Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

DRAFT, 2024

Mr. Mathieu Gendron
Plant Manager
Cascades Containerboard Packaging – Bear Island
10026 Old Ridge Road
Ashland, VA 23005

Location: Hanover County
Registration No.: 50840

Dear Mr. Gendron:

Attached is a renewal to the Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning DRAFT, 2024.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on November 12, 2024 and solicited written public comments by placing a newspaper advertisement in the Richmond Times-Dispatch on DRAFT, 2024. The thirty-day required comment period, provided for in 9VAC5-80-270 expired on DRAFT, 2024.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Cascades Containerboard Packaging - Bear Island of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the DEQ within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5020.

Sincerely,

James E. Kyle, P.E.
Air Permit Manager
Virginia Department of Environmental Quality
(804) 489-2641
James.Kyle@deq.virginia.gov
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060
(804) 527-5020

JEK/clm/50840-28 Cascades Containerboard Packaging - Bear Island Title V Renewal.docx

Attachment: Permit

cc: Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)
Manager/Inspector, Air Compliance (electronic file submission)

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Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee/Facility Name:	Cascades Containerboard Packaging – Bear Island
Facility Location:	10026 Old Ridge Road Ashland, Virginia
	Registration Number: 50840
Permit Number:	PRO-50840

This permit includes the following programs: **Federally Enforceable Requirements – Clean Air Act (Pages 5 through 64)**

DRAFT, 2024
Effective Date

DRAFT, 2029
Expiration Date

James E. Kyle, P.E.
Air Permit Manager
Virginia Department of Environmental Quality
(804) 489-2641
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Signature Date

Table of Contents, 1 page

Permit Conditions, pages 5-64

Table of Contents

Facility Information

Permittee/Facility
Cascades Containerboard Packaging – Bear Island
10026 Old Ridge Road
Ashland, VA 23005

Responsible Official
Mathieu Gendron
Plant Manager
(819) 352-0927

Contact Person
Joshua Stover
Utilities Asset Owner
(804) 356-5273

County-Plant Identification Number: 51-085-0042

Facility Description: NAICS 322122- Cascades Containerboard Packaging - Bear Island is being converted from a thermomechanical (TMP) and recycled pulp newsprint manufacturing facility to a recycled containerboard production facility that will produce linerboard and medium grade containerboard. The TMP process (a major source of VOC emissions) is being eliminated. The woodyard is also being eliminated since the feedstock will now consist of recycled cardboard in place of virgin wood and recycled newsprint. The Recycle Pulp Mill will be called the Recycle Fiber Plant. The existing wastewater treatment plant is being modified. The effluent treatment plant (ETP) will include an anaerobic digester, which will generate hydrogen sulfide and VOC emissions. These emissions will be scrubbed and sent to the existing Combination Boiler (PH-1) for further control, with a flare (ETP-1 Flare) used as back-up.

The facility consists of the following: Combination Boiler (natural gas, biomass, ETP biogas), package boiler (natural gas), effluent treatment plant with anaerobic digester and flare (propane or natural gas used as pilot fuel), wastewater treatment plant, recycle fiber plant, paper mill and supporting operations. Coal, fuel oil, and propane were eliminated as approved fuels for the Combination Boiler (PH-1) in the underlying NSR permit. The Combination Boiler will burn natural gas, biomass (wood and wood/paper waste), and ETP biogas only. No. 2 fuel oil and propane have been eliminated as approved fuels for the existing Package Boiler (PH-2) in the underlying permit. The Package Boiler will burn natural gas only. Natural gas-fired rental boilers are included in the permit to support process steam requirements in the event that either the Combination Boiler or Package Boiler is not operating.

Because the facility does not plan to re-commence firing of biomass in the Combination Boiler (PH-1) in the immediate future, the underlying permit conditions for the Combination Boiler were amended on July 18, 2022 to specify that certain requirements will become applicable once the Combination Boiler re-commences firing biomass (operation of the electrostatic precipitator, ash silo requirements, continuous opacity monitoring, and CAM). The July 18, 2022 permit was administratively amended on September 13, 2022 to correct the boiler reference in Condition 63 (initial notification for ETP biogas combustion in the Combination Boiler).

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
PH-1B	PHS-1	Babcock & Wilcox Combination Boiler Biomass Combustion – primary fuel	147.4 MMBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -1B	PM/PM-10	9/13/2022
PH-1D	PHS-1	Babcock & Wilcox Combination Boiler Natural Gas - primary fuel	243 MMBtu/hr	Multi-cyclone, Electrostatic Precipitator (after re-commencement of biomass fuel combustion)	PHC-1A PHC -1B	PM/PM-10	9/13/2022
PH-1E	PHS-1	Babcock & Wilcox Combination Boiler ETP Biogas - primary fuel	18.18 MMBtu/hr	Multi-cyclone, Electrostatic Precipitator (after re-commencement of biomass fuel combustion)	PHC-1A PHC -1B	PM/PM-10	9/13/2022
PH-1BDE	PHS-1	Babcock & Wilcox Combination Boiler Natural Gas - startup fuel	5.2 MMBtu/hr	Multi-cyclone, Electrostatic Precipitator (after re-commencement of biomass fuel combustion)	PHC-1A PHC -1B	PM/PM-10	9/13/2022
10	10	Ash Silo	5,000 cubic feet	Fabric Filter	10	PM/PM-10	9/13/2022
PH-2-2A	PHS-2	Package Boiler Natural Gas	243.83 MMBtu/hr	Clean burning fuel	None	PM/PM-10	9/13/2022
RB-1A, RB-1B	RB-1A RB-1B	Rental Boilers (for the replacement of PH-1 during an outage) Natural Gas	≤ 120 MMBtu/hr each	Clean burning fuel	None	PM/PM-10	9/13/2022
RB-2A, RB-2B	RB-2A RB-2B	Rental Boilers (for the replacement of PH-2 during an outage) Natural Gas	≤ 120 MMBtu/hr each	Clean burning fuel	None	PM/PM-10	9/13/2022
RFP (F-1)	Fugitive	Recycle Fiber Plant Truck delivery and transfer of recycle cardboard	N/A	N/A	N/A	N/A	N/A
RFP (F-2)	Fugitive	Recycle Fiber Plant Decompressing, dewiring, and loading of bales at Recycle Plant	N/A	N/A	N/A	N/A	N/A

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
RFP-1	Fugitive	Recycle Fiber Plant Pulping and Screening	1,600 tons pulp per day	N/A	N/A	N/A	9/13/2022
TMP-1C	TMPS-1C	Recycle Fiber Plant TMP Thickener	1,600 tons pulp per day	None	None	None	RACT July 12, 1996 Consent Agreement
SSI-1	N/A	Starch Silo	15,856 cubic ft/hr	Starch Silo Bin Vent Dust Collector	N/A	PM/PM-10	9/13/2022
ETP-1	ETPS-1	Effluent Treatment Plant – Anaerobic Reactor.	1.5 MGD MGD = mm gal/day 500 scfm ETP Biogas	Boiler PH-1	PH-1	H_2S, VOC	9/13/2022
			Flare Pilot (gas): 5 MMBtu/hr	Flare (Back-up)	ETP-1 Flare	H_2S, VOC	9/13/2022
PM-1	VENTS PM 1-23	Paper Forming, Pressing, Drying	1,320 BDT/day BDT = Bone Dry Tons	None	None	VOC	9/13/2022
MI-I1	Fugitive	2 Parts Washers – Non-Halogen – Safety Kleen Services.	60 gallons - Total combined capacity. 2 @ 30 gallons.	None	None	VOC	--
LF-1	Fugitive	Landfill surface	None	None	None	PM/PM-10	--
MI-I5	NA	Emergency Diesel Fire Pump	270 hp	None	None	NOx	--

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Fuel Burning Equipment Requirements: B&W COMBINATION BOILER (Emission Unit ID#s PH-1, 10)

1. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Limitations - Emission Controls –** Particulate matter and PM-10 emissions from the Combination Boiler (PH-1) shall be controlled by a multi-cyclone followed by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection and shall be in operation when the Combination Boiler is operating upon re-commencement of firing any amount of biomass fuel (wood, woodwaste, and paper waste/residuals).
(9VAC5-80-110 and Condition 1 of the 9/13/2022 NSR Permit)

2. **Fuel Burning Equipment Requirements – Combination Boiler Ash Silo (Emission Unit ID #10) – Limitations - Emission Controls –** Particulate matter and PM-10 emissions from the Ash Silo (Ref. No. 10) shall be controlled by fabric filter. The filter shall be provided with adequate access for inspection and shall be in operation when the ash silo is operating.
(9VAC5-80-110 and Condition 2 of the 9/13/2022 NSR Permit)

3. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Limitations - Emission Controls -** Carbon monoxide emissions from the Combination Boiler (PH-1) shall be controlled by the wood waste burner arrangement.
(9VAC5-80-110 and Condition 7 of the 9/13/2022 NSR Permit)

4. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Limitations -** Volatile Organic Compound emissions (VOC) from the Combination Boiler (PH-1), shall be controlled by the use of good combustion practices.
(9 VAC 5-80-110 and Condition E-3 of the July 12, 1996 RACT Consent Agreement)

5. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Limitations - Fuel -** The approved fuels for the Combination Boiler (PH-1) are natural gas, biogas generated from the ETP, and biomass (wood, wood waste, and paper waste/residuals). A change in the fuels may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.
(9VAC5-80-110 and Condition 27 of the 9/13/2022 NSR Permit)

6. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Limitations - Fuel Throughput -** The Combination Boiler (PH-1) shall consume no more than 450 tons per day and 164,250 ton per year of biomass (wood, wood waste and paper waste/residuals), 2058.6 million cubic feet of natural gas per year, and 274.5 million cubic feet of biogas per year, calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 30 of the 9/13/2022 NSR Permit)

7. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Fuel -** The natural gas, biomass, and Effluent Treatment Plant (ETP) Biogas shall meet the specifications below:

NATURAL GAS:
Minimum heat content: 1000 Btu/cf HHV
as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method

ETP BIOGAS:
Minimum heat content: 300 Btu/cf HHV
as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method

BIOMASS FUEL:

WOOD/BARK excluding any wood that contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates:
Average annual heat content : 3,930 Btu/lb HHV
as determined by ASTM D2015 or DEQ-approved equivalent method (includes ETP Residuals)

ETP RESIDUALS
Solid and semi-solid material that is recovered from the on-site effluent treatment plant.

