ, at Governor Cooper's direction, to review the impacts of intensive forest harvesting activities to produce wood pellets and complete a report on the forest, climate, and community impacts of the wood pellet industry in North Carolina. This report should be completed before any expansion of the wood pellet industry is considered."

Ms. Emily Zuchinno of Dogwood Alliance was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "Due to the high amount of public interest in this permit, I request that Governor Cooper and NC DEQ review the impacts of intensive forest harvesting activities for the production of wood pellets and complete a report on the forest, climate and community impacts of the wood pellet industry in North Carolina. This report should be completed before any expansion of the wood pellet industry is considered."

Mr. Jack Spruill was a speaker at the hearing held on August 16, 2022 and submitted additional comments via email. The emailed comments stated, "I urge you to require Enviva to meet the standards of the Cumulative Environmental Assessment and impact as required under the US National Environmental Policy Act and the North Carolina State Environmental Policy Act before any expansion is authorized. It is grossly inappropriate for DEQ to enable Enviva to expand its widespread environmental destruction and environmental injustice under only the narrow requirements of the draft air permit."

A representative of the North Carolina Wildlife Federation was a speaker at the hearing held on August 16, 2022 and submitted comments via email. The emailed comments stated, "The draft document does not discuss or analyze the cumulative impacts from the other polluting industries in the county and the one-mile radius in detail, although it reports that there are 35 permits or incidents of note. The Draft Environmental Justice Report recommends consultation with the list of sensitive receptors and community leaders for 'considering additional outreach' and 'outreach options,' as well as the provision of project information to the Meherrin Tribe, Town of Ahoskie, and Hertford County Health Department. We hope that the permit applicant and the DEQ might be willing to share the outcomes of such consultations and information sharing sessions, to increase transparency and accountability in this process. We also question how robust community consultation and evaluation of environmental justice impacts in earlier stages might have affected the plant's development and permitting process."

A representative of Clean Water for North Carolina submitted comments via email which stated, "According to the environmental justice report, within the one-mile radius for the property surveyed, there are 35 permits or incidents as of June 28, 2021. Those include 1 air quality permit, 3 inactive Hazardous Sites, 1 Preregulatory Landfill site, 1 Hazardous Waste Site, 16 Underground Storage Tank Incidents, 1 Above Ground Storage Tank Incidents, 3 Underground Storage Tank Active Facilities, and 9 Land Use Restriction and/or Notices. Considering the expansion of this facility along with these additional permits or incidents, there would be significant cumulative public health and environmental impacts on the community." Additionally, the email states, "The area is already overburdened with these social burdens and Enviva only exacerbates issues related to health inequities. While DEQ's draft EJ report identified communities and populations which would face disparate impacts, they failed to recommend additional provisions apart from outreach in this draft permit, DEQ failed to ensure there would be meaningful involvement or fair treatment for the Ahoskie's predominately Black community."

Comments were submitted via email through the Environmental Integrity Project (Conservation Groups). Representatives from some of these groups were also speakers at the hearing held on August 16, 2022. The emailed comments stated, "... in issuing this permit modification DAQ has failed to meet its obligations under Title VI of the Civil Rights Act of 1964. As a recipient of EPA financial assistance, DAQ must assure that its permitting decisions do not have the effect of causing disproportionate adverse harm to communities of color. Based on the Department of Environmental Quality's (DEQ) own draft EJ report, this permit modification would adversely impact Black communities surrounding Enviva Ahoskie's facility. DAQ's failure to consider the cumulative impacts to the Black and Native American communities surrounding Enviva Ahoskie is also contrary to the agency's own long-standing commitments to achieve environmental justice.

Publishing a report that documents some of the discriminatory harms of an agency action is insufficient under Title VI and DEQ's environmental justice policies.

Hearing Officer's Response

Meaningful Involvement: The NC DEQ's Draft Environmental Justice (EJ) Report includes information on the local (within a one-mile radius of the facility) demographics and compares those to the county and statewide census data. The report also includes information on Hertford County's health rankings and outcomes and the types of other industrial sites located in the area around Enviva. The Department used the results from the draft EJ report to inform the additional outreach conducted for this project. Based on the draft EJ Report, the following outreach was conducted:

- A one-page fact sheet with the permit overview and information about ways to engage was created and distributed.
- The list of sensitive receptors was consulted while considering additional outreach options that may best fit this community's needs.
- A dedicated phone line was set up and monitored for commenters to leave comments by voicemail at their convenience in case of internet connectivity issues.
- Multiple reminders were posted on social media.
- Project information was provided to officials of the Meherrin Tribe, the Town
 of Ahoskie, and the Hertford County Health Department.
- Known community leaders were consulted for additional outreach options.

