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ENVIRONMENT
& HEALTH

Via Electronic Mail

Mr. Mark Cuilla
Chief, Permitting Section
North Carolina Department of Environmental Quality, Division of Air Quality
217 West Jones Street
Raleigh, NC 27603
Email: mark.cuilla@ncdenr.gov

RE: ENVIVA PELLETS AHOSKIE, LLC – AHOSKIE, NC
APPLICATION FOR RENEWAL AND MODIFICATION OF TITLE V PERMIT
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Cuilla,

December 22, 2021

Ramboll US Consulting, Inc. (Ramboll), on behalf of Enviva Pellets Ahoskie, LLC (Enviva) located in Hertford County (Facility ID #4600107), is submitting this letter and the attached information in response to the North Carolina Division of Air Quality's (DAQ's) request for additional information dated September 30, 2021. As requested by Richard Simpson (DAQ) on November 27, 2021, Enviva is providing a complete replacement Title V Renewal and Modification Application. This submittal includes several proposed changes to the Ahoskie plant in addition to those changes proposed in the application submitted on August 28, 2020 and the Addendum submitted on December 15, 2020.[1] Details describing the proposed new changes requested in the replacement permit application are provided below following Enviva's responses to DAQ's specific requests for additional information.

Ramboll
8235 YMCA Plaza Drive
Suite 300
Baton Rouge, LA 70810
USA

T +1 225 408 2691

The following sets forth each item requested by DAQ in italics, followed by Enviva's response.

1. *40 CFR Part 64, CAM, allows 180 days after a signed permit for applicants to provide indicators for new sources and control devices. The modifications associated with this application are expected to take longer than 180 days to complete. Therefore, DAQ will require CAM plans for applicable existing sources/control devices (pre modification) that will be applicable upon signature of the permit. DAQ will also require separate*

[1] Telephone conversation between Richard Simpson (DAQ) and Michael Carbon (Ramboll) on November 27, 2021.

CAM plans for modified/new sources and control devices (post modification) that will each have a schedule for compliance based upon a source(s)'/control device(s)' start date.

DAQ is correct that the proposed new sources and control devices will not be installed and operational within 180 days of final permit issuance. Therefore, CAM applicability for pre-modification operations was assessed based on the current equipment/control device configuration and hourly/annual throughputs consistent with the current permit basis (10121T04). Attachment 1 documents the CAM applicability analyses for pre-modification operations and CAM plans to address pre-modification operations are included as part of the revised permit application in Attachment 2.

As shown in Attachment 1, CAM applies to the Pellet Mills and Coolers (ES-CLR1 through 5), Fines Bin (ES-FB), Finished Product Handling (ES-FPH), Truck Loadout Bin (ES-TLB), and two Pellet Loadouts (ES-PL1 and 2). Each of these sources is subject to a particulate matter (PM) emission limit under 15A NCAC 02D .0515, utilizes a control device to achieve compliance with this limit, and has pre-controlled potential PM emissions greater than 100 tons per year (tpy). All other sources either do not have potential pre-controlled emissions greater than 100 tpy, or do not require a control device to comply with the applicable PM limit under 15A NCAC 02D .0515 (i.e., uncontrolled PM emissions are less than the process weight limit).

2. *As part of those CAM plans, Enviva proposes both primary and secondary monitoring indicators on the more complex control device systems. One of your proposed monitoring indicators was a weekly visible emissions observation. Per 40 CFR 64.3(b)(4)(iii), for emission units with potential to emit less than the major source threshold after control, the minimum frequency for data collection is once per 24-hour period (daily). As an alternative, we are requesting the facility to provide the appropriate pressure drop range for the applicable control devices. The pressure drop range will be used as a primary indicator along with the associated performance criteria. The frequency for all pressure drop ranges must be daily. The secondary indicator can remain as weekly visible emissions observations as proposed in the application. The Quality Improvement Plan (QIP) threshold will be five (5) excursions per reporting period.*

Each of the CAM plans submitted as part of the August 2020 application include monitoring for at least one parameter on a daily (if not more frequent) basis which satisfies the requirement in 40 CFR 64.3(b)(4)(iii). CAM does not require monitoring of any specific indicator, nor does it require that multiple indicators be monitored. Rather, monitoring must simply be completed for at least one indicator at least once per 24-hour period. The current control devices (i.e., baghouses and cyclones) are not equipped with pressure drop monitors, the proposed daily monitoring meets all CAM requirements under 40 CFR 64.3, and the proposed monitoring is sufficient to provide reasonable assurance of compliance with applicable emission limitations or standards. For the Pellet Mills and Coolers, upon completion of the proposed modifications, monitoring will no longer be conducted at the cyclones but rather at the RTO/RCO (i.e., combustion zone temperature). Installation of pressure drop monitors on the cyclones to cover pre-modification operations would be costly and burdensome for the Ahoskie plant, and these devices will be rendered useless after the modification is complete. As such, Enviva requests that DAQ not require pressure drop monitoring.

