



*Commonwealth of Virginia*

*VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY*

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**STATEMENT OF LEGAL AND FACTUAL BASIS**

Cascades Containerboard Packaging – Bear Island  
10026 Old Ridge Road, Ashland (Hanover County), Virginia  
Permit No. (PRO50840)

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9VAC5 Chapter 80, Cascades Containerboard Packaging – Bear Island has applied for a renewal of the Title V Operating Permit for its 10026 Old Ridge Road, Ashland (Hanover County) facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

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Date: DRAFT/2024

## **FACILITY INFORMATION**

### Permittee/Facility

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

County-Plant Identification Number: 51-085-0042

## **FACILITY DESCRIPTION**

NAICS Code: 322122

Since the previous Title V renewal was issued, Cascades Containerboard Packaging – Bear Island Mill was converted from a thermomechanical (TMP) and recycled pulp newsprint manufacturing facility to a recycled containerboard production facility that produces linerboard and medium grade containerboard. Previously, the facility used a thermomechanical pulping process (a major source of VOC emissions), which has been eliminated. The woodyard was also eliminated, since the feedstock now consists of recycled cardboard in place of virgin wood and recycled newsprint. The existing wastewater treatment plant was modified. The effluent treatment plant (ETP) includes an anaerobic digester, which generates hydrogen sulfide and VOC emissions. These emissions are 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 have been eliminated as approved fuels for the Combination Boiler (PH-1). The Combination Boiler burns natural gas only at the present time, but is permitted to burn biomass (wood and wood/paper waste), and ETP biogas. No. 2 fuel oil and propane were eliminated as approved fuels for the existing Package Boiler (PH-2). The Package Boiler burns natural gas only. Natural gas-fired rental boilers are included in the permit to support process steam requirements in the event that the Combination Boiler or Package Boiler is not operating.

The facility is a Title V major source of carbon monoxide, nitrogen oxides, and HAP (HCl from the combustion of biomass/bio-based fuel). This source is located in an attainment area for all pollutants and is a PSD major-sized source. The facility is currently permitted under a minor NSR Permit issued on September 14, 2021 (as amended on March 30, 2022 for a facility name change, on July 18, 2022 to delay the re-commencement of biomass combustion in the Combination Boiler, and on September 13, 2022 to correct a boiler reference). The current NSR permit superseded the facility's State Operating Permit, issued on June 30, 2004 (and amended on May 12, 2006, December 1, 2008, May 17, 2011, August 24, 2012, December 10, 2013, December 17, 2015, and July 9, 2019) since the entire permitted facility underwent modification.

All underlying permit requirements are taken from the September 13, 2022 NSR Permit and from the facility’s July 12, 1996 VOC RACT agreement.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, was most recently conducted on May 29, 2024. All reports and other data required by permit conditions or regulations, which are submitted to the DEQ, have been evaluated for compliance. Based on these compliance evaluations, the facility was issued a Notice of Violation on July 17, 2024 alleging noncompliance with several applicable requirements of the NSR and Title V permits. These requirements included monitoring and visible emissions observations (NSR Conditions 8, 21, 25 and Title V Conditions 10, 22, 41, 72, 78, 79, 104), recordkeeping requirements (NSR Conditions 35, 36, 38, 59 and Title V Condition 10, 22, 73, 75, 80, 83, 84, 87, 102, 104, 105), excess emissions (NSR Conditions 9, 46, 48 and Title V Conditions 62, 67, 85, 145), notification and reporting requirements (NSR Condition 61a, Title V Conditions 114a, 132, 133). The facility submitted a response to DEQ on July 26, 2024 addressing these instances of alleged noncompliance. However, a consent order to resolve these issues is pending.

An updated compliance certification, certifying that the facility is currently in compliance with all applicable requirements, was submitted on November 12, 2024. Therefore, the draft permit does not include a compliance plan.

## 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

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
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
RFP-1	Fugitive	Recycle Fiber Plant Pulping and Screening	1,600 ons 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
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 <sub>2</sub> S, VOC	9/13/2022
			Flare Pilot (gas): 4 MMBtu/hr	Flare (Back-up)	ETP-1 Flare	H <sub>2</sub> S, 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 <u>combined</u> 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.

**EMISSIONS INVENTORY**

Emissions from the facility in 2023 are summarized in the following tables.

2023 Criteria Pollutant Emissions in Tons/Year

<b>Emissions</b>	<b>VOC</b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>	<b>CO<sub>2e</sub></b>
Total	4.77	19.79	1.20	8.65	4.26	40.90	Not reported

2023 Facility Hazardous Air Pollutant (HAP) Emissions

<b>Pollutant</b>	<b>2023 Hazardous Air Pollutant Emission in Tons/Yr</b>
Formaldehyde	0.04
n-Hexane	0.98