(9VAC5-80-110 and Condition 39 of the 9/13/2022 NSR Permit)

8. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Fuel - Emission Limits -** Emissions from the operation of the Combination Boiler (PH-1) shall not exceed the limits specified below:

NATURAL GAS/ETP BIOGAS

PM (filterable only)	0.7 lb/hr
PM-10	1.9 lb/hr
Sulfur Dioxide	0.3 lb/hr
Nitrogen Oxides (as NO_2)	34.8 lb/hr
Carbon Monoxide	19.1 lb/hr
Volatile Organic Compounds	1.4 lb/hr
Hydrogen Sulfide	0.7 lb/hr

ALL APPOVED FUELS

PM (filterable only)	15.0 lb/hr 0.1 lb/MMBtu
PM-10	17.9 lb/hr (filterable + condensable) 0.1 lb/MMBtu (filterable only)
Sulfur Dioxide	3.8 lb/hr
Nitrogen Oxides (as NO_2)	46.7 lb/hr
Carbon Monoxide	95.4 lb/hr
Volatile Organic Compounds	3.1 lb/hr
Hydrogen Sulfide	0.7 lb/hr

COMBINATION BOILER MAXIMUM ANNUAL EMISSIONS

PM (filterable only)	65.5 tons/yr
PM-10 (filterable + condensable)	78.2 tons/yr
Sulfur Dioxide	16.6 tons/yr
Nitrogen Oxides (as NO_2)	204.4 tons/yr
Carbon Monoxide	417.8 tons/yr
Volatile Organic Compounds	13.2 tons/yr
Hydrogen Sulfide	2.9 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 3, 5, 6, 18, and 19.
(9VAC5-80-110 and Condition 41 of the 9/13/2022 NSR Permit)

9. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Visible Emission Limit -** Visible emissions from the Combination Boiler (PH-1) shall not exceed the following limits:

a. Prior to re-commencement of operation burning any amount of biomass fuel: 10 percent opacity.

b. After re-commencement of operation burning any amount of biomass fuel: 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 50 of the 9/13/2022 NSR Permit)

10. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Monitoring -** The Combination Boiler (PH-1) shall be equipped with devices to continuously measure and record the primary current (direct current amperes), secondary current (direct current amperes), and secondary voltage (direct current volts), by field, across the ESP. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the Combination Boiler (PH-1) is operating upon re-commencement of firing any amount of biomass fuel.
(9VAC5-80-110 and Condition 15 of the 9/13/2022 NSR Permit)

11. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Monitoring -** A continuous monitoring system for measuring and recording the opacity of the Combination Boiler (Ref. No. PH-1) stack emissions shall be installed, calibrated, maintained and operated by the permittee upon re-commencement of firing any amount of biomass fuel.
(9VAC5-80-110 and Condition 16 of the 9/13/2022 NSR Permit)

12. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Monitoring -** The continuous monitoring data generated by the opacity monitor referenced in Condition 11 may, at the discretion of the Board, be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request.
(9VAC5-80-110 and Condition 17 of the 9/13/2022 NSR Permit)

13. **Fuel Burning Equipment Requirements – Combination Boiler Ash Silo (Emission Unit ID #10) – Monitoring –** The Ash Silo (Ref. No. 10) fabric filter shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation during loading of the Ash Silo.
(9VAC5-80-110 and Condition 23 of the 9/13/2022 NSR Permit)

14. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Monitoring -** To ensure good performance, the devices used to continuously measure the current and secondary voltage across the ESP shall be observed by the permittee when it is operating, with a

frequency of not less than once per shift. The permittee shall continuously record measurements from the monitoring device.
(9VAC5-80-110 and Condition 24 of the 9/13/2022 NSR Permit)

15. **Fuel Burning Equipment Requirements – Combination Boiler Ash Silo (Emission Unit ID #10) – Monitoring -** To ensure good performance, the devices used to continuously measure differential pressure drop across the Ash Silo fabric filter shall be observed by the permittee when it is operating, with a frequency of not less than once per shift. The permittee shall keep a log of the observations from the monitoring device.
(9VAC5-80-110)

16. **Fuel Burning Equipment Requirements – Combination Boiler (emissions unit ID# PH-1) – Monitoring - Compliance Assurance Monitoring (CAM) –** Upon re-commencement of burning any amount of biomass fuel, the permittee shall monitor, operate, calibrate and maintain the multi-cyclone followed by electrostatic precipitator, which controls PM/PM-10 emissions from the Combination Boiler, according to the CAM Plan attached to this permit and the CAM requirements in Conditions 151-159.
(9VAC5-80-110 and 40 CFR 64.6 (c))

17. **Fuel Burning Equipment Requirements – Combination Boiler (emissions unit ID# PH-1) – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

    a. Daily consumption of wood waste and paper waste/ETP residuals fired in the Combination Boiler (PH-1).

    b. Monthly and annual consumption of (each permitted fuel) natural gas, ETP biogas, wood waste and paper waste/residuals fired in the Combination Boiler (PH-1). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

    c. COMS records for the Combination Boiler.

    d. Electrostatic precipitator secondary voltage and current meter/gauge readings and once per shift observations.

    e. Ash Silo fabric filter differential pressure once per shift observations.

    f. The permittee shall maintain the records specified in 40 CFR 60.2175(v).

    g. Results of all stack tests, visible emission evaluations and performance evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 59.d, e, u, v, and bb of the 9/13/2022 NSR Permit)

18. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Testing -** Initial performance tests shall be conducted for carbon monoxide and nitrogen oxides from the Combination Boiler (PH-1) while burning only biomass and natural gas to determine compliance with the emission limits contained in Condition 8. The tests shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after the facility submits the notification required by Condition 22.b. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The performance test shall include a test method performance audit (PA), where applicable. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 55 of the 9/13/2022 NSR Permit)

19. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Testing -** Initial performance tests shall be conducted for hydrogen sulfide from the Combination Boiler (PH-1) while burning only natural gas and ETP biogas, to determine compliance with the emission limits contained in Condition 8. The tests shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after the facility submits the notification required by Condition 23.. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The performance test shall include a test method performance audit (PA), where applicable. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 56 of the 9/13/2022 NSR Permit)

20. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Testing** – Performance tests shall be conducted for PM-10 from the exhaust of the electrostatic precipitator controlling the Combination Boiler to determine compliance with the emission limits requirements contained in Conditions 8 and 58 to determine CAM monitoring data as required in Condition 16. The tests shall be performed and reported within 60 days after achieving the maximum production rate at which the facility will be operated after use of any amount of biomass fuel is resumed, but in no event later than 180 days after the facility submits the notification required by Condition 22.b. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test

results shall be submitted to the Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. The permittee shall submit the proposed CAM monitoring data within 45 days after the performance test completion. (9VAC5-80-110 and 9VAC5-50-30)

21. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) – Testing –** At an interval not to exceed five years, the facility shall conduct a performance test for NOx, CO and VOC from the exhaust of the Combination Boiler (PH-1) to determine compliance with the hourly emission limitations listed in Condition 8 of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110)

22. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) - Initial Notification (Re-commencement of Biomass Fuel Combustion) –** The facility shall furnish written notification to the Piedmont Regional Office of:

    a. The anticipated date that Combination Boiler (PH-1) recommences combustion of any amount of biomass fuel, postmarked not more than 60 days nor less than 30 days prior to such date.

    b. The actual date of startup of Combination Boiler (PH-1) combustion of any amount of biomass fuel within 15 days after such date.

    c. The anticipated date of continuous opacity monitoring system performance evaluations postmarked not less than 30 days prior to such date.

    d. The anticipated date of performance tests of the Combination Boiler (PH-1) required by Condition 18, postmarked at least 30 days prior to such date.

    (9 VAC5-80-110 and Condition 62 of the 9/13/2022 NSR Permit)

23. **Fuel Burning Equipment Requirements – Combination Boiler (Emission Unit ID #PH-1) - Initial Notification (Commencement of ETP Biogas Combustion) –** The facility shall furnish written notification to the Piedmont Regional Office of:

    a. The anticipated date that the Combination Boiler (PH-1) commences combustion of any amount of ETP biogas, postmarked not more than 60 days nor less than 30 days prior to such date.

b. The actual date that the Combination Boiler (PH-1) commences combustion of any amount of ETP biogas within 15 days after such date.

(9 VAC5-80-110 and Condition 63 of the 9/13/2022 NSR Permit)

Fuel Burning Equipment Requirements – PACKAGE BOILER – (Emission Unit ID# PH-2)

24. **Fuel Burning Equipment Requirements – Package Boiler – (Emission Unit ID# PH-2) - Limitations - Emission Controls -** Particulate matter and PM-10 emissions from the Package Boiler (PH-2) shall be controlled by the use of clean burning fuel.
(9VAC5-80-110 and Condition 3 of the 9/13/2022 NSR Permit)

25. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) - Limitations - Emission Controls -** Nitrogen oxide emissions from the Package Boiler (PH-2) shall be controlled by Low NOx Burners (LNB) with a NOx performance value of 0.036 lb/MMBtu (equivalent to 30 ppmvd at 3% O_2). The LNB shall be installed and operated in accordance with manufacturer's specifications.
(9VAC5-80-110 and Condition 5 of the 9/13/2022 NSR Permit)

26. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) - Limitations - Emission Controls –** Carbon monoxide and volatile organic compound emissions from the Package Boiler (PH-2) shall be controlled by good combustion practices, operator training, and proper emission unit design, construction and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at a minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations and/or best engineering practices, at a minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9VAC5-80-110, Condition E.3 of the July 12, 1996 RACT Consent Agreement, and Condition 8 of the 9/13/2022 NSR Permit)

27. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) - Limitations - Fuel -** The approved fuel for the Package Boiler (PH-2) is natural gas. A change in the fuel shall be considered a change in the method of operation of the boilers and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.
(9VAC5-80-110 and Condition 28 of the 9/13/2022 NSR Permit)

28. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) - Limitations - Fuel Throughput -** The Package Boiler (PH-2) shall consume no more than 2065.7 million cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-

month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 31 of the 9/13/2022 NSR Permit)

29. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) – Limitations -** Requirements by Reference - Except where this permit is more restrictive than the applicable requirement, the Package Boiler (PH-2) described in the Introduction shall be operated in compliance with the requirements of 40 CFR 60, Subpart Db.
(9VAC5-80-110 and Condition 40 of the 9/13/2022 NSR Permit)

30. **Fuel Burning Equipment Requirements - Package Boiler – (Emission Unit ID# PH-2) – Limitations - Emission Limits -** Emissions from the operation of the Package Boiler (PH-2) shall not exceed the limits specified below:

PM	0.5 lb/hr	2.0 tons/yr
PM-10	1.8 lb/hr	7.8 tons/yr
Sulfur Dioxide	0.2 lb/hr	0.6 tons/yr
Nitrogen Oxides (as NO_2) 0.036 lb/MMBtu*	8.8 lb/hr	38.5 tons/yr
Carbon Monoxide	4.9 lb/hr	21.4 tons/yr
Volatile Organic Compounds	1.3 lb/hr	5.7 tons/yr

*Calculated as a 30-day rolling average.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 24, 25, 26, 27, 28, and 32.
(9VAC5-80-110, 40 CFR 60.44b(a), (h), and (i), and Condition 42 of the 9/13/2022 NSR Permit)

31. **Fuel Burning Equipment Requirements – Package Boiler – (Emission Unit ID# PH-2) – Limitations - Visible Emission Limit -** Visible emissions from the Package Boiler (PH-2) shall not exceed 10 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times <u>including</u> startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 51 of the 9/13/2022 NSR Permit)

32. **Fuel Burning Equipment Requirements – Package Boiler – (Emission Unit ID# PH-2) – Monitoring -** The permittee shall monitor the Package Boiler (Ref. No. PH-2) steam generating unit operating conditions and predict NO_x emission rates as specified in the Package Boiler operating plan for NO_x predictions submitted to and approved by the Piedmont Regional Office. The plan shall:

    a. Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lb/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O_2 level).

    b. Include the data and information that the owner or operator used to identify the relationship between NOx emission rates and those operating conditions; and

    c. Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the permittee during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

    (9VAC5-80-110, 40 CFR 60.48b(g)(2), 40 CFR 60.49b(c), and Condition 18 of the 9/13/2022 NSR Permit)

33. **Fuel Burning Equipment Requirements – (Emission Unit ID #PH-2) – Monitoring – Periodic Monitoring for Visible Emissions –** The permittee shall check for the presence of visible emissions from the Package Boiler (PH-2) stack while the boiler is in operation during daylight hours in accordance with the following procedures and frequencies:

    a. At a minimum of once per month, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9 unless timely corrective action is taken such that the Package Boiler (PH-2) resumes operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10%, the VEE shall be conducted for a total of 60 minutes.

    b. All visible emissions inspections shall be performed when the Package Boiler (PH-2) is operated during daylight hours. If no operation of the boiler for business purposes is necessary during a calendar month, the boiler need not be operated solely to make this compliance determination.