In 40 CFR 64.8(a), EPA recommends a QIP threshold of 5 percent of the duration of a pollutant-specific emissions unit's operating time for a reporting period. Based on this recommendation, Enviva proposes the

following QIP thresholds summarized in Table 1 below. These thresholds are based on 5% of each source's permitted operating hours (8,760 hours per year). Updated CAM plans, which include QIP thresholds, are provided as part of the revised permit application in Attachment 2.

Table 1. CAM Indicators and Proposed QIP Thresholds for Pre- and Post-Modification

Source	Control Device	Indicator 1
Pellet Mills and Coolers	Pre-Modification: CD-CLR-C1 through CD-CLR-C3	Indicator: Daily Visible Emissions Observation QIP Threshold: 219 hours of visible emissions per semi-annual reporting period
	Post-Modification: CD-CLR-C1 through CD-CLR-C4 (exhausting through CD-RCO)	Indicator: Combustion Zone Temperature QIP Threshold: 219 hours of operation per semi-annual reporting period with a combustion zone temperature below the minimum average combustion zone temperature established during compliance testing
Fines Bin	Pre- and Post-Modification: CD-FB-BV	Indicator: Daily Visible Emissions Observation QIP Threshold: 219 hours of visible emissions per semi-annual reporting period
Finished Product Handling; Truck Loadout Bin; Two Pellet Loadouts	Pre- and Post-Modification: CD-FPH-BF	Indicator: Daily Visible Emissions Observation QIP Threshold: 219 hours of visible emissions per semi-annual reporting period

Since reporting is required on a semi-annual basis, the proposed QIP thresholds are derived as follows:

$$8{,}760\frac{hr}{yr}\ x\ 5\% = 438\frac{hr}{yr} = 219\ hours\ per\ semi-annual\ reporting\ period$$

3. *No CAM plan was submitted for the dryer and its controls. Please provide a CAM plan for the dryer which is controlled by the wet electrostatic precipitator (WESP) before the modification. For post modification CAM, the green hammermill sources should be combined with the dryer.*

The dryer is not subject to CAM. Pre-controlled potential PM emissions from the furnace/dryer are less than the applicable process weight limit under 15A NCAC 02D .0515. As such, the WESP is not required to achieve compliance with this emission limit and, therefore, the source is not subject to CAM. The same is also true for the green hammermills. Please refer to the CAM applicability analyses provided in Attachment 1.

4. *The proposed CAM for the dry hammermills is for post modification and excludes the large fabric filters as control devices. The background for your proposed CAM plan notes "…100% of the dry hammermill exhaust will be controlled by a baghouse…" For pre modification, the indicators should be weekly visible emissions and a daily pressure drop. For post modification, the CAM indicators should be pressure drop and those associated with the WESP (secondary voltage, current, number of grids, etc.). The dust control system source was not in the proposed CAM plan but should be combined with the dry hammermills.*

As documented in the CAM applicability analyses provided in Attachment 1, the Dry Hammermills are not subject to CAM. Although the dry hammermills are subject to a PM limit under 15A NCAC 02D .0515, pre-controlled emissions from each dry hammermill are less than 100 tpy and are also less than the applicable PM emission limit.

As documented in Attachment 1, the potential uncontrolled PM emissions from the Dust Control System are less than 100 tpy; therefore, the Dust Control System is not subject to CAM.