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

### **Limitations**

*Limitations for the Combination Boiler (ID #PH-1) and the Ash Silo (ID #10) are taken from the 9/13/2022 NSR permit and the VOC RACT agreement dated 7/12/1996. The Combination Boiler is also subject to MACT Subpart DDDDD (the MACT requirements are included in a separate section of the permit and Statement of Basis). The Combination Boiler was constructed before the applicability date of NSPS Subpart Db, and the modification permitted on 9/14/2021 (and amended on 7/18/2022 and 9/13/2022) does not meet the NSPS definition of modification at 40 CFR 60.14 (the changes to the boiler, such as adding natural gas guns, do not cause an increase in the emissions rate of any pollutant regulated by the Subpart), or the definition of reconstruction at 40 CFR 60.15. Several requirements for the Combination Boiler which were included in the September 3, 2019 Title V permit renewal are obsolete because of the elimination of coal and distillate oil as approved fuels. Please see “**STREAMLINED AND OBSOLETE REQUIREMENTS**” for a complete description of these changes.*

*The NSR permit was amended on 7/18/2022 to allow for a delay in re-commencing biomass fuel combustion as well as the implementation of requirements associated with biomass combustion emissions (PM emission control by multicyclone followed by electrostatic precipitator, ash silo requirements, continuous opacity monitoring, and CAM). The Combination Boiler currently fires natural gas only, with ETP biogas to be added as a fuel once the process is stabilized.*

### **Limitations from the 9/13/2022 NSR Permit**

Condition 1 of the 9/13/2022 NSR Permit (**Title V Condition 1**) requires PM and PM-10 emissions from the Combination Boiler to be controlled by a multi-cyclone followed by an electrostatic precipitator, once the boiler re-commences firing of any amount of biomass fuel. *This is a BACT requirement for the boiler when firing wood (or, as originally permitted, coal). The facility submitted a BACT analysis during the NSR permit process demonstrating that an ESP was not economically feasible when the Combination Boiler is burning natural gas alone or in combination with ETP biogas. The requirement to control PM with the multicyclone/ESP will apply immediately upon re-commencement of burning any amount of biomass fuel.*

Condition 2 of the 9/13/2022 NSR Permit (**Title V Condition 2**) requires PM and PM-10 emissions from the Combination Boiler ash silo be controlled by fabric filter. *This condition was not originally included in the June 7, 1977 permit for the boiler. The ash handling was “TBD”, but the engineering analysis stated that the control of fugitive emissions would meet BACT. “Ash handling” was previously included in the Title V permit as an insignificant activity. However, the ash silo emissions are actually controlled by a fabric filter, and potential uncontrolled emissions are greater than 5 tons PM/PM-10. The specific requirement to control emissions from the ash silo was formalized in the 9/14/2021 NSR permit (as amended 7/18/2022 and 9/13/2022).*

Condition 7 of the 9/13/2022 NSR Permit (**Title V Condition 3**) requires carbon monoxide emissions from the Combination Boiler to be controlled by the wood waste burner arrangement. *This BACT requirement was added to the permit in the 3/19/2001 minor NSR, which allowed the facility to increase throughput of wood to the Combination Boiler.*

Condition 27 of the 9/13/2022 NSR Permit (**Title V Condition 5**) lists the approved fuels for the Combination Boiler. *Coal, No. 2 Fuel Oil, and Propane have been deleted; ETP Biogas has been added.*

Condition 30 of the 9/13/2022 NSR Permit (**Title V Condition 6**) establishes throughput limits for each fuel.

Condition 39 of the 9/13/2022 NSR Permit (**Title V Condition 7**) lists fuel specifications for each approved fuel. *Note that the facility must keep records required by 40 CFR 60.2175(v) that demonstrate that woodwaste/paper waste/ETP residuals constitute non-hazardous secondary materials (Title V Condition 17.f).*

Condition 41 of the 9/13/2022 NSR Permit (**Title V Condition 8**) includes hourly and annual emission limits for the Combination Boiler. *The standard of 0.1 lb/MMBtu for PM and filterable PM-10 is taken from the 6/7/1977 NSR Permit. The hydrogen sulfide limits represent BACT with the addition of ETP biogas as a fuel in the 9/14/2021 NSR Permit (as amended 9/13/2022). Hourly and annual emissions limits for PM, PM-10, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC are substantially less than in the previous Title V permit renewal with the removal of coal, No. 2 fuel oil, and propane as authorized fuels. Because the facility will delay re-commencement of biomass fuel combustion, there are separate hourly limits for natural gas/ETP biogas only.*

Condition 50 of the 9/13/2022 NSR Permit (**Title V Condition 9.a**) includes a visible emissions limit of 10% opacity when the Combination Boiler is burning natural gas/ETP biogas only. *This is considered BACT for PM when burning natural gas/ETP biogas only.*

Upon re-commencement of combustion of biomass fuel, the Combination Boiler will again be subject to the previous limit of 20% opacity, except for one six-minute period in any one hour in which opacity cannot exceed 30% opacity (**Title V Condition 9.b**). *This is the visible emissions standard for New and Modified Sources taken from the Virginia Code (9VAC5-50-80).*

### **Limitations from the 7/12/1996 VOC RACT Agreement**

Condition E.3 of the 7/12/1996 RACT Agreement (**Title V Condition 4**) requires that VOC emissions be controlled by good combustion practices.