    All observations, VEE results, and corrective actions taken shall be recorded.
    (9VAC5-80-110)

34. **Fuel Burning Equipment Requirements – Package Boiler (Emission Unit ID# PH-2) – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

    a. Daily, monthly and annual consumption of natural gas in the Package Boiler (PH-2). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
    (40 CFR 60.49b(d))

    b. Annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new capacity factor calculated at the end of each calendar month.
    (40 CFR 60.49b(d)(1))

    c. Records of predicted NOx emission rates and the monitored operating conditions, including steam generating unit load, identified in the Package Boiler Operating Plan.
    (40 CFR 60.49b(c))

    d. Records for each steam generating unit (PH-2) operating day as required by 40 CFR 60.49b(g).

    e. Fuel quality records for natural gas combusted in the Package Boiler (PH-2).
    (40 CFR 60.49b(r)(1))

    f. Results of all stack tests, visible emissions observations/evaluations and performance evaluations.

    g. Results of all Method 9 visible emission evaluations, and any corrective actions taken, as required by Condition 33.

    (9VAC5-80-110, 40 CFR 60.49b(c), 40 CFR 60.49b(d)(1), 40 CFR 60.49b(f), 40 CFR 60.49b(g), 40 CFR 60.49b(r)(1), and Conditions 59.f and bb of the 9/13/2022 NSR Permit)

35. **Fuel Burning Equipment Requirements – Package Boiler - (Emission Unit ID #PH-2) – Testing -** At an interval not to exceed five years, the facility shall conduct a performance test for NOx, CO, and VOC from the exhaust of the package boiler to determine compliance with the emission limitations listed in Condition 30 of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior

to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110)

36. **Fuel Burning Equipment Requirements- Package Boiler – (Emission Unit ID# PH-2) – Testing –** Compliance with the NOx emission standard under 40 CFR 60.44b in Condition 30 shall be determined through performance testing in accordance with 40 CFR 60.46b(c). (9VAC5-80-110 and 40 CFR 60.46b(c))

37. **Fuel Burning Equipment Requirements – Package Boiler - (Emission Unit ID #PH-2) – Reporting –** The permittee shall submit emission reports for any excess emissions that occurred during the reporting period. Excess emissions are defined as any calculated 30-day rolling average NOx emission rate, as determined under 40 CFR 60.46b(c), that exceeds the applicable emission limits in 40 CFR 60.44b (Condition 30). (9VAC5-80-110, 40 CFR 60.49b(h)(2) and 40 CFR 60.49b(v))

38. **Fuel Burning Equipment Requirements – (Emission Unit ID #PH-2) – Reporting –**The permittee shall report the results of any 40 CFR Part 60 Appendix A Method 9 opacity test performed as a result of Condition 33. If the test indicates the facility is out of compliance with the standard contained in Condition 31, the source shall also report the length of time associated with any exceedance of the standard and the corrective actions taken to correct the exceedance. This report shall be sent to the Piedmont Regional Office with the semiannual report required by Condition 166 unless otherwise noted in Condition 168. (9VAC5-80-110)

39. **Fuel Burning Equipment Requirements – Package Boiler - (Emission Unit ID #PH-2) – – Reporting –** The permittee shall submit reports certifying that only natural gas was combusted in the Package Boiler (PH-2) during the reporting period. All reports shall be postmarked by the 30th day following the end of each six-month period. (9VAC5-80-110, 40 CFR 60.49b(r)(1) and 40 CFR 60.49b(w))

Fuel Burning Equipment Requirements – RENTAL BOILERS – (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B)

40. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Limitations – Emission Controls -** Particulate matter and PM-10 emissions from the Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B) shall be controlled by the use of clean burning fuel. (9VAC5-80-110 and Condition 4 of the 9/13/2022 NSR Permit)

41. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-2A, RB-2B) – Limitations –Emission Controls -** Nitrogen oxide emissions from the Rental Boilers (RB-2A, RB-2B) shall be controlled by low-NOx burners (LNB) to achieve a NOx emission standard of 0.036

lb/MMBtu/hr (equivalent to 30 ppmvd at 3% O_2). The LNB shall be installed and operated in accordance with manufacturer's specifications.
(9VAC5-80-110 and Condition 6 of the 9/13/2022 NSR Permit)

42. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Limitations – Emission Controls –** Carbon monoxide and volatile organic compound emissions from the Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B) shall be controlled by good combustion practices, operator training, and proper emission unit design, construction and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at a minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations and/or best engineering practices, at a minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9VAC5-80-110 and Condition 8 of the 9/13/2022 NSR Permit)

43. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Limitations – Operating Restrictions -** The Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B) may be operated subject to the following conditions:

    a. The Rental Boilers (RB-1A, RB-1B) may be operated to replace the steam output of the Combination Boiler during an outage. These boilers are subject to the emission standards and limits in Condition 47.

    b. The Rental Boilers (RB-2A, RB-2B) may be operated to replace the steam output of the Package Boiler during an outage. These boilers are subject to the emission standards in Condition 48.

    c. Each Rental Boiler used to replace the steam output of the Combination Boiler (RB-1A, RB-1B) during an outage shall operate no more than 180 consecutive days nor more than 4,380 hours in any 12-month consecutive period.

    d. The Rental Boilers used to replace the steam output of the Package Boiler (RB-2A, RB-2B) during an outage shall operate no more than 180 consecutive days each nor more than 4,380 hours combined in any 12-month consecutive period.

    e. Each Rental Boiler shall meet the definition of "temporary boiler" found at 40 CFR 60.41b.

    In no event shall Rental Boilers be operated while both the Combination Boiler (PH-1) and the Package Boiler (PH-2) are operating. For NSR applicability purposes, the rental boilers are considered to be the same unit as the boiler they are replacing. If the Combination Boiler (PH-1) or the Package Boiler (PH-2) is modified, then the corresponding rental boilers are also considered to be

modified. If the rental boilers are modified, then the corresponding boiler (PH-1 or PH-2) is also considered to be modified.
(9VAC5-80-110 and Condition 26 of the 9/13/2022 NSR Permit)

44. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Limitations – Fuel -** The approved fuel for Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B) is natural gas. A change in the fuel shall be considered a change in the method of operation of the boilers and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.
(9VAC5-80-110 and Condition 28 of the 9/13/2022 NSR Permit)

45. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B) – Limitations –Fuel Throughput -** The Rental Boilers (RB-1A, RB-1B) shall consume no more than 1,016.6 million cubic feet of natural gas per year (combined), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 32 of the 9/13/2022 NSR Permit)

46. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-2A, RB-2B) – Limitations – Fuel Throughput -** The Rental Boilers (RB-2A, RB-2B) shall consume no more than 508.3 million cubic feet of natural gas per year (combined), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 33 of the 9/13/2022 NSR Permit)

47. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B) – Limitations – Process Emission Limits -** Emissions from the operation of the Rental Boilers (RB-1A, RB-1B) shall not exceed the limits specified below:

	lb/hr each	tons/yr combined
PM	0.2 lb/hr	1.0 tons/yr
PM-10	0.9 lb/hr	3.9 tons/yr
Nitrogen Oxides (as NO_2)	18.0 lb/hr 0.15 lb/MMBtu	78.8 tons/yr
Carbon Monoxide	9.8 lb/hr	42.7 tons/yr
Volatile Organic Compounds	0.7 lb/hr	2.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 41, 43 and 45.
(9VAC5-80-110 and Condition 43 of the 9/13/2022 NSR Permit)

48. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-2A, RB-2B) – Limitations – Process Emission Limits -** Emissions from the operation of the Rental Boilers (RB-2A, RB-2B) shall not exceed the limits specified below:

	lb/hr (each)	tons/yr (combined)
PM	0.3 lb/hr	0.5 tons/yr
PM-10	0.9 lb/hr	1.9 tons/yr
Nitrogen Oxides (as NO_2)	4.4 lb/hr 0.036 lb/MMBtu	9.5 tons/yr
Carbon Monoxide	4.4 lb/hr	9.5 tons/yr
Volatile Organic Compounds	0.7 lb/hr	1.4 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 41, 43 and 46.
(9VAC5-80-110 and Condition 44 of the 9/13/2022 NSR Permit)

49. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Limitations – Visible Emission Limit -** Visible emissions from the Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B) shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 52 of the 9/13/2022 NSR Permit)

50. **Fuel Burning Equipment Requirements – (Emission Unit ID #RB-1A, RB-1B, RB-2A, RB-2B) – Monitoring – Periodic Monitoring for Visible Emissions –** The permittee shall check for the presence of visible emissions from each Rental Boiler stack while the boiler is in operation during daylight hours in accordance with the following procedures and frequencies:

    a. At a minimum of once per month while the unit is on-site, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A,

Method 9 unless timely corrective action is taken such that the Rental Boiler resumes operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10%, the VEE shall be conducted for a total of 60 minutes.

b. All visible emissions inspections shall be performed when the Rental Boiler is operated during daylight hours. If no operation of the boiler for business purposes is necessary during a calendar month, the boiler need not be operated solely to make this compliance determination.

All observations, VEE results, and corrective actions taken shall be recorded.
(9VAC5-80-110)

51. **Fuel Burning Equipment Requirements – Rental Boilers (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B) – Recordkeeping -** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

a. Annual hours of operation of Rental Boilers (RB-1A, RB-1B, RB-2A, RB-2B), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. For each Rental Boiler (RB-1A, RB-1B, RB-2A, RB-2B), records of the date that the Rental Boiler was brought on-site, each day that the Rental Boiler operated, and the date that the Rental Boiler was moved off-site.

c. Certification from the Rental Boiler vendor that any boiler used at the site (RB-1A, RB-1B, RB-2A, RB-2B) meets the applicable emission standards and limits in Conditions 41, 47 and/or 48.

d. Monthly and annual consumption of natural gas in each Rental Boiler (RB-1A, RB-1B, RB-2A, RB-2B). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

e. Results of all visible emissions observations, Method 9 visible emission evaluations, and any corrective actions taken, as required by Condition 50.

(9VAC5-80-110 and Condition 59 of the 9/13/2022 NSR Permit)

MACT SUBPART DDDDD – INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS (Emission Unit ID#PH-1, PH-2)

52. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – Requirements by Reference –** Except where this permit is more restrictive than the applicable requirement, the Combination Boiler (PH-1) and the Package Boiler (PH-2) shall be operated in compliance with all applicable requirements of MACT Subparts A and DDDDD. RB-1A, RB-1B, RB-2A, and RB-2B are exempt from the MACT as temporary units according to 40 CFR 63.7491(j).

Boiler	Subcategory
PH-1	Existing Gas 1 Unit – 40 CFR 63.7490(d) and 40 CFR 63.7575 Existing Hybrid Suspension Grate Boiler Designed to Burn Wet Biomass/Bio-based Solids – 40 CFR 63.7490(d) and 40 CFR 63.7575 (as applicable – note that Conditions 58-87 will apply if the boiler is operated under any subcategory other than a Gas 1 Unit)
PH-2	Existing Gas 1 Unit – 40 CFR 63.7490(d) and 40 CFR 63.7575

(9VAC5-80-110 and 40 CFR 63.7499)

53. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – General Provisions –** The permittee shall comply with the applicable General Provisions as specified in Table 10 to Subpart DDDDD of Part 63.
(40 CFR 63.7565 and 9VAC5-80-110)

54. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – Operation and Maintenance Requirements -** The permittee shall at all times, operate and maintain the boilers (PH-1, PH-2), including associated air pollution equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(9VAC5-80-110 and 40 CFR 63.7500(a)(3))

55. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – Boiler Tune-ups –** The permittee shall conduct a tune-up of the boilers (PH-1, PH-2) annually in accordance with 40 CFR 63.7540(a)(10) and Table 3 to Subpart DDDDD of Part 63 to demonstrate continuous compliance. Subsequent tune-ups shall be conducted no later than 13 months from the previous tune-up. If the unit is not operating on the required date for a tune-up, then the tune-up must be conducted within 30 calendar days of re-startup. These tune-ups shall consist of the following:

    a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or a storage vessel is required to

complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment, but each burner must be inspected at least once every 12 months;

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made); and

f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in §63.7540(a)(10)(vi)(A) through (C).