5. *The pellet coolers are currently controlled by the cyclones. The proposed CAM plan used the quench duct inlet as a control device. The quench system as a control device contradicts this permit application, all other Enviva facilities in NC, and should be removed as an indicator. The sources' indicators should be weekly visible emissions and daily pressure drop ranges for the cyclones.*

Please refer to the CAM plans included in Attachment 2, which address the Pellet Mills and Coolers both prior to and after completion of the proposed modifications. Prior to installation of the RTO/RCO Enviva proposes daily visible emissions observations at the outlet of the cyclones and after installation of the RTO/RCO Enviva proposes continuous monitoring of the combustion zone temperature of the RTO/RCO which meets all requirements under 40 CFR 64.3. As previously stated, CAM does not require monitoring of any specific indicator, nor does it require that multiple indicators be monitored. Rather, CAM only requires that monitoring be completed for at least one indicator at least once per 24-hour period. The Pellet Cooler cyclones are not equipped with pressure drop monitors and the proposed monitoring is sufficient to provide reasonable assurance of compliance with applicable emission limitations and standards. Installation of pressure drop monitors on the cyclones would be costly and burdensome for the Ahoskie plant, and these devices will be rendered useless after the modification is complete. As such, Enviva requests that DAQ not require pressure drop monitoring.

6. *It appears the dry shavings hammermill (DSHM) is an existing source that is not on the current permit and does not have a control device but is subject to CAM post modification. Please explain CAM pre modification potential emissions and what would be the CAM indicators if applicable. One proposed post modification DSHM source indicator is the quench duct system. See No. 5 comments*

on quench duct above. The DSHM and the dried wood silo are controlled by a bin vent filter and daily visible emission are acceptable for CAM. The dried wood silo was not in the proposed CAM plan but should be combined with the DSHM.

As documented in the CAM applicability analyses provided in Attachment 1, the dry shavings hammermill is not subject to CAM either pre- or post-modification. Although the dry shavings hammermill is subject to a PM limit under 15A NCAC 02D .0515, pre-controlled emissions from the dry shavings hammermill are both less than 100 tpy and less than the applicable PM emission limit.

As shown in Attachment 1, uncontrolled emissions from the Dried Wood Day Silo are both less than 100 tpy and less than the applicable PM emission limit; therefore, CAM does not apply to this source.

7. *A CAM plan was not submitted for VOCs from the applicable sources (dryers, dry hammermills, dry shavings hammermills, pellet mills, and pellet coolers). A post modification CAM plan should be submitted for the two oxidizers with primary and secondary indicators.*

None of the aforementioned sources will be subject to a VOC emission limit or standard post-modification; therefore, CAM does not apply for VOC. The current Ahoskie Title V permit includes a facility-wide VOC limit to ensure past modifications did not trigger PSD requirements. Potential facility-wide VOC emissions upon installation of the proposed RTO and RTO/RCO will be well below the PSD major source threshold (125 tpy) and the plant will become a true minor source with respect to PSD upon commencement of operation of the proposed RTO and RTO/RCO. Therefore, no facility-wide VOC limit will be required following installation of the controls. Furthermore, CAM applies to individual emission units subject to an applicable emission standard.[2] As facility-wide VOC limits are not considered individual emission unit limits, they would not be considered emission limits or standards subject to CAM. As such, CAM does not apply for VOC.

8. *Provide the origin and details of the PM, PM10, PM2.5, VOC, and NOx emission factors from the dryer and dry hammermills system.*

Please refer to Table 2 below for the origin and details of the emission factors for the dryer, green hammermills, and dry hammermills controlled via WESP and RTO.

[2] §64.1 references the definition of "emissions unit" provided under 40 CFR 70 which is as follows: "***any part or activity*** *of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.*"

Table 2. Dryer/Green Hammermill and Dry Hammermill Emission Factor Basis				
Source	**Pollutant**	**Emission Factor (lb/ODT)**	**Contingency**	**Reference**
Dryer; Green Hammermills	$PM/PM_{10}/PM_{2.5}$	0.11	15%	Sampson December 2020 (filterable), Sampson December 2019 (condensable)
	VOC as propane	0.19	5%	95% upper confidence level of Greenwood December 2018, Sampson December 2019, Sampson December 2020, Hamlet January 2020 (adjusted for pine percentage)
	NOx	0.47	25%	Hamlet January 2020
Dry Hammermills	$PM/PM_{10}/PM_{2.5}$	0.0003	20%	Hamlet January 2020 (assumes 95% control by WESP)
	VOC as propane	0.070	55%	95% upper confidence level of Greenwood October 2017, Greenwood December 2018, Sampson December 2019, Sampson December 2020, Amory October 2013, Hamlet January 2020 (assumes 95% control by RTO, adjusted for pine percentage)

9. *Provide the origin and details of the PM, PM10, PM2.5, and VOC emission factors from the dry shavings hammermill and pellet coolers.*

Please refer to Table 3 below for the origin and details of the emission factors for the dry shavings hammermill, pellet mills, and pellet coolers controlled by the RTO/RCO.