### **Monitoring/Recordkeeping**

*The CAM requirements of 40 CFR 64 apply to the Combination Boiler when firing biomass fuel, because it has the potential to emit PM-10 emissions above major source thresholds; it is subject*



*to PM-10 emission limits, and the emissions unit uses a control device (multi-cyclone followed by ESP) to achieve compliance with the emission limit.*

*The facility is exempt from CAM for PM emissions from the Combination Boiler, since MACT Subpart DDDDD, which includes a PM standard, is applicable to the Combination Boiler. MACT Subpart DDDDD was promulgated after November 15, 1990, PM emission standards are exempt from CAM according to 40 CFR 64.2(b)(1)(i).*

*NOx and CO emission limitations are not subject to CAM because no control device is used to comply with these limits.*

*There is no change to the CAM Plan (**Title V Conditions 153-161**) since the previous Title V Renewal. However, CAM will not apply prior to re-commencement of biomass fuel combustion, since there will be no control device used to achieve compliance with an emission limit.*

*The CAM plan does not currently include indicator ranges because Cascades Containerboard Packaging – Bear Island does not have any data to establish ranges at this time. The ESP associated with the boiler does have a monitoring device that measures the voltage and a COMS will be used on the Combination Boiler once the firing of biomass is resumed. In both instances, there is no correlation between this monitoring data and the PM-10 emission limit. A testing requirement (**Title V Condition 20**) has been incorporated into the permit in part to establish indicator ranges for the CAM plan. Because the facility is currently not burning biomass fuel in the Combination Boiler, the permittee is required to test 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 re-commencement of firing biomass fuel. The permittee is required to submit the proposed CAM monitoring data within 45 days after the performance test is completed.*

### **Monitoring/Recordkeeping Requirements from the 9/13/2022 NSR Permit**

**Title V Conditions 10-14 will be applicable upon re-commencement of firing any amount of biomass fuel:**

Condition 15 of the 9/13/2022 NSR Permit (**Title V Condition 10**) requires the permittee to record the primary & secondary current, and primary voltage, by field, across the ESP upon re-commencement of firing any amount of biomass fuel. *This monitoring will demonstrate compliance with the standards for PM/PM-10.*

Condition 16 of the 9/13/2022 NSR Permit (**Title V Condition 11**) requires a Continuous Opacity Monitoring System (COMS) on the Combination Boiler. *This Condition originated in the October 30, 1992 PSD Permit. The requirement has been retained even with the removal of coal as an approved fuel, since wood/wood waste also has the potential to produce opacity. The COMS will be required upon re-commencement of firing any amount of biomass fuel.*

Condition 17 of the 9/13/2022 NSR Permit (**Title V Condition 12**) states that the COMS records may be used as evidence of a violation of the emission standards.

Condition 23 of the 9/13/2022 NSR Permit (**Title V Condition 13**) requires the Ash Silo to be equipped with devices to measure the differential pressure across the ash silo fabric filter. *The devices are required to be operating when the ash silo is being loaded, which will not occur until the Combination Boiler is burning biomass fuel.*

Condition 24 of the 9/13/2022 NSR Permit (**Title V Condition 14**) requires the permittee to observe the current and secondary voltage monitoring devices for the ESP at least once per shift. *This requirement will not be triggered until the ESP is operating – when the Combination Boiler is burning biomass fuel.*

Condition 59 of the 9/13/2022 NSR Permit (**Title V Condition 17**) includes recordkeeping requirements corresponding to items d, e, u, v, z, and bb of the underlying NSR permit, which consists of records of daily consumption of wood waste and paper waste/ETP residuals fired in the Combination Boiler (there is a daily throughput limit), monthly fuel records, COMS records, monitoring records, and the records required by 40 CFR 60.2175(v) that demonstrate that woodwaste/paper waste/ETP residuals constitute non-hazardous secondary materials. The facility is also required to keep copies of the results for all stack tests, visible emissions evaluations, and performance evaluations.

### **Other Monitoring Requirements**

***Title V Conditions 17 & 18 will be applicable upon re-commencement of firing any amount of biomass fuel:***

**Title V Condition 17** requires the permittee to observe the differential pressure across the ash silo at least once per shift when it is operating. *This Condition applies when the Ash Silo is operating (i.e., upon re-commencement of firing any amount of biomass fuel), and was added to meet Part 70 periodic monitoring requirements.*

**Title V Condition 18** requires the facility to monitor, operate, calibrate and maintain the multi-cyclone/electrostatic precipitator controlling PM/PM-10 emissions according to the CAM Plan attached to the permit upon re-commencement of biomass fuel combustion. CAM requirements are included in a dedicated section of the permit, **Title V Conditions 153-161**.