Meherrin Tribal land concerns: The state designated tribal statistical area for the Meherrin tribe did come up within the results of the draft EJ Report. As such, the Meherrin tribal leadership was provided the permit information and the opportunities for engagement.

Health and cumulative impacts: The Division of Air Quality continues to research and learn new methods for evaluating cumulative impacts from facilities located in a common area. DAQ is open to examples from other states on how this can be done related to the air permitting process. DAQ uses NC DEQ's Community Mapping System and all other available data to inform its permitting actions in an area with multiple air emission sources, including the data from emission inventories, source testing reports, and any other periodic records and reports maintained for compliance with air quality rules and regulations. Best professional judgement is used as part of this process.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

H. Facility's Compliance History

Ms. Nancy Carter submitted comments via email which stated, "The company involved has had numerous violations not address[ed] by authorities."

A representative of Clean Water for North Carolina submitted comments via email which stated, "Enviva's Ahoskie plant has been cited for failure to control dust and equipment failures and has faced numerous violations across other plants in the Southeast."

Hearing Officer's Response

Based on the most recent full compliance evaluation conducted by DAQ staff on March 15 and 16, 2022 and a complete records review, the Enviva Pellets, LLC – Ahoskie Plant has been operating in compliance with their air permit since the last Notice of Deficiency issued on July 6, 2017. Also, there have been no complaints received by the Washington Regional Office since October 30, 2019.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

I. Permit Changes Requested by Enviva

Mr. Stephen Stroud, Sr. Director, Environmental Affairs with Enviva, LP, was a speaker at the hearing held on August 16, 2022 and also submitted additional comments via email. The facility requested the following changes to the draft permit:

• Specific Limitation and Condition 2.2 – A.2.f. of the draft permit requires the facility to install, calibrate, operate, maintain, and inspect continuous temperature monitoring systems for the regenerative thermal oxidizer (ID No. CD-RTO) and the regenerative catalytic oxidizer (ID No. CD-RCO). The facility is required to ensure the 3-hour rolling average firebox temperature for each firebox does not drop below the firebox temperature established during the performance test. Enviva requested the permit be revised to allow compliance using average temperatures based on a 3-hour block average instead of the 3-hour rolling average.

Hearing Officer's Response

Although the calculation of 3-hour block averages is often easier to accommodate in data handling (in that there are eight distinct and eight unique time blocks in a 24-hour day starting from midnight), the selection of the 3-hour rolling average helps assure that compliance is being maintained between the time blocks for some emission or parametric value. For example, the selection of the thermal oxidizer minimum temperature being set to a 3-hour rolling value can assure that the average temperature is being maintained between the times when data is being accumulated to calculate the 3-hour block average. A dataset that shows compliance in all 3-hour rolling average values for a given temperature requirement will always demonstrate compliance with a comparable 3-hour block average value (for the same temperature). The converse is not always true (i.e., compliance with a 3-hour block average does not assure compliance with a 3-hour rolling average for the same numerical value). The 3-hour rolling average provides greater assurance of continuous compliance, particularly where the effects of short-term changes (in temperature) may have nonlinear effects on emissions.

Recommendation: The DAQ will continue to use the 3-hour rolling average in the draft permit. No changes to the draft air permit are recommended based on this comment at this time.

• Specific Limitation and Conditions 2.1 – A.1.h., 2.2 – A.2.i., and 2.2-A.4.e. of the draft permit require the facility to monitor and maintain minimum secondary voltage and current for each grid of the wet electrostatic precipitator (WESP). Enviva requested the permit be revised to allow compliance based on the minimum daily total power output instead of secondary voltage and current.

Hearing Officer's Response

Demonstrations for compliance with the applicable particulate matter emission standard is on an hourly basis. Thus, the daily average total power input (secondary corona power) to the WESP proposed by the facility is not appropriate. The averaging time for the "total power" should be:

- a. an instantaneous measurement value in line with the secondary voltage and current that is proposed in the draft permit, or
- b. an hourly or a rolling 3-hour average consistent with the averaging time of the applicable PM emission standard, based on the compliance test results.

DAQ would also need to know and approve how the "total power" is calculated, an acceptable value, and what kind of data acquisition handling system will be used. The facility will be required to clearly define the new parameter operating limits with rationale on how they were established in either a cover letter to or an executive summary within the stack test report that is the basis for the new "total power" limits. Due to the many unknowns for the requested parameter, the facility can propose the request with a separate application.