Table 3. Dry Shavings Hammermill, Pellet Mill, and Pellet Cooler Emission Factor Basis				
Source	**Pollutant**	**Emission Factor (lb/ODT)**	**Contingency**	**Reference**
Dry Shavings Hammermill	$PM/PM_{10}/PM_{2.5}$	0.0011	330%	Hamlet January 2020 (assumes 95% control by WESP)
Dry Shavings Hammermill	VOC as propane	0.070	55%	95% upper confidence level of Greenwood October 2017, Greenwood December 2018, Sampson December 2019, Sampson December 2020, Amory October 2013, Hamlet January 2020 (assumes 95% control by RTO, adjusted for pine percentage)
Pellet Mills and Pellet Coolers	$PM/PM_{10}/PM_{2.5}$	0.012	20%	95% upper confidence level of Southampton August 2021, Greenwood January 2019, Greenwood March 2019, Northampton July 2021, Hamlet January 2020, Hamlet December 2020
	VOC as propane	0.11	30%	95% upper confidence level of Southampton August 2021, Greenwood January 2019, Greenwood March 2019, Northampton July 2021, Hamlet January 2020, Hamlet December 2021, Waycross May 2021

10. Submit the diameter of existing simple cyclone CD-CLR-C3.

The stack diameter of CD-CLR-C3 is 0.71 meters.

11. Submit estimated potential emissions from the dust collection system ES-DCS. DCS is a separate source controlled by the dry hammermill fabric filters.

Please refer to the CAM applicability analysis provided in Attachment 1. Uncontrolled emissions from the dust collection system are less than 100 tpy and are also less than the applicable PM emission limit. As such, CAM does not apply to this source.

12. Submit a clean flow diagram. The submitted scanned version is difficult to read.

Please refer to the updated process flow diagram included in Attachment 2.

13. The dry wood handling source has no control device but the same sources at other NC Enviva facilities do. Please explain the low particulate potential emission factors versus other facilities. Refer to Enviva Northampton July 22, 2020 additional information letter for dry wood handling.

Dried wood handling (ES-DWH) at the Ahoskie plant consists of partially enclosed conveyor systems, conveyor transfer points located along the post-dryer conveyance system, and a dry hammermill surge bin. Particulate emission factors for estimating emissions from dried wood handling at Ahoskie were calculated based on the drop point equation from AP-42 Section 13.2.4. Among other variables, this equation takes into consideration mean wind speed. Since the material transfer points associated with ES-DWH are primarily enclosed, the mean wind speed was assumed to be 2 miles per hour (mph) in calculating the emission factors for these transfer points, as opposed to 6.3 mph for non-enclosed transfer points. This methodology is consistent with the current permit basis for Ahoskie (Title V Permit No. 10121T04). A reduced wind speed was not utilized in the Northampton potential emissions calculations, thus the Northampton emission factors for dried wood handling transfer points are higher. Please note that the difference in emission calculation approach results in a negligible impact on overall potential PM emissions. For example, if the Ahoskie plant's dried wood handling emissions were calculated in a manner consistent with Northampton (i.e., no reduction in wind speed for partially enclosed transfer points) total PM emissions from this source would be 0.32 tpy versus the proposed potential to emit of 0.07 tpy.

As discussed above, Enviva is providing a complete replacement permit application as part of this submittal. This replacement application includes several additional proposed changes to the Ahoskie plant and reflects updates to the application previously submitted in August 2020 (Attachment 2).[3] The revised application reflects the following changes from the August 2020 application:

1. Updates to the description of the existing dust control system (ES-DCS);
2. Updates to criteria pollutant and hazardous air pollutant (HAP) emission factors;
3. Replacement of the existing 300 brake horsepower (bhp) diesel-fired fire water pump with a new 234 bhp diesel-fired fire water pump;
4. Addition of two (2) natural gas-fired boilers to provide steam to the pelletizing process;
5. Updates to the CAM applicability analysis to address pre- and post-modification operations;

[3] Telephone conversation between Richard Simpson (DAQ) and Michael Carbon (Ramboll) on November 27, 2021.

6. Updates to the potential fugitive emissions from on-road and off-road vehicles traveling on paved and unpaved areas to reflect silt loading data from a similar wood pellet manufacturing plant and the National Council for Air and Stream Improvement (NCASI);
7. Updates to potential emissions for storage pile wind erosion to utilize silt data from NCASI; and
8. Updates to the air toxics modeling analysis to address changes in HAP emission rates and the addition of the natural gas-fired boilers.