### **Testing**

*The Title V permit includes initial performance testing for the Combination Boiler, taken from the underlying permit dated 9/13/2022 and to establish CAM monitoring parameters, as well as ongoing testing to be conducted at least once every five years as part of the Part 70 periodic monitoring plan. Since the previous Title V permit was issued, the Combination Boiler was modified to eliminate coal, fuel oil, and propane as fuel, as well as to install natural gas guns to bring the maximum heat input capacity to 243 MMBtu/hr while burning natural gas only.*

### **Testing Requirements from the 9/13/2022 NSR Permit**

Conditions 55 of the 9/13/2022 NSR Permit (**Title V Condition 18**) requires initial performance tests for CO and NO<sub>x</sub> when firing biomass and natural gas (worst-case fuel combination for these pollutants). These tests must be conducted within 6 months of re-commencement of firing biomass fuel.

Condition 56 of the 9/13/2022 NSR Permit (**Title V Condition 19**) requires initial performance testing for hydrogen sulfide while burning natural gas and ETP biogas. This test must be conducted within 6 months of commencement of firing ETP biogas in the Combination Boiler.

### **Other Testing Requirements**

**Title V Condition 20** requires testing for PM-10 to establish parameters for CAM. *This testing requirement will be triggered with the combustion of biomass fuel in the Combination Boiler.*

**Title V Condition 24** requires performance testing for NO<sub>x</sub>, CO, and VOC to determine compliance with emission limits at least once every 5 years. *This testing was added to meet periodic monitoring requirements for the emission limitations listed in **Title V Condition 8**.*

### **Notification/Reporting**

*The 9/13/2022 NSR Permit does not contain specific reporting requirements for the Combination Boiler. Two initial notification requirements were added to the underlying NSR permit to accommodate delays in commencement of burning ETP biogas (until the gas is considered stable and will not damage the boiler) and re-commencement of burning biomass (originally estimated to be 1-2 years after facility start-up).*

Condition 62 of the 9/13/2022 NSR Permit (**Title V Condition 22**) requires the facility to notify DEQ when the facility re-commences combustion of biomass fuel in the Combination Boiler, along with opacity monitoring system performance evaluation and required stack testing for NO<sub>x</sub> and CO.

Condition 63 of the 9/13/2022 NSR Permit (**Title V Condition 23**) requires the facility to notify DEQ when the facility commences combustion of ETP biogas in the Combination Boiler, as well as stack testing for hydrogen sulfide.

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

### **Limitations**

*Limitations for the Package Boiler (PH-2) are taken from the 9/13/2022 NSR permit and the VOC RACT agreement dated 7/12/1996. The Package Boiler is also subject to the boiler tune-up requirements of MACT Subpart DDDDD (the MACT requirements are included in a separate section of the permit and Statement of Basis). Originally permitted in 1992, the Package Boiler is subject to NSPS Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units). Several requirements for the Package Boiler which were included in the September 3, 2019 Title V permit renewal are obsolete because of the elimination of distillate oil as an approved fuel. Please see “**STREAMLINED AND OBSOLETE REQUIREMENTS**” for a complete description of these changes.*

### **Limitations from the 9/13/2022 NSR Permit**

Condition 3 of the 9/13/2022 NSR Permit (**Title V Condition 24**) requires that PM/PM-10 emissions from the Package Boiler be controlled by the use of clean-burning fuel (natural gas).

Condition 5 of the 9/13/2022 NSR Permit (**Title V Condition 25**) requires that NO<sub>x</sub> emissions from the Package Boiler be controlled by the use of low-NO<sub>x</sub> burners. *This is a BACT requirement. The natural gas throughput limit was increased in the 9/14/2021 NSR Permit so that the boiler can operate for 8760 hours per year. Previously, the Package Boiler was limited to 2880 hours of operation per year.*

Condition 8 of the 9/13/2022 NSR Permit (**Title V Condition 26**) requires that CO and VOC emissions from the Package Boiler be controlled by good combustion practices, operator training, and proper emission unit design, construction, and maintenance. *The requirement that “VOC emissions from the...Package Boiler...shall be controlled by the use of good combustion practices” is also Condition E.3 of the facility’s 7/12/1996 VOC RACT Consent Order.*

Condition 28 of the 9/13/2022 NSR Permit (**Title V Condition 27**) lists natural gas as the approved fuel for the Package Boiler (PH-2). *No. 2 fuel oil has been eliminated as an approved fuel.*

Condition 31 of the 9/13/2022 NSR Permit (**Title V Condition 28**) limits natural gas throughput to the Package Boiler. *This limit corresponds to 8760 hours per year.*

Condition 40 of the 9/13/2022 NSR Permit (**Title V Condition 29**) incorporates NSPS Subpart Db by reference.