(9VAC5-80-110, 40 CFR 63.7500(a)(1), §63.7505(a), §63.7515(d), §63.7540(a)(10)(i through vi), §63.7540(a)(12),and Table 3 to Subpart DDDDD of Part 63, Item 3)

56. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – Recordkeeping** – The permittee shall keep records of the following:

a. A copy of each notification and report submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting and Initial Notification or Notification of Compliance Status or annual compliance report submitted.

b. Records of annual tune-ups for the Combination Boiler (PH-1) and Package Boiler (PH-2).

These records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The permittee shall keep each record for 5 years following the date of each occurrence, report, or record. Each record shall be kept on site, or must be accessible from on site, for at least 2 years after the date of each occurrence, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years. (9VAC5-80-110, 40 CFR 63.7555(a), and 40 CFR 63.7560)

57. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1, PH-2) – Reporting –** The permittee shall submit the following reports:

a. Each report in Table 9 to Subpart DDDDD of Part 63 that applies to the permitted facility. The permittee must submit each report, according to 40 CFR 63.7550(h), by the data in Table 9 to Subpart DDDDD of Part 63 and according to the requirements in 40 CFR 63.7550(b)(1)-(4).

b. For units that are subject only to a requirement to conduct subsequent tune-ups according to 40 CFR 63.7540(a)(10), and not subject to emission limits specified in Table 4 to Subpart DDDDD to Part 63, the permittee shall submit only an annual compliance report as specified in 40 CFR 63.7550(b)(1)-(4). The compliance report must contain the information specified in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv), and (xvii).

(9VAC5-80-110 and 40 CFR 63.7550(a) and (b))

The limitations in Conditions 58-87 apply to the Combination Boiler (PH-1) only. These are considered Future Applicable Requirements, which will apply when the boiler is operated under the "existing hybrid suspension grate boiler designed to burn wet biomass/bio-based solids" subcategory.

58. **MACT Subpart DDDDD Requirements – (Emission Unit ID #PH-1) – Requirements by Reference (upon re-commencement of biomass fuel combustion) -** Except where this permit is more restrictive than the applicable requirement, the Combination Boiler (PH-1) shall be operated in compliance with all applicable requirements of MACT DDDDD- National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. Upon re-commencement of biomass fuel combustion, the Combination Boiler will be considered an existing hybrid suspension/grate boiler designed to burn wet biomass/bio-based solids as defined in 40 CFR 63.7490(d) and 63.7575.
(9VAC**5-**80-110 and 40 CFR 63, Subpart DDDDD)

59. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – General Provisions** – The permittee shall comply with the applicable General Provisions as specified in Table 10 to Subpart DDDDD of Part 63.
(9VAC5-80-110 and 40 CFR 63.7565)

60. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Operating Limits –** The permittee shall meet each operating limit in Table 4 to Subpart DDDDD of Part 63 that applies to the Combination Boiler (PH-1). If the permittee uses a control device or combination of control devices not covered in Subpart DDDDD, or if the permittee wishes to establish and monitor an alternative monitoring parameter, then the permittee shall apply to the EPA Administrator for approval of alternative monitoring under 40 CFR 63.8(f).
(9VAC5-80-110 and 40 CFR 63.7500(a)(2))

61. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Emission Limitations** - Prior to October 6, 2025, in accordance with Table 15 to Subpart DDDDD of Part 63, items 1 and 13, emissions from the Combination Boiler when operating as an existing boiler in the "hybrid suspension grate boiler designed to burn biomass/bio-based solids" subcategory shall not exceed the limits specified below:

Particulate Matter (PM)[1] (filterable only)	4.4×10^{-1} lb/MMBtu heat input, OR
Total Selected Metals (TSM)[1]	4.5×10^{-4} lb/MMBtu heat input
Carbon Monoxide	3500 ppmdv[2]
Hydrogen Chloride	2.2 x 10-2 lb/MMBtu heat input
Mercury	5.7 x 10-6 lb/MMBtu heat input

[1]Comply with either the PM or TSM standard

[2]Measured on a dry basis corrected to 3 percent oxygen, 3-run average (ppmdv = parts per million dry volume)

These standards apply at all times the boiler is operating, except for periods of startup and shutdown during which time the boiler must comply only with Items 5 and 6 in Table 3 to Subpart DDDDD of Part 63. The permittee shall demonstrate continuous compliance with each emission limit according to the methods specified in Table 8 to Subpart DDDDD of Part 63 and 40 CFR 63.7540(a)(1) through (19).
(9VAC5-80-110, 40 CFR 63.7500(a) and (f), and 40 CFR 63.7540(a) and (d))

62. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Emission Limitations Effective October 6, 2025 –** As of October 6, 2025, in accordance with Table 2 to Subpart DDDDD of Part 63, items 1 and 13, emissions from the Combination Boiler when operating as an existing boiler in the "hybrid suspension grate boiler designed to burn biomass/bio-based solids" subcategory shall not exceed the limits specified below:

Particulate Matter (PM)[1] (filterable only)	4.4×10^{-1} lb/MMBtu heat input, OR
Total Selected Metals (TSM)[1]	4.5×10^{-4} lb/MMBtu heat input
Carbon Monoxide	3500 ppmdv[2]
Hydrogen Chloride	2.0×10^{-2} lb/MMBtu heat input
Mercury	5.4×10^{-6} lb/MMBtu heat input

[1]Comply with either the PM or TSM standard

[2]Measured on a dry basis corrected to 3 percent oxygen, 3-run average (ppmdv = parts per million dry volume)
These standards apply at all times the boiler is operating, except for periods of startup and shutdown during which time the boiler must comply only with Items 5 and 6 in Table 3 to Subpart DDDDD of Part 63. The permittee shall demonstrate continuous compliance with each emission limit according to the methods specified in Table 8 to Subpart DDDDD of Part 63 and 40 CFR 63.7540(a)(1) through (19).
(9VAC5-80-110, 40 CFR 63.7500(a) and (f), 40 CFR 63.7510(f)(2), and 40 CFR 63.7540(a) and (d))

63. **MACT Subpart DDDDD Requirements – (emission unit ID#PH-1) – Limitations – Operating Limits –** The Combination Boiler must comply with the operating limit in Table 4 to Subpart DDDDD of Part 63, Item 4, for electrostatic precipitator control on a boiler not using a PM CPMS. Visible emissions from the combination boiler stack shall maintain opacity to less than or equal to 10 percent opacity or the highest average opacity reading measured during the performance test run demonstrating compliance with the applicable PM (or TSM) emission limitation in Condition 61 or 62 (daily block average).
(9VAC5-80-110 and 40 CFR 63.7500(a)(2))

64. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Compliance Demonstration -** The permittee shall demonstrate compliance with all applicable emission limits in Condition 61 or 62, as applicable, using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. The permittee may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(c) is less than the applicable emission limit. For gaseous fuels, the permittee may not use fuel analyses to comply with the TSM alternative standard or the HCl standard. Otherwise, the permittee shall demonstrate compliance for HCl, mercury, or TSM using performance stack testing.
(9VAC5-80-110 and 40 CFR 63.7505(c))

65. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations - Site-Specific Monitoring Plan -** Should the permittee demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, the permittee shall develop a site-specific monitoring plan according to the requirements in 40 CFR 63.7505(d)(1)-(4) for the use of any CEMS, COMS, or CPMS. This requirement also applies should the permittee petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f).

    a. The site-specific monitoring plan shall address the design, data collection, and the quality control elements outlined in 40 CFR 63.8(d), and the elements described in (i)-(iii), below:

i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).
ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).
(40 CFR 63.7505(d)(1))

b. The site-specific monitoring plan shall address the procedures described in (i)-(iii), below:

i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii).

ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d).

iii. The recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), as applicable in Table 10 to Subpart DDDDD of Part 63, and 40 CFR 63.8(e)(1) and (e)(2)(i).
(40 CFR 63.7505(d)(2))

c. The permittee shall conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.
(40 CFR 63.7505(d)(3))

d. The permittee shall operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
(40 CFR 63.7505(d)(4))

(9VAC5-80-110 and 40 CFR 63.7505(d))

66. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Startup and Shutdown Plan** - Should the permittee choose to comply using definition (2) of "Startup" in 40 CFR 63.7575, the permittee shall develop and implement a written startup and shutdown plan (SSP) according to the requirements in Table 3 to Subpart DDDDD of Part 63. The SSP shall be maintained onsite and available upon request for public inspection.
(9VAC5-80-110 and 40 CFR 63.7505(e))

67. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Change in Fuel Subcategory** - For affected sources that switch fuel subcategories consistent with 40 CFR 63.7545(h) after the initial compliance date, the permittee shall demonstrate compliance within 60

days of the effective date of the switch, unless a compliance demonstration was previously conducted for this subcategory within the previous 12 months.
(9VAC5-80-110 and 40 CFR 63.7510(k))

68. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Initial Compliance Requirements for Performance Testing -** If the permittee elects to demonstrate compliance with any of the applicable emission limits in Conditions 61 or 62, as applicable, through performance testing, initial compliance requirements shall include all of the following:

    a. Conduct performance tests according to 40 CFR 63.7520 and Table 5 to Subpart DDDDD of Part 63.

    b. Conduct a fuel analysis for each type of fuel burned in the boiler according to 40 CFR 63.7521 and Table 6 to Subpart DDDDD of Part 63, except as specified in 40 CFR 63.7510(a)(2)(i) through (iii).

    c. Establish operating limits according to 40 CFR 63.7530 and Table 7 to Subpart DDDDD of Part 63.

    d. Conduct CMS performance evaluations according to 40 CFR 63.7525.