The replacement permit application includes an updated application report, potential emissions calculations, CAM plans, application forms, and an updated air toxics modeling analysis. As discussed previously, this application replaces the original permit application submitted in August 2020 and the addendum submitted in December 2020.

If you have any questions regarding the information presented in this letter or the revised permit application, please contact me at (225) 408-2691.

Yours sincerely,

Michael H. Carbon
Managing Principal

D +1 225 408 2691
M +1 225 907 3822
mcarbon@ramboll.com

cc: Stephen Stroud (Enviva)
Kai Simonsen (Enviva)
Joe Harrell (Enviva)
Afton Schneider (Enviva)

ATTACHMENT 1
CAM APPLICABILITY ANALYSES

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Table 1a. Pre-Modification CAM Applicability Analysis								
Emission Unit	**Control Device**	**Maximum Hourly Throughput[1] (ODT/hr)**	**Material Moisture Content (%)**	**Maximum Hourly Throughput (tph)**	**Process Weight Limit[2] (lb/hr)**	**Uncontrolled PM Emissions[3] (lb/hr)**	**Uncontrolled PM Emissions[3] (tpy)**	**CAM Applicable?[4]**
IES-CHP2[5]	-	--	--	--	--	--	< 5 tpy	No
ES-Dryer	CD-WESP[6]	48.0	50%	96.0	52.7	37.8	138	No
Furnace		--	--	19.5				
ES-DWDS	CD-DWDS-BV[7]	11.4	14%	13.3	23.2	18.7	82.1	No
ES-DHM-1	CD-DHM-FF1[7]	9.60	10%	10.7	20.0	3.35	14.7	No
ES-DHM-2		9.60	10%	10.7	20.0	3.35	14.7	No
ES-DHM-3	CD-DHM-FF2[7]	9.60	10%	10.7	20.0	3.35	14.7	No
ES-DHM-4		9.60	10%	10.7	20.0	3.35	14.7	No
ES-DHM-5	CD-DHM-FF3[7]	9.60	10%	10.7	20.0	3.35	14.7	No
ES-DCS		48.0	10%	53.3	45.2	10.6	46.6	No
ES-PMFS	CD-PMFS-BV[7]	57.6	11%	64.5	47.0	18.7	82.1	No
ES-DSHM	CD-DWDS-BV[7]	9.60	14%	11.2	20.6	3.35	14.7	No
ES-CLR1	CD-CLR-C1[8]	11.0	5.5%	11.6	21.2	181	792	**Yes**
ES-CLR2		11.0	5.5%	11.6	21.2	181	792	**Yes**
ES-CLR3	CD-CLR-C2[8]	11.0	5.5%	11.6	21.2	181	792	**Yes**
ES-CLR4		11.0	5.5%	11.6	21.2	181	792	**Yes**
ES-CLR5	CD-CLR-C3[8]	11.0	5.5%	11.6	21.2	181	792	**Yes**
ES-FB	CD-FB-BV[7]	2.75	5.5%	2.91	8.39	30.9	135	**Yes**
ES-FPH	CD-FPH-BV[7]	55.0	5.5%	58.2	46.0	76.1	333	**Yes**
ES-TLB		55.0	5.5%	58.2	46.0	76.1	333	**Yes**
ES-PL1		55.0	5.5%	58.2	46.0	76.1	333	**Yes**
ES-PL2		55.0	5.5%	58.2	46.0	76.1	333	**Yes**

1. Maximum hourly throughputs are consistent with the current permit basis (Title V Permit No. 10121T04).
2. Each individual emission unit is subject to a PM emission limit under 15A NCAC 02D .0515. The applicable process weight limit is calculated based on the emission unit's maximum hourly throughput (tons per hour) and the equations provided in 15A NCAC 02D .0515(a).
3. Uncontrolled emissions are calculated by dividing the potential emissions by 1 minus the assumed control efficiency for the specific particulate control device.
4. Per §64.2, an emission unit is subject to CAM if all of the following criteria are met:
    1. The emission unit is subject to an emission limitation or standard;
    2. The emission unit uses a control device to achieve compliance with the emission limitation or standard; and
    3. The emission unit has pre-controlled potential emissions of the applicable regulated air pollutant that are equal to or greater than the amount in tons per year (tpy) required for a source to be classified as a major source (i.e., 100 tpy for the Ahoskie plant).
5. The existing green hammermill (IES-CHP2) is currently uncontrolled and permitted as an insignificant activity based on potential emissions of less than 5 tpy for each criteria pollutant emitted. The green hammermill is not subject to CAM.
6. Uncontrolled emissions are calculated assuming the WESP achieves a 95% control efficiency for filterable PM and 70% control efficiency for condensable PM.
7. Uncontrolled emissions are calculated assuming baghouses achieve a 99% control efficiency for filterable PM.
8. Uncontrolled emissions are calculated assuming the cyclones achieve a 90% control efficiency for filterable PM.