Condition 42 of the 9/13/2022 NSR Permit (**Title V Condition 30**) establishes emissions limitations for the Package Boiler. *The NO<sub>x</sub> limitation is BACT based on the use of low-NO<sub>x</sub>*

*burners. The hourly CO limitation was established as BACT in the 10/30/1992 PSD Permit (note that this hourly limit was reduced slightly from 5.1 lb/hr to 4.9 lb/hr when the boiler was derated from 255 MMBtu/hr to 243.8 MMBtu/hr in 2011).*

Condition 51 of the 9/13/2022 NSR Permit (**Title V Condition 31**) limits the Package Boiler to 10% opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity. *This condition applies at all times including periods of startup, shutdown, and malfunction. This is a BACT limitation.*

### **Monitoring/Recordkeeping**

*Because the Package Boiler does not have the potential to emit more than 100 tons per year of any regulated air pollutant, it is not subject to CAM. Additionally, the Package Boiler is subject to NSPS Subpart Db and MACT Subpart DDDDD, which were promulgated after November 15, 1990. Monitoring requirements are taken from the 9/13/2022 NSR permit and from Subpart Db. Because a COMS is no longer required for the Package Boiler since it is only authorized to burn natural gas, a Part 70 periodic monitoring requirement has been added for monthly visible emissions observations.*

*Continuing periodic monitoring of NO<sub>x</sub>, CO, and VOC emissions from the exhaust of the Package Boiler (PH-2) will be accomplished by a performance test every five years. For sulfur dioxide, the facility will burn only natural gas & will submit fuel quality reports in accordance with the NSPS. Finally, because the boiler burns natural gas only, PM emissions are low, and there are no applicable PM standards either in NSPS Subpart Db or Boiler MACT. The permit will contain periodic monitoring requirements for opacity, which indirectly monitors PM emissions. No additional periodic monitoring has been added for PM.*

*General Title V retention of records is 5 years. Some of the records required of the applicable NSPS have 2-year retention timeframes (**40 CFR 60.49b(o)**). For the purpose of Title V, all records relevant to this permit and facility, including those taken from NSPS Subpart Db, must be maintained for 5 years.*

### **Monitoring/Recordkeeping from the 9/13/2022 NSR Permit**

Condition 18 of the 9/13/2022 Permit (**Title V Condition 32**) requires the permittee to monitor NO<sub>x</sub> emissions from the Package Boiler (PH-2) as specified in an approved NO<sub>x</sub> monitoring plan. This plan is also required by the NSPS, as detailed below.

### **Monitoring/Recordkeeping Requirements from NSPS Subpart Db**

**40 CFR 60.48b(g)(2):** The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall

monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan submitted pursuant to §60.49b(c). *The Package Boiler Operating Plan for NOx predictions is required by Title V Condition 32.*

**40 CFR 60.49b(c):** The owner or operator of each affected facility subject to the NOx standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records maintained in §60.49b(g). The plan shall:

- (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lbs/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<sub>2</sub> level).
- (2) Include the data and information that the owner or operator used to identify the relationship between NOx emission rates and those operating conditions; and
- (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator 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).

*The requirements of the plan are also incorporated into Title V Condition 32. Recordkeeping required by 40 CFR 60.49b(c)(3) is included in Title V Condition 34.c.*

**40 CFR 60.49b(d)(1):** The owner or operator of an affected facility shall record and maintain records of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. *Daily fuel throughput records are required by Title V Condition 34.a. Records of annual capacity factor are required by Title V Condition 34.b.*

- 40 CFR 60.49b(g):** Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO<sub>x</sub> standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date;
  - (2) The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBtu heat input) measured or predicted;
  - (3) The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/MMBtu heat input)
  - (4) Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

*These records are required by **Title V Condition 34.d.***

- 40 CFR 60.49b(r)(1):** The owner or operator of an affected facility who elects to demonstrate that the affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) and §60.42b(k) shall obtain and maintain at the affected facility fuel receipts (such as a valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the...gaseous fuel meets the definition of natural gas that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period.

*Fuel quality records are required by **Title V Condition 34.e.***

### **Recordkeeping Requirements from the 9/13/2022 NSR Permit**

Condition 57.f and bb (**Title V Condition 34.a and f**) require records of daily, monthly, and annual throughput, as well as the results of all stack tests, visible emissions evaluations, and performance evaluations. *Records of visible emissions observations have been added, since the Title V permit requires periodic monitoring for opacity.*

**Other Monitoring/Recordkeeping Requirements:**

*Periodic monitoring was added to ensure compliance with the 10% opacity limitation in **Title V Condition 30**. Because the boiler is natural gas-fired only, there should be no visible emissions during normal operation.*

**Title V Condition 33** requires that the Package Boiler stack be observed once per month for the presence of visible emissions. The presence of *any* visible emissions shall be followed up by a Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible. Records shall be kept of the observations and any corrective actions taken.

**Testing**

*Because the Package Boiler was modified to burn only natural gas for 8760 hours per year (it was previously limited to 2880 hours of operation per year), the change was subject to BACT for NOx. Low NOx burners were installed to meet the BACT requirement. Compliance with NOx, CO, and VOC emission limits will be determined by stack test once each permit term (five years) as a component of periodic monitoring.*

**Testing Requirements**

**Title V Condition 35** requires the permittee to conduct a performance test for NOx, CO, and VOC emissions from the Package Boiler (PH-2) every five years to demonstrate compliance with the emission limits in **Title V Condition 30**. *This testing is required as a component of periodic monitoring for these pollutants.*

**Title V Condition 36** specifies that compliance with the NOx emission standard under 40 CFR 60.44b shall be determined through performance testing in accordance with **40 CFR 60.46b(c)**.