    (9VAC5-80-110 and 40 CFR 63.7510(a))

69. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Initial Compliance Requirements – Fuel Analysis –** If the permittee elects to demonstrate compliance with any of the applicable emission limits for HCl, mercury, or TSM in Conditions 61 or 62, as applicable, through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the Combination Boiler according to 40 CFR 63.7521 and Table 6 to Subpart DDDDD of Part 63 and establish operating limits according to 40 CFR 63.7530 and Table 8 to Subpart DDDDD of Part 63. The fuels described in 40 CFR 63.7510(a)(2)(i) and (ii) are exempt from these fuel analyses and operating limit requirements. The fuels described in 40 CFR 63.7510(a)(2)(ii) are exempt from the chloride fuel analysis and operating requirements.
(9VAC5-80-110 and 40 CFR 63.7510(b))

70. M**ACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Initial Compliance Requirements – CO Performance Testing –** The permittee shall conduct a performance test for CO according to Table 5 to Subpart DDDDD of Part 63 or conduct a performance evaluation of the continuous CO monitor, if applicable, according to 40 CFR 63.7525(a).
(9VAC5-80-110 and 40 CFR 63.7510(c)

71. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Initial Compliance Requirements – PM Performance Testing** – The permittee shall conduct a performance test in accordance with 40 CFR 63.7520 and Table 5 to Subpart DDDDD of Part 63, to demonstrate initial compliance for PM.
(9VAC5-80-110 and 40 CFR 63.7510(d))

72. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Initial Compliance Demonstrations –** The permittee shall complete the initial compliance demonstrations, as specified in 40 CFR 63.7520(a) through (d), no later than 180 days after the effective date of the fuel switch or physical change, as specified in 40 CFR 63.7495(i) and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 to Subpart DDDDD of Part 63, except as specified in 40 CFR 63.7510(j).
(9VAC5-80-110 and 40 CFR 63.7510(e))

73. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Site-Specific Stack Test Plan -** The permittee shall conduct all applicable performance tests according to 40 CFR 63.7520 on an annual basis, except as specified in paragraphs (a) and (b) below. The facility must develop a site-specific stack test plan according to the requirements of 40 CFR 63.7(c). Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (a)-(e) below:

    a. If the performance tests for a given pollutant for at least 2 consecutive years shows that emissions are below 75 percent of the emission limit for the pollutant, and if there are no changes in the individual boiler or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM.
    (40 CFR 63.7515(b))

    b. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant, the permittee shall conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit), as specified in Conditions 61 or 62, as applicable.
    (40 CFR 63.7515(c))

    c. If the permittee demonstrates compliance with the mercury, HCl, or TSM based on fuel analysis, the permittee shall conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to the emission limits in Conditions 61 or 62, as applicable. The permittee may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If a new type of fuel is burned, the permittee shall conduct a fuel analysis before burning the new type of fuel in the combination boiler. The permittee must continue to meet all

applicable continuous compliance requirements in §63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, the fuel analysis frequency may be reduced to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level, or the permittee begins burning a new type of fuel, the monitoring frequency must return to monthly for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level. If sampling is conducted one day per month, samples shall be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.
(40 CFR 63.7515(e))

d. If the Combination Boiler (PH-1) has not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee shall complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected source and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 to Subpart DDDDD of Part 63.
(40 CFR 63.7515(g))

e. If a CO CEMS that meets the Performance Specifications outlined in 40 CFR 63.7525(a)(3) is operated to demonstrate compliance with the applicable CO CEMS emission standard for the combination boiler in Condition 61 or 62, as applicable, the permittee is not required to conduct CO performance tests and is not subject to the oxygen concentration operating limit requirement specified in 40 CFR 63.7510(a).
(40 CFR 63.7515(i))

(9VAC5-80-110, 40 CFR 63.7515(a), (b), (c), (e), (g), and (i), and 40 CFR 63.7520)

74. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Limitations – Fuel Analysis Requirements –** For solid and liquid fuels, the permittee shall conduct fuel analyses for chloride and mercury according to the procedures in 40 CFR 63.7521(b) through (e) and Table 6 to Subpart DDDDD of Part 63, as applicable. For solid and liquid fuels, the permittee shall also conduct fuel analyses for TSM if opting to comply with the TSM alternative standard. The permittee is not required to conduct fuel analyses for fuels used only for startup, unit shutdown, and transient flame stability purposes. The permittee is required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury and HCl in Table 2 to Subpart DDDDD of Part 63. Gaseous and liquid fuels are exempt from the sampling requirements in 40 CFR 63.7521(c) and (d).
(9VAC5-80-110 and 40 CFR 63.7521(a))

75. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Monitoring – Fuel Monitoring Plan -** The permittee shall develop a site-specific fuel monitoring plan according to the procedures in 40 CFR 63.7521(b)(1) and (2) if required to conduct fuel analyses as specified in 40 CFR 63.7510.
(9VAC5-80-110 and 40 CFR 63.7521(b))

76. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Monitoring – CO CEMS –** The permittee shall install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate, and maintain continuous emission monitoring systems (CEMS) for CO and oxygen (O_2) (or carbon dioxide(CO_2)) according to the procedures in 40 CFR 63.7525(a)(1) through (6).
(9VAC5-80-110 and 40 CFR 63.7525(a))

77. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Monitoring – Continuous Opacity Monitoring System (COMS) Requirements** – The permittee shall install, operate, certify, and maintain the COMS for the combination boiler according to the procedures in 40 CFR 63.7525(c)(1) through (7).
(9VAC5-80-110 and 40 CFR 63.7525(c))

78. **MACT Subpart DDDDD Requirements – (emission unit ID#HW-PSG2-S022/006) – Monitoring – Site-Specific Monitoring Plan -** The permittee shall monitor and collect data according to 40 CFR 63.7535(a), (b), (c), and (d) and the site-specific monitoring plan required by 40 CFR 63.7505(d).
(9VAC5-80-110 and 40 CFR 63.7535(a), (b), (c), and (d))

79. **MACT Subpart DDDDD Requirements – (emission unit ID#PH-1) – Recordkeeping – Required MACT Subpart DDDDD Records -**The permittee shall keep records according to 40 CFR 63.7555(a) through (d). These records shall include:

    a. A copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification or semiannual compliance report that was submitted, according to the requirements of 40 CFR 63.10(b)(2)(xiv).
    (40 CFR 63.7555(a)(1))

    b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
    (40 CFR 63.7555(a)(2))

    c. For each CEMS and continuous monitoring system required by MACT Subpart DDDDD, all records listed in 40 CFR 63.7555(b)(1) through (5):

        i. Records described in 40 CFR 63.10(b)(2)(vii) through (xi).

        ii. Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii).

        iii. Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

iv. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i).

v. Records of the date and time that each deviation started and stopped.
(40 CFR 63.7555(b))

d. Records required in Table 8 to Subpart DDDDD of Part 63, including records of all monitoring data and calculated averages for applicable operating limits, such as oxygen content and boiler operating load, to show continuous compliance with each applicable emission limit and operating limit.
(40 CFR 63.7555(c))

e. **A**pplicable records required by 40 CFR 63.7555(d)(1) through (11):

i. Maintain records of monthly fuel use by the combination boiler, including the type(s) of fuel(s) and amount used.

ii. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the permittee shall keep records documenting that the material is listed as nonwaste under 40 CFR 241.4(a).

iii. A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 16 of 40 CFR 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation shall include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates.

iv. A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 17 of 40 CFR 63.7530, that were done to demonstrate compliance with the mercury limit. Supporting documentation shall include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates.

v. If, consistent with 40 CFR 63.7515(b) and Condition 73, the permittee chooses to stack test less frequently than annually, the permittee shall keep a record that documents that emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel

composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

vi. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

vii. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

viii. A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 18 of 40 CFR 63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation shall include results of any fuel analyses and basis for estimates of maximum TSM fuel input or TSM emission rates.

ix. The permittee shall maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

x. The permittee shall maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

xi. For each startup period, for units selecting paragraph (2) of the definition of "startup" in 40 CFR 63.7575, the permittee shall maintain records of the time that clean fuel combustion begins; the time when fuels that are not clean fuels commence to be fed; the time when useful thermal energy is first supplied; and the time when PM controls are engaged. (40 CFR 63.7555(d))

(9VAC5-80-110 and 40 CFR 63.7555)

80. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Recordkeeping –** The permittee's records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

a. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

b. The permittee must keep each record on site, or they must be accessible from on site, for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report,

or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining three years.

(9VAC5-80-110 and 40 CFR 63.7560(a), (b), and (c))

81. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Testing –** To demonstrate compliance with the emission limits in Condition 61 or 62, the permittee shall establish a unit specific limit for maximum operating load according to 40 CFR 63.7520(c) in accordance with Table 7 to Subpart DDDDD of Part 63:
    a. Collect operating load or steam generation data at least once every 15 minutes during the entire period of the performance test.

    b. Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.

    c. Determine the highest hourly average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as the unit specific operating limit.

    (9VAC5-80-110, 40 CFR 63.7520, and Table 7 to Subpart DDDDD of Part 63)

82. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Reporting – Performance Testing and Fuel Analysis -** The permittee shall report the results of performance tests and the associated fuel analyses conducted to demonstrate compliance with the emission limits in Condition 61 or 62, as applicable, within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 to Subpart DDDDD of Part 63, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550.
(9VAC5-80-110 and 40 CFR 63.7515(f))

83. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Reporting – MACT Subpart DDDDD Deviation Reporting** - The permittee shall report each instance in which each applicable emission limit and operating limit in Tables 1 through 4 or 11 through 15 of Subpart DDDDD of Part 63 was not met. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550.
(9VAC5-80-110 and 40 CFR 63.7540(b))

84. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Reporting –** The permittee shall submit each report in Table 9 to Subpart DDDDD of Part 63 that applies to the permitted facility. The permittee must submit each report, according to 40 CFR 63.7550(h), by the data in Table 9 to Subpart DDDDD of Part 63 and according to the requirements in 40 CFR 63.7550(b)(1) through (4).
(9VAC5-80-110 and 40 CFR 63.7550(a) and (b))

85. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Reporting – Compliance Reports -** A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in 40 CFR 63 Subpart DDDDD:

    a. If the facility is subject to the requirements of a tune-up, the permittee shall submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv), and (xvii).

    b. If complying with the applicable emission limits with performance testing, the permittee shall submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (vi), (vii), (viii), (xv), (xvii), (xviii), and 40 CFR 63.7550(d).

    c. If complying with an emissions limit using a CMS the compliance report shall contain the information in 40 CFR 63.7550(c)(5)(i) through (iii), (v), (vi), (xi) through (xiii), (xv through xviii) and 40 CFR 63.7550(e).

    d. For each deviation from an emission or operating limit in 40 CFR 63 Subpart DDDDD when not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in 40 CFR 63.7550(d)(1) through (3).

    e. For each deviation from an emission limit, operating limit, and monitoring requirement in 40 CFR 63 Subpart DDDDD that occurs when using a CMS to comply with the emission limit or operating limit, the compliance report must additionally contain the information in 40 CFR 63.7550(e)(1) through (9). This includes any deviations from the site-specific monitoring plan as required in 40 CFR 63.7505(d).

    (9VAC5-80-110 and 40 CFR 63.7550(c), (d), (e) and (h))

86. **MACT Subpart DDDDD Requirements – (Emission unit ID#PH-1) – Reporting – Report Submission Procedures -** The permittee shall submit the reports required by Condition 61 or 62 according to the procedures specified in 40 CFR 63.7550(h)(1)through (3). The information required for each report shall also be submitted to the Piedmont Regional Office, with the details of the reports to be arranged with the Piedmont Regional Office.
    (9VAC5-80-110 and 40 CFR 63.7550(h))

87. **MACT Subpart DDDDD Requirements – (Emission Unit ID#PH-1) – Notifications –** The permittee shall submit the following MACT Subpart DDDDD notifications:

    a. All of the notifications in 40 CFR 63.7(b) and (c), §63.8(e), (f)(4) and (6), and §63.9(b) through (h) that apply to the permitted facility by the dates specified.

    b. For each initial compliance demonstration as specified in 40 CFR 63.7530, the permittee shall submit a Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for the combination boiler

according to 40 CFR 63.10(d)(2). The Notification of Compliance Status Report shall contain all information specified in paragraphs 40 CFR 63.7545(e)(1) through (8), as applicable.

c. For each required performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

d. If the permittee has switched fuels or made a physical change to the combination boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee shall provide notice of the date upon which the fuel switch or physical change was made within 30 days of the switch/change. The notification must identify the information in 40 CFR 63.7545(h)(1) through (3).

(9VAC5-80-110 and 40 CFR 63.7545(a), (d), (e), and (h))

NESHAP SUBPART E – NATIONAL EMISSION STANDARD FOR MERCURY (Emission Unit ID #PH-1)

The limitations in Conditions 88-91 apply to the Combination Boiler (PH-1) only. These are considered Future Applicable Requirements, which will apply when the boiler re-commences firing any amount of biomass fuel.