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Table 1b. Post-Modification CAM Applicability Analysis								
Emission Unit	**Control Device**	**Maximum Hourly Throughput[1] (ODT/hr)**	**Material Moisture Content (%)**	**Maximum Hourly Throughput (tph)**	**Process Weight Limit[2] (lb/hr)**	**Uncontrolled PM Emissions[3] (lb/hr)**	**Uncontrolled PM Emissions (tpy)**	**CAM Applicable?[3]**
ES-Dryer	CD-WESP[5]; CD-RTO	62.8	48%	121	54.8	49.4	216	No
Furnace		--	--	20.9				
ES-GHM-1[4]		15.7	48%	30.2	40.0	31.4	138	No
ES-GHM-2[4]		15.7	48%	30.2	40.0	31.4	138	No
ES-GHM-3[4]		15.7	48%	30.2	40.0	31.4	138	No
ES-GHM-4[4]		15.7	48%	30.2	40.0	31.4	138	No
ES-DHM-1	CD-DHM-FF1[6]; CD-WESP; CD-RTO	8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-2		8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-6		8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-3	CD-DHM-FF2[6]; CD-WESP; CD-RTO	8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-4		8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-7		8.97	10%	10.0	19.1	3.13	13.7	No
ES-DHM-5	CD-DHM-FF3[6]; CD-WESP; CD-RTO	8.97	10%	10.0	19.1	3.13	13.7	No
ES-DCS		62.8	10%	69.8	47.7	10.6	46.6	No
ES-CLR1	CD-CLR-C1[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-CLR2	CD-CLR-C2[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-CLR3	CD-CLR-C3[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-CLR4	CD-CLR-C4[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-CLR5	CD-CLR-C5[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-CLR6	CD-CLR-C6[7]; CD-RCO	12.5	5.5%	13.2	23.1	205	863	**Yes**
ES-DSHM	CD-DWDS-BV[6]; CD-RCO	12.0	14%	14.0	24.0	4.2	17.5	No
ES-DWDS		12.0	14%	14.0	24.0	18.7	82.1	No
ES-PMFS	CD-PMFS-BV[6]	74.8	10%	83.1	49.4	18.7	82.1	No
ES-FPH	CD-FPH-BF[6]	74.8	5.5%	79.1	49.0	76.1	333	**Yes**
ES-TLB		74.8	5.5%	79.1	49.0	76.1	333	**Yes**
ES-PL1		74.8	5.5%	79.1	49.0	76.1	333	**Yes**
ES-PL2		74.8	5.5%	79.1	49.0	76.1	333	**Yes**
ES-FB	CD-FB-BV[6]	3.74	5.5%	3.96	10.3	30.9	135	**Yes**

1. Maximum hourly throughputs equal to proposed potential emissions basis.
2. Each individual emission unit is subject to a PM emission limit under 15A NCAC 02D .0515. The applicable process weight limit is calculated based on the emission unit's maximum hourly throughput (tons per hour) and the equations provided in 15A NCAC 02D .0515(a).
3. Per §64.2, an emission unit is subject to CAM if all of the following criteria are met:
    1. The emission unit is subject to an emission limitation or standard;
    2. The emission unit uses a control device to achieve compliance with the emission limitation or standard; and
    3. The emission unit has pre-controlled potential emissions of the applicable regulated air pollutant that are equal to or greater than the amount in tpy required for a source to be classified as a major source (i.e., 100 tpy for the Ahoskie plant).
4. Uncontrolled emissions for the green hammermills assume the material recovery cyclones recover 99.9% of the wood fiber.

5. Uncontrolled emissions are calculated assuming the WESP achieves a 95% control efficiency for filterable PM and 70% control efficiency for condensable PM.
6. Uncontrolled emissions are calculated assuming baghouses achieve a 99% control efficiency for filterable PM.
7. Uncontrolled emissions are calculated assuming the cyclones achieve a 90% control efficiency for filterable PM.

ATTACHMENT 2
REVISED PERMIT APPLICATION