**Reporting**

*The Title V permit General Conditions include semi-annual compliance reporting, excess emission reporting, and the occurrence of any malfunctions or permit deviations. In addition to these reporting requirements, the following reporting requirements are also required by the Title V permit:*

**Reporting Requirements from NSPS Subpart Db**

- 40 CFR 60.49b(h)(2):** The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (h)(2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
- (2) Any affected facility that is subject to the NOx standard of §60.44b, and that combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less  
*Excess emission reports are required by **Title V Condition 37**.*



- 40 CFR 60.49b(v):** The owner or operator of an affected facility may submit electronic quarterly reports for...NOx...in lieu of submitting the written reports required under [§60.49b(h)]. The format of each quarterly electronic report shall be coordinated with the permitting authority. *This requirement is cited for Title V Condition 37.*
- 40 CFR 60.49b(w):** The reporting period for the reports under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. *This section is cited for the fuel quality reports to be submitted semiannually in accordance with 40 CFR 60.49b(r)(1) and is included in Title V Condition 39.*

### **Other Reporting Requirements**

**Title V Condition 38** requires the facility to report any exceedance of the opacity standard as determined by visible emissions evaluations required by **Title V Condition 33**.

### **Fuel Burning Equipment Requirements – Rental Boilers – (Emission Unit ID# RB-1A, RB-1B, RB-2A, RB-2B)**

*In order to ensure a continuous supply of steam to the manufacturing facility, natural gas-fired Rental Boilers were added to the 9/14/2021 NSR Permit (as amended 9/13/2022). These boilers will be rated at  $\leq 120$  MMBtu/hr each and can be operated only if either the Combination Boiler (PH-1) or Package Boiler (PH-2) are out of service. Restrictions have been included in the permit to ensure that the boilers meet the definition of “Temporary boiler” in NSPS Subpart Db, so the requirements of Subpart Db do not apply. Additionally, the boilers are required to meet the same emissions limitations as the boilers they replace, and no rental boiler can be operated if both the Combination Boiler and Package Boiler are operating simultaneously. Boilers RB-1A and RB-1B would be used to replace the Combination Boiler (PH-1), and Boilers RB-2A and RB-2B would be used to replace the Package Boiler (PH-2).*

### **Limitations**

Condition 4 of the 9/13/2022 NSR Permit (**Title V Condition 40**) requires that PM/PM-10 emissions be limited by the use of clean-burning fuel.

Condition 6 of the 9/13/2022 NSR Permit (**Title V Condition 41**) requires that the rental boilers (RB-2A, RB-2B) used to replace the Package Boiler (PH-2) during an outage be equipped with low-NOx burners and meet the same NOx emission standard as the Package Boiler. *The NOx emission standard of 0.15 lb/MMBtu is required for the rental boilers (RB-1A, RB-1B) replacing the Combination Boiler (PH-1) in Title V Condition 47, but there is no requirement for a particular NOx control technology, since NOx emissions from natural gas combustion only will*

*be less than the allowable NO<sub>x</sub> emissions from the Combination Boiler (which may combust natural gas, wood/woodwaste, or ETP biogas).*

Condition 8 of the 9/13/2022 NSR Permit (**Title V Condition 42**) requires that CO and VOC emissions from the Rental Boilers be controlled by good combustion practices, operator training, and proper design, construction, and maintenance. *This is a BACT requirement.*

Condition 26 of the 9/13/2022 NSR Permit (**Title V Condition 43**) includes restrictions on the Rental Boilers such that they meet the definition of Rental Boiler. They cannot operate more than 6 months per year, must meet permitted emission standards, and in no event can any rental boiler be operated when 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 rental boilers are modified (for example, the requirements are modified such that RB-2A and RB-2B are not required to use low-NO<sub>x</sub> burners), then the corresponding boiler (PH-1 or PH-2) is also considered to be modified.*

Condition 28 of the 9/13/2022 NSR Permit (**Title V Condition 44**) states that the approved fuel for the Rental Boilers is natural gas.

Condition 32 of the 9/13/2022 NSR Permit (**Title V Condition 45**) sets forth combined throughput limits for the Rental Boilers (RB-1A, RB-1B) that would be used to replace the Combination Boiler.

Condition 33 of the 9/13/2022 NSR Permit (**Title V Condition 46**) sets forth combined throughput limits for the Rental Boilers (RB-2A, RB-2B) that would be used to replace the Package Boiler. *Note that this throughput is half of the throughput limit for RB-1A, RB-1B. This is because the Package Boiler was originally permitted with a PSD BACT standard for CO that is difficult to achieve with a rental boiler. The lower limit ensures that combined CO emissions from RB-2A, RB-2B and the Package Boiler do not exceed the CO limitation for the Package Boiler alone in any 12-month rolling period.*

Condition 43 of the 9/13/2022 NSR Permit (**Title V Condition 47**) limits emissions from the Rental Boilers that would be used to replace the steam output of the Combination Boiler (PH-1). *The NO<sub>x</sub> emission standard corresponds to the worst-case hourly emissions from the Combination Boiler if it were operating at maximum rated capacity.*

Condition 44 of the 9/13/2022 NSR Permit (**Title V Condition 48**) limits emissions from the Rental Boilers that would be used to replace the steam output of the Package Boiler (PH-2).