88. **NESHAP Subpart E – (Emission Unit #PH-1) –Limitations –** Emissions to the atmosphere from combustion of process wastewater treatment plant residuals shall not exceed 3.2 kg (7.1 lb) of mercury per 24-hour period.
(9VAC5-80-110 and 40 CFR 61.52(b))

89. **NESHAP Subpart E – (Emission Unit #PH-1) – Monitoring –** All the sources for which mercury emissions exceed 1.6 kg (3.5 lb) per 24-hour period, demonstrated either by stack sampling according to 40 CFR 61.53 or wastewater residuals sampling according to 40 CFR 61.54, shall monitor mercury emissions at intervals of at least once per year by use of Method 105 of 40 CFR 61, Appendix B, or the procedures specified in 40 CFR 61.53(d)(2) and (d)(4). The results of the monitoring shall be reported and retained according to 40 CFR 61.53(d)(5) and (d)(6) or 40 CFR 61.54(f) and (g).
(9VAC5-80-110 and 40 CFR 61.55(a)

90. **NESHAP Subpart E – (Emission Unit #PH-1) – Recordkeeping –** The permittee shall maintain records of wastewater residuals sampling, charging rate determination, and other data needed to determine mercury content of wastewater treatment residuals. These records shall be available for inspection by the DEQ for a minimum of five years.
(9VAC5-80-110 and 40 CFR 61.54(g))

91. **NESHAP Subpart E – (Emission Unit #PH-1) – Testing –** A residuals test shall be conducted for mercury from the pulp and paper residues (i.e., ETP sludge). Each test shall be conducted and reported in accordance with 40 CFR 61.54 to determine compliance with the mercury emission limit

contained in Condition 88. The details of the test are to be arranged with the Piedmont Regional Office. If performance testing is performed in lieu of wastewater residuals sampling, the permittee shall submit a test protocol at least 30 days prior to testing. One copy of the performance test results shall be submitted to the Piedmont Regional Office and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and 40 CFR 61.54)

Process Equipment Requirements – EFFLUENT TREATMENT PLANT ANAEROBIC REACTOR – (Emission Unit ID# ETP-1)

92. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Limitations – Emission Controls –** Hydrogen sulfide emissions from the ETP Anaerobic Reactor (ETP-1) shall be controlled by a scrubber that reduces the concentration of hydrogen sulfide in the ETP biogas to less than or equal to 250 ppmv, followed by either combustion of the biogas in the Combination Boiler (PH-1), or by venting the gas to a non-assisted flare (ETP-1 Flare) that meets the standards of 40 CFR 60.18. The Combination Boiler and ETP-1 Flare shall be provided with adequate access for inspection and sufficient combustion capacity, and either the ETP-1 flare or the Combination Boiler shall be in operation when the anaerobic reactor (ETP-1) is operating.
(9VAC5-80-110, 40 CFR 60.18(b), and Condition 9 of the 9/13/2022 NSR Permit)

93. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1 Flare) – Limitations – Flare Heating Value Requirements –** The ETP non-assisted flare (ETP-1 Flare) shall operate at all times with a minimum net heating value of the gas to be combusted of 7.45 MJ/scm (200 Btu per standard cubic foot) of the gas. The net heating value of the inlet to the ETP-1 non-assisted flare shall be determined annually. The net heating value shall be calculated using the equation in 40 CFR 60.18(f)(3).
(9VAC5-80-110, 40 CFR 60.18 (c)(3)(A)(ii), and Condition 11 of the 9/13/2022 NSR Permit)

94. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1 Flare) – Limitations – Flare Exit Velocity Requirements -** The ETP non-assisted flare (ETP-1 Flare) shall operate with an exit velocity less than the velocity calculated from the following equation:

$$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

where: V_{max} = the maximum permitted velocity < 122 m/sec (400 ft/sec); and
H_T = the net heating value (Condition 92).

The actual velocity of the ETP-1 Flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross-sectional area of the flare tip.
(9 VAC 5-80-110, 40 CFR 60.18(c)(4)(iii) and (f)(5), and Condition 12 of the 9/13/2022 NSR Permit)

95. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1 Flare) – Limitations – Fuel –** The approved pilot fuels for the ETP non-assisted flare (ETP-1 Flare) are natural gas and propane. A change in the fuel shall be considered a change in the method of operation and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.
(9VAC5-80-110 and Condition 29 of the 9/13/2022 NSR Permit)

96. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Limitations – Throughput -** The throughput of volatile organic compounds to the Effluent Treatment Plant for the treatment of ETP residuals shall not exceed 9.8 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 37 of the 9/13/2022 NSR Permit)

97. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1 Flare) – Limitations – Process Emission Limits -** Emissions from the ETP non-assisted flare (ETP-1 Flare) including pilot gas combustion emissions shall not exceed the limits specified below:

PM	0.3 lb/hr	1.0 tons/yr
PM-10	0.3 lb/hr	1.1 tons/yr
Sulfur Dioxide	1.7 lb/hr	7.1 tons/yr
Nitrogen Oxides (as NO_2)	1.8 lb/hr	7.6 tons/yr
Carbon Monoxide	1.3 lb/hr	5.5 tons/yr
Volatile Organic Compounds	0.2 lb/hr	0.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 93, 94, and 95.
(9VAC5-80-110 and Condition 46 of the 9/13/2022 NSR Permit)

98. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Limitations – Process Emission Limits –** Emissions from the operation of the effluent treatment plant from additives used in the treatment of ETP residuals shall not exceed the limit specified below:

Volatile Organic Compounds	2.3 lb/hr	9.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 96 and 103.
(9VAC5-80-110 and Condition 49 of the 9/13/2022 NSR Permit)

99. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1 Flare) – Limitations – Visible Emission Limit –** The ETP non-assisted flare (ETP-1 Flare) shall be operated with no visible emissions, as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during two consecutive hours. This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110, 40 CFR 60.18(c)(1), and Condition 53 of the 9/13/2022 NSR Permit)

100. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Monitoring –** The ETP non-assisted flare (ETP-1 Flare) shall be equipped to maintain the pilot flame during all periods of operation. The pilot flame shall be equipped with a heat-sensing device to indicate the continuous presence of a flame. Additionally, the pilot flame shall be equipped with an alarm such that extinguishing of the flame can be recognized and corrected. During all periods of operation, to include startup and shutdown, the presence of the pilot flame shall be monitored and recorded. Data from the heat sensing device monitor shall be recorded as fifteen-minute readings. The heat-sensing device shall be maintained and calibrated in accordance with approved procedures that shall include, as a minimum, the manufacturer's written requirements or recommendations. The heat-sensing device shall be inspected annually and the results of the inspection recorded.
(9VAC5-80-110 and Condition 19 of the 9/13/2022 NSR Permit)

101. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Monitoring –** The Anaerobic Reactor (ETP-1) scrubber outlet shall be equipped with a device to continuously measure the flow rate of ETP biogas. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures, which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the ETP-1 anaerobic reactor is operating.
(9VAC5-80-110 and Condition 20 of the 9/13/2022 NSR Permit)

102. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Monitoring –** The Anaerobic Reactor (ETP-1) scrubber outlet shall be equipped with a device to continuously measure the hydrogen sulfide concentration of the ETP biogas. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures, which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the Anaerobic Reactor (ETP-1) is operating.
(9VAC5-80-110 and Condition 21 of the 9/13/2022 NSR Permit)

103. **Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor (Emission Unit ID# ETP-1) – Recordkeeping –** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

    a. Monthly and annual throughput of ETP biogas from the outlet of the scrubber to the ETP-1 Flare and Combination Boiler, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

    b. Annual throughput of VOC to the Effluent Treatment Plant for the treatment of ETP residuals, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

    c. Records of hydrogen sulfide concentration at the ETP Anaerobic Reactor (ETP-1) scrubber outlet.

    d. The existence of the pilot flame as detected by the heat-sensing device required by Condition 92, recorded hourly.

    e. Monthly and annual throughput of natural gas or propane to the ETP-1 Flare pilot.

    f. The dates and length of time that the ETP biogas is vented to the ETP-1 Flare.

    g. The number of times and the length of each occurrence where visible emissions are observed from the ETP-1 Flare.

    h. Records of all heat content analyses, flow rate calculations or measurements, V_{max} calculations, and exit velocity calculations for the ETP-1 Flare, as well as any other information necessary to determine compliance with Conditions 93 and 94.

    These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
    (9VAC5-80-110 and Condition 59 of the 9/13/2022 NSR Permit)

Process Equipment Requirements – STARCH STORAGE SILO (Emission Unit ID# SSI-1)

104. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Limitations – Emission Controls –** Particulate Matter and PM-10 emissions from the Starch Silo (SSI-1) shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection and shall be in operation when receiving starch.
(9VAC5-80-110 and Condition 10 of the 9/13/2022 NSR Permit)

105. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Limitations – Throughput -** The throughput of starch to the starch silo (SSI-1) shall not exceed 12,614,400 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 38 of the 9/13/2022 NSR Permit)

106. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Limitations – Visible Emission Limit -** Visible emissions from the Starch Silo (SSI-1) shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 54 of the 9/13/2022 NSR Permit)

107. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Monitoring –** The Starch Silo (SSI-1) fabric filter shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation during loading of the Starch Silo.
(9VAC5-80-110 and Condition 22 of the 9/13/2022 NSR Permit)

108. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Monitoring – Periodic Monitoring –** To ensure good performance, the fabric filter's differential pressure device used to continuously measure pressure drop shall be observed by the permittee with a frequency of not less than once per loading of starch into the silo. The permittee shall keep a log of the observations from the differential pressure gauge.
(9VAC5-80-110 and Condition 25 of the 9/13/2022 NSR Permit)

109. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) – Monitoring – Periodic Monitoring -** The permittee shall conduct visible emission inspections from the starch silo (SSI-1) while it is in operation in accordance with the following procedures and frequencies:

a. At a minimum of once per month, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9, unless timely corrective action is taken such that the systems resume operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 5%, the VEE shall be conducted for a total of 60 minutes.

b. All visible emissions inspections shall be performed when the system is operated during daylight hours. If no operation of these systems for business purposes is necessary during a calendar month, the starch storage silo equipment need not be operated solely to make this compliance determination.

c. All observations, VEE results, and corrective actions taken shall be recorded.