Recommendation: The WESP voltage and current indicators will be retained in the draft permit. No changes to the draft air permit are recommended based on this comment at this time.

 Enviva requested the draft permit not include parametric monitoring values for control devices as listed in Specific Limitation and Condition 2.1 – A.1.h.ii. This change would eliminate the problem of frequent permit revisions that would be required to update parameters re-established by compliance testing, and thereby reduce the permitting burden on both Enviva and DAQ.

Hearing Officer's Response

The DAQ must have sufficient parametric data to ensure the facility is operating in compliance with emissions limits. The parametric monitoring values allow the facility and DAQ personnel the means to ensure compliance with the permit. Also, the facility is responsible for collecting sufficient data during stack testing to justify any new parametric operating limits and for accurately calculating and documenting all parametric operating limits required to be established by the permit following each new stack test. With this being said, the DAQ is investigating how Title V permits are being written as a whole, and in comparison to other EPA Region IV states with respect to inclusion of parameters such as those in this draft permit. It may be standard procedure sometime in the future to not include parameters in the cases where more frequent testing is required while still maintaining the practicable enforceability of those conditions. Until that time and until EPA approves that concept, parameters will be maintained as in the draft permit.

Recommendation: The parametric monitoring values will be retained in the draft permit. Also, language concerning the facility being responsible for collecting sufficient data during stack testing to justify any new parametric monitoring values should be added to Specific Limitation and Condition No. 2.2 - A.2.e.xv.

 Enviva requested the proposed cyclone (ID No. CD-CLR-4) associated with proposed pellet mills and pellet cooler (ID No. ES-CLR6) be removed from the construction schedule in Section 2.3 of the draft permit. The installation of this control equipment may not occur at the same time as the installation of the thermal oxidizers.

Hearing Officer's Response

The facility may be able to increase throughput using the existing pellet cooler systems. Therefore, the installation of the new pellet cooler (ID No. ES-CLR6) may not be required. If the new pellet cooler (ID No. ES-CLR6) and associated cyclone (ID No. CD-CLR6) are constructed, all exhaust will be routed through the new regenerative catalytic oxidizer (ID No. CD-RCO), and stack testing requirements will be used to ensure compliance.

Recommendation: The cyclone (ID No. CD-CLR6) requirements to purchase the control device within 12 months, to install the control device within 24 months, and to complete construction of the control device within 48 months should be removed from the draft permit.

• Enviva has requested corrections to the toxic air pollutants limits contained in the table in Specific Limitation and Condition No. 2.2 – A.7.b.

Hearing Officer's Response

The changes requested by the facility were verified with a review of the modeling results submitted on December 22, 2021 and the approval memo from the DAQ Air Quality Analysis Branch dated April 26, 2022.

Recommendation: The changes to the emission limit table should be made since these were typographical errors.

• Enviva requested administrative updates to Specific Limitation and Condition No. 2.1 – B.1.a. to replace the reference to "ES-DSC" with "ES-DCS" and to Conditions 2.1 – C.3.a. and C.3.c. to add "ES-PMFS" to each of these conditions.

Hearing Officer's Response

The changes requested by the facility were verified with a review of the equipment table in the draft permit.

Recommendation: The changes to the conditions should be made since these were typographical errors. Also, "ES-PMFS" should be added to condition 2.1-C.1.a.

• Enviva requested to add "CD-WESP" to the description of sources to be tested in Specific Limitations and Conditions 2.2 - A.2.d.i., 2.2 - A.2.e.i., 2.2 - A.3.c.i., and 2.2 - A.3.d.i.

Hearing Officer's Response

There are other initial control devices such as the bagfilters and cyclones for these sources. All of the sources eventually exhaust to the oxidizers where there are required stack tests. The other control systems are not needed for this description.

Recommendation: No changes to the draft air permit are recommended based on this comment at this time.

• Enviva requested to add the emissions associated with the diesel accelerant used during a cold startup to the "NOx constant" listed in Specific Limitation and Conditions 2.2 – A.2.m.i. through A.2.m.ii.

Hearing Officer's Response

The "NOx constant" only applies to sources listed as an insignificant activity in the draft permit. The application of diesel accelerant is to the furnace/dryer bypass (ID No. ES-FURNACEBYP) during cold startup. Any emissions associated with the diesel accelerant must be included in the furnace bypass calculations.

Recommendation: No changes to the draft air permit are recommended based on this comment at this time.