Condition 52 of the 9/13/2022 NSR Permit (**Title V Condition 49**) limits visible emissions from the Rental Boilers to 10% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity. *This requirement is identical to the visible emissions limitation for the Package Boiler (which burns only natural gas). However, the exception for startup, shutdown and malfunction is granted for the Rental Boilers since they are temporary.*

## **Monitoring**

*Because of the Rental Boilers' short-term, temporary use at the site, responsibility for testing is to be assumed by the Rental Boiler vendor, with emissions standards certified. The permittee will be required to carry out periodic monitoring for visible emissions while the units are on site.*

**Title V Permit Condition 50** includes periodic monitoring of visible emissions to be carried out monthly while the Rental Boiler is on-site. Like the Package Boiler, any visible emissions noted will trigger a Method 9 VEE unless timely corrective action is taken so that the Rental Boiler resumes operation without visible emissions. All observations, VEE results, and corrective actions taken must be recorded.

## **Recordkeeping**

### **Recordkeeping Requirements from the 9/13/2022 NSR Permit**

Condition 59.a, b, c, g of the 9/13/2022 NSR Permit (**Title V Condition 51**) requires the permittee to keep records of fuel throughput, hours of operation, and the dates that each Rental Boiler was brought on site, operated, and removed from the site. The permittee must keep records of the certifications that the boilers meet the applicable emission standards in the permit.

### **Other Recordkeeping Requirement**

**Title V Condition 51.e** was added for records of visible emissions observations, VEEs, and any corrective action taken as a result of **Title V Condition 50**.

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

*Title V Conditions 52-57 will apply to both the Combination Boiler (PH-1) and Package Boiler (PH-2), which are operating in the existing Gas 1 subcategory. Additional requirements will apply to the Combination Boiler (PH-1) if it transitions to the “existing hybrid suspension grate boiler designed to burn wet biomass/bio-based solids” subcategory. These are included in Title V Conditions 58-87 and are described below.*

**Condition 52** incorporates MACT Subparts A and DDDDD by reference for the boilers.

**Condition 53** specifies that the applicable General Provisions are found in Table 10 to Subpart DDDDD of Part 63.

**Condition 54** requires the permittee to operate and maintain the boilers at all times in a manner consistent with safety and good air pollution control requirements for minimizing emissions (**40 CFR 63.7500(a)(3)**)

**Condition 55** requires the permittee to conduct an annual tune-up of the boilers in accordance with **40 CFR 63.7540(a)(10)** and Table 3 to Subpart DDDDD of Part 63. Subsequent tune-ups must be conducted no later than 13 months from the previous tune-up.

**Condition 56** requires the facility to keep a copy of each notification and report submitted to comply with MACT Subpart DDDDD (**40 CFR 63.7555(a)**) and records of the annual tune-ups. **40 CFR 63.7560** specifies the manner in which the records must be kept (2 years on-site or accessible from the site, with the option to keep the records off-site for the remaining 3 years).

**Condition 57** requires the permittee to submit reports according to Table 9 to Subpart DDDDD of Part 63.

*Once the permittee re-commences burning biomass fuel in the Combination Boiler, it will be operated in the “existing hybrid suspension grate boiler designed to burn wet biomass/bio-based solids” subcategory and will have many more requirements under the Boiler MACT. These requirements include emission standards for PM/TSM, CO, HCl, and mercury. Since the previous Title V modification was issued in 2019, the MACT Subpart DDDDD standards for the Combination Boiler (when operating in the “existing hybrid suspension grate boiler designed to burn wet biomass/bio-based solids” subcategory) in Table 1 to Subpart DDDDD have been updated. These standards have become more stringent for PM/TSM, HCl, and mercury. Until October 6, 2025, the facility may comply with the Alternative Emission Limits for New or Reconstructed Boilers from Table 14 to the Subpart.*

**Title V Conditions 58-87** outline the additional requirements that will be triggered for the Combination Boiler (PH-1) if it transitions to the “existing hybrid suspension grate boiler designed to burn wet biomass/bio-based fuel” subcategory in the future - emission limitations, work practice standards, initial and continuous compliance requirements, as well as notification, recordkeeping, and reporting requirements from MACT Subpart DDDDD.