(9VAC5-80-110)

110. **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID #SSI-1) - Recordkeeping -** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:

a. Monthly and annual throughput of starch to the Starch Silo, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Fabric filter differential pressure monitoring records.

c. Results of visible emissions observations, visible emissions evaluations, and any corrective action taken.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 59.i and y of the 9/13/2022 NSR Permit)

Process Equipment Requirements – PAPER MACHINE (Emission Unit ID# PM-1)

111. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Limitations –** Emissions from the operation of the paper machine shall be controlled by good operating practices.
(9VAC5-80-110 and 9 VAC 5-50-20 E)

112. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Limitations** - Emissions from the cleaning of the paper machine shall be controlled by the use of good cleaning practices.
(9VAC5-80-110 and 9 VAC 5-50-20 E)

113. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Limitations –** The throughput of volatile organic compounds to the paper machine (PM-1), other than for cleaning purposes, shall not exceed 38.2 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 35 of the 9/13/2022 NSR Permit)

114. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Limitations –** The throughput of volatile organic compounds to the paper machine (PM-1) for cleaning purposes shall not exceed 3.1 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 36 of the 9/13/2022 NSR Permit)

115. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Limitations –** Combined emissions from the operation of the paper machine (PM-1) and felt cleaning operations shall not exceed the limits specified below:

Volatile Organic Compounds	523.8 lb/hr	41.3 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 113, 114, and 116.
(9VAC5-80-110 and Condition 48 of the 9/13/2022 NSR Permit)

116. **Process Equipment Requirements – Paper Machine – (Emission Unit ID# PM-1) - Recordkeeping -** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:

    a. Annual production of recycled containerboard (in bone dry tons), calculated monthly as the sum of each consecutive 12-month period.

    b. Annual throughput of VOC to the paper machine (PM-1), for purposes other than cleaning, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

c. Annual throughput of VOC to the paper machine (PM-1) for cleaning purposes, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

d. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all cleaning solutions used on the paper machine.

e. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all solutions added in the paper making process.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 59.j, l, m, w and x of the 9/13/2022 NSR Permit)

Process Equipment Requirements – RECYCLE FIBER PLANT – (Emission Unit ID #RFP-1, TMP-1C)

117. **Process Equipment Requirements – Recycle Fiber Plant – (Emission Unit ID# RFP-1, TMP-1C) - Limitations-** Emissions from the operation of the Recycle Fiber Plant shall be controlled by good operating practices.
(9VAC5-80-110 and 9 VAC 5-50-20 E)

118. **Process Equipment Requirements – Recycle Fiber Plant – (Emission Unit ID# RFP-1, TMP-1C) – Limitations –** The throughput of volatile organic compounds to the Recycle Fiber Plant (RFP-1 and TMP-1C) shall not exceed 2.8 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 34 of the 9/13/2022 NSR Permit)

119. **Process Equipment Requirements – Recycle Fiber Plant – (Emission Unit ID# RFP-1, TMP-1C) – Limitations – Process Emission Limits –** Combined emissions from the operation of the Recycle Fiber Plant pulping and screening equipment (RFP-1 and TMP-1C) and cleaning operations shall not exceed the limit specified below:

Volatile Organic Compounds	0.6 lb/hr	2.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of

emission limits. Compliance with these emission limits may be determined as stated in Conditions 118 and 120.
(9VAC5-80-110 and Condition 47 of the 9/13/2022 NSR Permit)

120. **Process Equipment Requirements – Recycle Fiber Plant – (Emission Unit ID# - RFP-1, TMP-1C) – Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:

    a. Annual throughput of VOC to the Recycle Fiber Plant (RFP-1), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

    b. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ for VOC-containing material used in the Recycle Fiber Plant.

    c. Monthly and annual material balance to verify compliance with the volatile organic compound (VOC) emission limitations in Condition 118.

    These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
    (9VAC5-80-110 and Condition 59.k, w and x of the 9/13/2022 NSR Permit)

Process Equipment Requirements – NON-HALOGENATED COLD SOLVENT DEGREASERS – (Emission Unit ID# MI-I1)

121. **Parts Washer Equipment Requirements – Limitations – Solvent Metal Cleaning Operations –** The cleaning solutions used in the parts washers are non-halogenated solvents, the solutions used do contain VOC therefore 9 VAC 5 Chapter 40 Article 24 - Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents shall be applicable. Any change to the current cleaning solutions used in the parts washers may require a new or amended permit.
    (9 VAC 5 Chapter 40, Rule 4-24)

122. P**arts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Limitations -** No owner or other person shall use or permit the use of any cold cleaner unless such cleaner is equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.
    (9VAC5-80-110 and 9 VAC 5-40-3280 C)

123. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Limitations -** Achievement of the emission standard in Condition 122 by use of the methods in 9VAC5-40-3290 C and D will be acceptable to the Board.
(9VAC5-80-110 and 9 VAC 5-40-3280 C)

124. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Limitations -** Emissions from each solvent metal cleaning operation (cold cleaning) shall be controlled as follows:

    a. Covers or enclosed remote reservoirs should be provided. Covers shall be designed so that they can be easily operated with one hand. (Covers for large degreasers may require mechanical assistance, by spring loading, counter weighting or powered systems). Enclosed remote reservoirs should be designed such that they provide reduction effectiveness equivalent to that of a cover.

    b. External or internal drainage facilities shall be provided to collect and return the solvent to a closed container or solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100ºF, then the drainage facilities should be internal, so that parts are enclosed under the cover while draining. The drainage facilities may be external for applications where an internal type cannot fit into the cleaning system.

    c. A permanent label summarizing the operating procedures in Condition 125 should be placed in a conspicuous location on or near the degreaser.

    d. If used, the solvent spray should be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.

    (9VAC5-80-110 and 9 VAC 5-40-3290 C1)

125. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Limitations -** The permittee shall operate each solvent cleaning operation (cold cleaning) consistent with good operating practices including the following:

    a. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate to the atmosphere. Store waste solvent only in closed containers.

    b. The cold cleaning unit should be closed whenever not handling parts in the cold cleaner.

    c. Cleaned parts should drain for at least 15 seconds or until dripping ceases.

    (9VAC5-80-110 and 9 VAC 5-40-3290 C.2)

126. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Limitations -** The permittee shall dispose of waste solvent from the cold cleaning units by one of the following methods:

a. Reclamation (either by outside services or in-house)

b. Incineration

(9VAC5-80-1100 and 9 VAC 5-40-3290.D)

127. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Monitoring -** Cleaning machine inspections shall be conducted monthly for the area around each cleaning machine to ensure that all operational requirements are being met. At the end of six months, upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to quarterly for the next six-month period. If, at any time, the operational requirements are not being met per the permit conditions, the permittee shall revert back to the monthly inspection schedule. At the end of the second six-month period, upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to semiannually. If, at any time, the operational requirements are not being met per the permit conditions, the permittee shall revert back to the quarterly inspection schedule.
(9VAC5-80-110)

128. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. The records shall include, but are not limited to:

a. Records documenting that each solvent metal cleaning operation (cold cleaning) at the facility are in compliance with the requirements of Conditions 122-126.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and 9VAC5-50-50F and H)

129. **Parts Washer Equipment Requirements – (Emission Unit ID# MI-I1) – Reporting -** Semiannually the permittee shall report all instances of non-compliance found during cleaning machine area inspections. The source shall also report the length of time associated with any exceedance of such a standard and the actions taken to correct the exceedance. This report shall be sent to the Piedmont Regional Office.
(9VAC5-80-110 and 9 VAC 5-50-50 H)

Industrial Landfill Equipment Requirements – (Emission Unit ID# LF-1)

130. **Industrial Landfill Equipment Requirements – (Emission Unit ID# LF-1) – Limitations -** Emissions from the operation of the industrial landfill shall be controlled by good operating practices.
(9VAC5-80-110 and 9 VAC 5-50-20 E)

Fuel Burning Equipment Requirements – EMERGENCY DIESEL FIRE PUMP – (Emission Unit ID# MI-I5)

131. **Fuel Burning Equipment Requirements – (Emission Unit ID# MI-I5) – Limitations -** Visible emissions from the emergency diesel fire pump shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30 percent opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this condition.
(9VAC5-80-110 and 9 VAC 5-50-80)

132. **Fuel Burning Equipment Requirements – (Emission Unit ID# MI-I5) – Monitoring -** The permittee shall conduct an observation of the presence of visible emissions on the emergency diesel fire pump at least once each calendar month in which the emissions unit operates. If visible emissions are observed, the permittee shall take timely corrective actions such that the systems resume operation with no visible emissions or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the systems do not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the engine resumes operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary corrective actions taken.
(9VAC 5-80-110 and 9 VAC 5-50-50)

133. **Fuel Burning Equipment Requirements – (Emission Unit ID# MI-I5) – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to records of visible emissions observations, VEE results and corrective actions. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC 5-80-110 and 9 VAC 5-50-50)

MACT Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Emission Unit ID#MI-I5)

134. **MACT Subpart ZZZZ Requirements – (Emission Unit ID# MI-I5) – Limitations –** Except where this permit is more restrictive than the applicable requirement, the emergency diesel fire pump engine (ID# MI-I5) shall be operated in compliance with the applicable requirements of the MACT, 40 CFR 63, Subparts A and ZZZZ. The emission unit is considered an existing emergency stationary compression ignition engine as defined in 40 CFR 63.6590(a)(1)(ii) and 63.6675. Table 8

to Subpart ZZZZ of Part 63 shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to the permittee.
(9VAC5-80-110 and 40 CFR 63, Subparts A and ZZZZ)

135. **MACT Subpart ZZZZ Requirements – (Emission Unit ID# MI-I5) – Limitations –** The emergency diesel fire pump engine (ID# MI-I5) shall meet the requirements of Table 2c(1) to Subpart ZZZZ of Part 63. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2c(1). The analysis program must be part of the maintenance plan for the engine. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2c(1), or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.
(9VAC5-80-110 and 40 CFR 63.6602(a))

136. **MACT Subpart ZZZZ Requirements – (Emission Unit ID# MI-I5) – Limitations –** The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.
(9VAC5-80-110 and 40 CFR 63.6604(b))

137. **MACT Subpart ZZZZ Requirements – (Emission Unit ID# MI-I5) – Limitations –** The permittee shall operate and maintain the diesel emergency fire pump engine (ID# MI-I5) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether such operation and maintenance procedures being used are sufficient to minimize emissions will be based on available information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, and inspection of the source.
(9VAC5-80-110, 40 CFR 63.6605(b), 40 CFR 63.6640(a), and 40 CFR 63.6625(e))

138. **MACT Subpart ZZZZ Requirements – (Emission Unit ID# MI-I5) – Limitations –** The emergency diesel fire pump engine (ID# MI-I5) shall be operated in accordance with 40 CFR 63.6640(f). Operation not in accordance with 40 CFR 63.6640(f) shall make the engine subject to the non-emergency requirements of 40 CFR 63 Subpart ZZZZ. Operations for non-emergency purposes may require a new or amended permit pursuant to 9VAC5-80, Article 6.
(9VAC5-80-110 and 40 CFR 63.6625(h))

139. **MACT Subpart ZZZZ Requirements (Emission Unit ID #MI-I5) - Limitations –** The permittee shall minimize the emergency diesel fire pump engine's time spent at idle during startup and

minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
(9VAC5-80-110 and 40 CFR 63.6625(h))

140. **MACT Subpart ZZZZ Requirements (Emission Unit ID #MI-I5) – Monitoring –** The emergency diesel fire pump engine (ID# MI-I5) shall be equipped with a non-resettable hour meter. The reason for operation and the length of time operated shall be recorded.
(9VAC5-80-110, 40 CFR 63.6655(f), and 40 CFR 63.6625(f))

141. **MACT Subpart ZZZZ Requirements – (Emission Unit ID #MI-I5) - Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

a. All fuel supplier certifications;

b. A copy of each notification and report submitted to comply with 40 CFR 63 Subparts A and ZZZZ;

c. Records of the occurrence and duration of each malfunction of the emergency diesel fire pump engine (ID# MI-I5) or any air pollution monitoring control equipment;

d. Records of all required maintenance performed on the air pollution control and monitoring equipment;

e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning engine air pollution control and monitoring equipment to its normal or usual manner of operation;

f. If the oil analysis program described in 40 CFR 63.6625(i) is implemented, the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine; and

g. Records of the reason and hours of operation for the emergency diesel fire pump engine (ID# MI-I5).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 40 CFR 63.6625(i), and 40 CFR 63.6655)

Facility Wide Conditions

142. **Facility Wide Conditions – Limitations - Combined Annual Boiler Emission Limit –** Combined annual emissions from all boilers operating at the facility (Ref. Nos. PH-1, PH-2, RB-1A, RB-1B, RB-2A, RB-2B) shall not exceed the limits specified below:

Particulate Matter	67.4 tons/yr
PM-10	86.1 tons/yr
Sulfur Dioxide	17.2 tons/yr
Nitrogen Oxides (as NO_2)	242.8 tons/yr
Carbon Monoxide	440.9 tons/yr
Volatile Organic Compounds	18.9 tons/yr
Hydrogen Sulfide	2.9 tons/yr

(9VAC5-80-110 and Condition 45 of the 9/13/2022 NSR Permit)

143. **Facility Wide Conditions – Limitations - Maintenance/Operating Procedures -** At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

a. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

b. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

c. Maintain an inventory of spare parts.

d. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

e. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 67 of the 9/13/2022 NSR Permit)

144. **Facility Wide Conditions – Limitations - Fugitive Dust Emission Standards -** During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

    b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

    c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

    d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

    e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

    (9VAC5-80-110 and Condition 13 of the 9/13/2022 NSR Permit)

145. **Facility Wide Conditions – Limitations – VOC Work Practice Standards -** At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9VAC5-80-110 and Condition 14 of the 9/13/2022 NSR Permit)

146. **Facility Wide Conditions – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

a. Combined annual emissions from the boilers, calculated as the sum of each consecutive 12-month period, to demonstrate compliance with Condition 142. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Records of maintenance and operator training required by Condition 143.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC 5-80-110)

147. **Facility Wide Conditions – Recordkeeping – Record of Malfunctions -** The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC5-80-110 and Condition 68 of the 9/13/2022 NSR Permit)

148. **Facility Wide Conditions – Testing -** The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
(9VAC5-80-110 and Condition 60 of the 9/13/2022 NSR Permit)

149. **Facility Wide Conditions – Testing -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5 -80-110)

150. **Facility Wide Conditions – Reporting – Initial Notifications -** The permittee shall furnish written notification to the Piedmont Regional Office of:

a. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.

b. The anticipated date of performance tests of the Combination Boiler (PH-1), postmarked at least 30 days prior to such date.