• Enviva requested to updated emission source identification numbers to be consistent throughout the permit (i.e., references to ES-CLR-1 should be changed to ES-CLR1).

Hearing Officer's Response

The draft permit was reviewed, and all identification numbers should match throughout the permit.

Recommendation: Updated all identification numbers so they match throughout the permit.

 Enviva requested to remove the statement "in series with an oxidizer" from Specific Limitation and Condition No. 2.2 – A.4.d.iii. as this condition refers to control systems BEFORE the oxidizer is installed.

Hearing Officer's Response

A review of the draft permit indicates Specific Condition and Limitation 2.2 – A.4.d.iii. is for compliance BEFORE the construction of the oxidizer is complete.

Recommendation: Remove the statement "in series with an oxidizer" from Specific Limitation and Condition No. 2.2 - A.4.d.iii. as this was a typographical error.

J. Support for Issuance of the Permit

Oral and written comments were received showing support for the issuance of the draft permit for Enviva Pellets, LLC – Ahoskie Plant. Eighteen speakers commented support for the draft permit during the hearing held on August 16, 2022. Four commenters submitted additional comments via email in support of the issuance of the draft permit. The comments were submitted by the Mayor of Ahoskie, a Hertford County official, NC Forestry Association, Virginia Loggers Association, US Industrial Pellet Association, Roseburg Resources Company, Enviva representatives, NC Chamber of Commerce, Green Leaf Timber and Management, Inc., and the Ahoskie Chamber of Commerce. In summary, the commenters mentioned the following as some of the reasons why they are in support of the issuance of the permit:

- Long standing economic boost for the community for many years
- Strong reforestation program
- New control devices with improved operations
- Assists in various land management practices
- Enviva supports programs for youth and senior members of the community
- Permit will allow continuous improvements to benefit Ahoskie

Hearing Officer's Response

Many of these points are commendable and are positively aimed towards the company. The DEQ appreciates the positive aspects that industry and business provide to the State and the Ahoskie community. However, the decision at hand is whether the air quality permit should be issued to Enviva, and if issued, will the content and conditions contained therein be based on a reasonable assurance that the facility can and will be operated in compliance with existing State and Federal air quality regulations at all times. None of these comments propose any changes to the draft permit or question the application or accuracy of its content.

Recommendation: No changes to the draft air permit are recommended based on these comments at this time.

V. Conclusions and Recommendations

All public comments regarding whether or not the Division of Air Quality should issue the air quality permit for renewal with modifications to Enviva Pellets, LLC – Ahoskie Plant, a wood pellet manufacturing facility located at 142 NC Route 561 East, Ahoskie, Hertford County, North Carolina, have been considered. It is the recommendation of the hearing officer that the Director issue the Air Quality permit, if after the 45-day EPA review period, the EPA does not object to the permit as specified in 40 CFR 70.8(c)(1), and after considering the following recommendations:

- Include language requiring submittal of an updated fugitive dust plan to include all new sources of fugitive dust emissions and any new strategies to control fugitive dust emissions. The condition should also include a submittal deadline date.
- Add hydrogen chloride in all stack testing conditions concerning HAP emissions.
- Include a condition to limit HAP emissions to avoid 15A NCAC 02D .1112, "112(g) Case-by-Case Maximum Achievable Control Technology" from the time period from the date of issuance of the permit (current state of operations) through the completion of the construction phase of the project. The condition should include a specific testing requirement with a completion and test submittal date of 180 days after the issuance of the permit.
- Include language to ensure the facility is responsible for collecting sufficient data during stack testing to justify any new parametric monitoring values.
- Remove the cyclone (ID No. CD-CLR6) requirements to purchase the control device within 12 months, to install the control device within 24 months, and to complete construction of the control device within 48 months from the draft permit.
- The table for toxic air pollutants limits should be corrected in the draft permit.

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- Update Specific Limitation and Condition No. 2.1 B.1.a. to replace the reference to "ES-DSC" with "ES-DCS."
- Add "ES-PMFS" to Conditions 2.1 A.1.a, C.3.a., and C.3.c. in the draft permit.
- Updated all source identification numbers so they match throughout the draft permit.
- Remove the statement "in series with an oxidizer" from Specific Limitation and Condition No. 2.2 A.4.d.iii. in the draft permit.

Denise Hayes	09/28/22
Denise Hayes, Hearing Officer	Date

Appendix A Draft Air Quality Permit and Permit Review

Appendix B Enviva Pellets, LLC – Ahoskie Plant, Draft Environmental Justice Report