(9VAC5-80-110 and Condition 61 of the 9/13/2022 NSR Permit)

General Compliance Assurance Monitoring (CAM) Provisions

Conditions 151-159 apply upon re-commencement of firing any amount of biomass fuel:

151. **CAM – Monitoring -** The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 and 40 CFR 64.6(c))

152. **CAM – Monitoring -** At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7 (b))

153. **CAM – Monitoring -** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Combination Boiler (PH-1) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))

154. **CAM – Monitoring -** Upon detecting an excursion or exceedance, the permittee shall restore operation of the Combination Boiler (PH-1) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))

155. **CAM – Monitoring -** Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

156. **CAM – Monitoring** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9VAC5-80-110 and 40 CFR 64.7(e))

157. **CAM – Monitoring** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Combination Boiler (PH-1) for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9VAC5-80-110 and 40 CFR 64.8(a) and (b))

158. **CAM – Recordkeeping -** The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). (9VAC5-80-110 and 40 CFR 64.9(b))

159. **CAM – Reporting -** The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 166 of this permit to the Piedmont Regional Office. Such reports shall include at a minimum:

    a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

Insignificant Emission Units

160. **Insignificant Emission Units -** The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
PH-I2	Ash Handling	9 VAC-5-80-720 B	PM/PM-10	
ST-I1	Paper Machine Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I2	TMP Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I3	WWTP Storage Tanks	9 VAC-5-80-720 C	PM/PM-10, VOC	< 1,000 gallons
ST-I4	Warehouse Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I5	Powerhouse Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I6	Recycle Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I8	Maintenance Storage Tanks	9 VAC-5-80-720 B	VOC	
MI-I2	Cooling Towers-Non-VOC/Haps	9 VAC-5-80-720 B	-	
MI-I3	Chillers - Non-VOC/Haps	9 VAC-5-80-720 B	-	
PH-I1	Wood Waste Handling	9 VAC-5-80-720 B	PM10	
WY-I2	Chip/Bark/Sludge Handling	9 VAC-5-80-720 B	PM10	
WY-I3	Wind Erosion	9 VAC-5-80-720 B	PM10	
PH-I4	TGM Steam Turbine	9 VAC-5-80-720 A, B	None	
PH-I5	Ideal Electric Generator (non-combustion)	9 VAC-5-80-720 A, B	None	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.
(9VAC5-80-110)

Permit Shield & Inapplicable Requirements

161. **Permit Shield and Inapplicable Requirements -** Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by

terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Not applicable to Rental Boilers since they are temporary boilers; not applicable to the Combination Boiler (PH-1) since the changes authorized by the 9/13/2022 NSR Permit do not meet the definition of modification in 40 CFR 60.14 or reconstruction in 40 CFR 60.15
40 CFR 60, Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	Not applicable because the landfill is an industrial landfill.
40 CFR 63, Subpart S	National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	The bleaching system is exempt because it does not use any chlorine or chlorinated compounds for bleaching. (40 CFR 63.445(a))

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the DEQ pursuant to §10.1-1307.3 or §10.1-1315 of the Virginia Air Pollution Control Law.
(9VAC5-80-110 and 9 VAC 5-80-140)

General Conditions

162. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)

163. **General Conditions - Permit Expiration**

a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the DEQ takes final action on the application under 9VAC5-80-150.

d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.

e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the DEQ fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

164. **General Conditions -Recordkeeping and Reporting -** All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

a. The date, place as defined in the permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

165. **General Conditions -Recordkeeping and Reporting -** Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9VAC5-80-110)

166. **General Conditions -Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1

of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

   i. Exceedances of emissions limitations or operational restrictions;

   ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

   iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9VAC5-80-110)

167. **General Conditions - Annual Compliance Certification -** Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31;

b. The identification of each term or condition of the permit that is the basis of the certification;

c. The compliance status;

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;

f. Such other facts as the permit may require to determine the compliance status of the source; and

g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110)

168. **General Conditions - Permit Deviation Reporting -** The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 166 of this permit.
(9VAC5-80-110 F. 2)

169. **General Conditions - Failure/Malfunction Reporting -** In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office.
(9VAC5-80-110 and 9VAC5-20-180)

170. **General Conditions - Failure/Malfunction Reporting -** The emission units that have continuous monitors subject to 9VAC5-40-50 C and 9VAC5-50-50 C are not subject to the 14-day written notification.
(9VAC5-20-180 and 9VAC5-40-50 or 9VAC5-50-50)

171. **General Conditions - Failure/Malfunction Reporting -** The emission unit subject to the reporting and the procedure requirements of 9VAC5-40-50 C and the procedures of 9VAC5-50-50 C is the Combination Boiler (Emission Unit ID #PH-1) upon the re-commencement of firing any amount of biomass fuel (COMS).
(9VAC5-80-110, 9VAC5-20-180 C and 9VAC5-40-50 or 9VAC5-50-50)

172. **General Conditions - Failure/Malfunction Reporting -** Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9VAC5-40-41 or 9VAC5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9VAC5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the DEQ quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:

    a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9VAC5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

    c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
    d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

    All malfunctions of emission units not subject to 9VAC5-40-50 C and 9VAC5-50-50 C require written reports within 14 days of the discovery of the malfunction.
    (9VAC5-80-110, 9VAC5-20-180 C, and 9VAC5-40-50 or 9VAC5-50-50)

173. **General Conditions - Severability -** The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
    (9VAC5-80-110)

174. **General Conditions - Duty to Comply -** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
    (9VAC5-80-110)

175. **General Conditions - Need to Halt or Reduce Activity not a Defense -** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
    (9VAC5-80-110)

176. **General Conditions - Permit Modification -** A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-

80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC80-110, 9VAC5-80-190, and 9VAC5-80-260)

177. **General Conditions - Property Rights -** The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)

178. **General Conditions - Duty to Submit Information -** The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality.
(9VAC5-80-110)

179. **General Conditions - Duty to Submit Information -** Any document (including reports) required in a permit condition to be submitted to the DEQ shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110)

180. **General Conditions - Duty to Pay Permit Fees -** The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.
(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)

181. **General Conditions - Startup, Shutdown, and Malfunction -** At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9VAC5-80-110 and 9VAC5-50-20 E)

182. **General Conditions - Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such

operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1. (9VAC5-80-110)

183. **General Conditions - Inspection and Entry Requirements -** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

    a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

    b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

    d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

    (9VAC5-80-110)

184. **General Conditions - Reopening for Cause -** The permit shall be reopened by the DEQ if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

    a. The permit shall be reopened if the DEQ or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

    b. The permit shall be reopened if the administrator or the DEQ determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

    c. The permit shall not be reopened by the DEQ if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

    (9VAC5-80-110)

185. **General Conditions - Permit Availability -** Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-110 and 9VAC5-80-150)

186. **General Conditions - Transfer of Permits**

a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.

b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the DEQ of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.

c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the DEQ of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

187. **General Conditions - Permit Revocation or Termination for Cause -** A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The DEQ may suspend, under such conditions and for such period of time as the DEQ may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)

188. **General Conditions - Duty to Supplement or Correct Application -** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-110 and 9VAC5-80-80 E)

189. **General Conditions - Stratospheric Ozone Protection -** If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9VAC5-80-110 and 40 CFR Part 82)

190. **General Conditions - Asbestos Requirements -** The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9VAC5-60-70 and 9VAC5-80-110)

191. **General Conditions - Accidental Release Prevention -** If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9VAC5-80-110 and 40 CFR Part 68)

192. **General Conditions - Changes to Permits for Emissions Trading -** No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9VAC5-80-110)

193. **General Conditions - Emissions Trading -** Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

    a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.

    b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

    c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

    (9VAC5-80-110)

Compliance Assurance Monitoring Plan

Emission Unit ID# PH-1: Combination Boiler

Control Device: Multi-cyclone PHC-1A and Electrostatic Precipitator PHC-1B

Pollutant: PM-10

Emission Limit: 17.9 lb/hr

CAM Description: Since the Combination Boiler is currently idled, Cascades Containerboard Packaging - Bear Island proposes the below CAM Plan. The facility will conduct a performance test for PM-10 after achieving maximum production and no later than 180 days after start-up on biomass and will establish the indicator range for total secondary power as stated below.

Justification for Selection of Performance Indicators and Ranges: The CAM indicator selected is total secondary power in the ESP which is the control device for PM-10. Control efficiency is dependent upon the ESP's total power during operation. The source will conduct a performance test to demonstrate compliance with the PM-10 limit and will establish a minimum value for total secondary power (the indicator range) for the ESP in order to achieve compliance. Operating below the indicator range will indicate a change in the PM-10 collection efficiency of the ESP and possibly exceedance of the PM-10 limit.

CAM Plan:

Indicator: Total Secondary Power from the ESP

Measurement Approach: Secondary Power is calculated from measurement of secondary voltage and current from each precipitator field. Measurements will be taken after each transformer and prior to the electrode in each field.

Indicator Range: The total Secondary Power from the precipitator (as a 1-hour average) must be greater than or equal to the minimum value determined during the performance test so as not to exceed the PM-10 hourly permit limit. An excursion is defined as any one-hour period when the total secondary power is less than the value determined during the stack test. The performance test will be conducted according to the test plan that will be developed as required by the Title V permit.

Quality Improvement Plan (QIP) Threshold: A QIP will be developed and implemented if the number of excursions exceeds 5% duration of the operating time during a semiannual reporting period.

Data Representativeness: Secondary voltage and current are measured and recorded for each precipitator field.

Verification of Operational Status: N/A because the monitoring equipment is not new or modified.

QA/QC Practices and Criteria: The ESPs and monitoring devices will be calibrated, maintained and operated using procedures that take into account the manufacturer's specifications. This includes annual washdown and inspection of the ESP and tuning and calibration of the monitoring devices.

Monitoring Frequency: Data (secondary voltage and current for each field) is collected by the data acquisition system at least every minute and reduced to a 6-minute average. The 6-minute averages are recorded and averaged to provide a 1-hour secondary voltage and current. These will be used to calculate the hourly total secondary power.

Data Collection Procedures: Secondary voltage and current are collected by the data acquisition system and combined into an hourly average to calculate total secondary power. An alarm will occur when total secondary power is less than the value determined during the performance test. The alarm will alert the operator to the excursion which will be investigated and corrective actions taken as necessary. Records will be maintained and reported as required.