<b>Requirement</b>	<b>Citation (40 CFR ____)</b>
Emission Limitations <b>Title V Conditions #61</b>	63.7500(a) and (f); Table 15 to Subpart DDDDD of Part 63 (items 1 and 13 for existing hybrid suspension grate boiler designed to burn wet biomass/bio-based fuel) – prior to October 6, 2025
Emission Limitations <b>Title V Conditions #62</b>	63.7500(a) and (f); Table 2 to Subpart DDDDD of Part 63 (items 1 and 13 for existing hybrid suspension grate boiler designed to burn wet biomass/bio-based fuel) – as of October 6, 2025
Work Practice Standards <b>Title V Condition #61, 62</b>	63.7500(a)(3); Items 5 and 6 of Table 3 to Subpart DDDDD of Part 63
Operating Limits <b>Title V Condition #63, 81</b>	63.7500(a)(2); 63.7530; Table 7 to Subpart DDDDD of Part 63
General Compliance Requirements <b>Title V Conditions #64, 65, 66</b>	63.7505(c), (d), and (e)
Initial Compliance Requirements <b>Title V Conditions #62, 67, 68, 69, 70, 71, 72</b>	63.7510(a), (b), (c), (d), (e), (f), and (k)

Requirement	Citation (40 CFR )
Testing, Fuel Analyses, and Continuous Compliance Requirements <b>Title V Conditions #61, 62, 69, 73, 74, 75, 76, 77, 78, 82</b>	63.7515(a), (b), (c), (f); 63.7520; 63.7521(a) and (b); 63.7525(a), (c); 63.7535(a), (b), (c), and (d); 63.7540(a) and(d); Table 8 to Subpart DDDDD of Part 63
Notifications <b>Title V Condition #87</b>	63.7545(a), (d), (e), and (h)
Reports <b>Title V Conditions #82, 83, 84, 85, 86</b>	63.7515(f); 63.7540(b); 63.7550 (a), (b), (c), (d), (e), and (h); Table 9 to Subpart DDDDD of Part 63
Records <b>Title V Condition #79, 80</b>	63.7555(a), (b), (c), and (d); 63.7560(a), (b), and (c)

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

**Title V Conditions 88-91** include requirements for PH-1 when the boiler is burning residuals from the Effluent Treatment Plant. The residuals are primarily residue from the recycle fiber plant. These requirements include sampling, monitoring, and the mercury emission limitation.

### Process Equipment Requirements – Effluent Treatment Plant Anaerobic Reactor – (Emission Unit ID# ETP-1)

#### Limitations

Condition 9 of the 9/13/2022 NSR Permit (**Title V Condition 92**) requires that Hydrogen Sulfide emissions from the ETP Anaerobic Reactor (ETP-1) be controlled by a scrubber with an outlet concentration of 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). *This is a BACT determination. Normal operation, once ETP gas is introduced into the Combination Boiler, will be to combust the scrubbed biogas in the Combination Boiler, with the flare used as backup.*

Condition 11 of the 9/13/2022 NSR Permit (**Title V Condition 93**) incorporates the minimum net heating value standard from 40 CFR 60.18 for the ETP-1 Flare. *This minimum net heating value standard is taken from 40 CFR 60.18(b).*

Condition 12 of the 9/13/2022 NSR Permit (**Title V Condition 94**) incorporates the flare tip exit velocity requirement from 40 CFR 60.18 for the ETP-1 Flare. *The flare tip velocity and calculation method are taken from 40 CFR 60.18(c)(4)(iii) and 40 CFR 60.18(f)(5), respectively.*

Condition 29 of the 9/13/2022 NSR Permit (**Title V Condition 95**) specifies approved pilot fuels for the ETP-1 Flare. *The pilot has a maximum heat input capacity of 5 MMBtu/hr.*

Condition 37 of the 9/13/2022 NSR Permit (**Title V Condition 96**) limits the throughput of VOC in the treatment chemicals to the Effluent Treatment Plant for treatment of ETP residuals.

Condition 46 of the 9/13/2022 NSR Permit (**Title V Condition 97**) limits emissions from the ETP-1 Flare, including pilot gas combustion. *These calculated emissions assume a 98% control efficiency for a flare that meets 60.18 work practice requirements. Note that emissions from ETP-1 biogas are also included in the emission limits for the Combination Boiler (PH-2).*

Condition 49 of the 9/13/2022 NSR Permit (**Title V Condition 98**) limits VOC emissions from the use of treatment chemicals used to treat ETP residuals. *All VOC added is assumed to be emitted.*

Condition 53 of the 9/13/2022 NSR Permit (**Title V Condition 99**) requires that the ETP-1 Flare 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 standard is taken from 40 CFR 60.18(c)(1).*

### **Monitoring**

*The Anaerobic Reactor (ETP-1) has the potential to emit more than 100 tons per year of hydrogen sulfide if the scrubber is considered a control device. However, the hydrogen sulfide concentration and ETP biogas flow rate at the outlet of the scrubber are continuously monitored (**Title V Conditions 101 & 102**). Therefore, the CAM requirements of 40 CFR 64 do not apply.*

Condition 19 of the 9/13/2022 NSR Permit (**Title V Condition 100**) requires that the ETP-1 Flare pilot flame be equipped with a heat-sensing device to indicate the continuous presence of a flame. The heat sensing device shall be inspected annually and the results of the inspection recorded.

Condition 20 of the 9/13/2022 NSR Permit (**Title V Condition 101**) requires that the Anaerobic Reactor (ETP-1) scrubber outlet be equipped with a device to continuously measure the flow rate of ETP biogas. *This monitoring is required to determine compliance with annual ETP biogas throughput limits.*

Condition 21 of the 9/13/2022 NSR Permit (**Title V Condition 102**) requires the Anaerobic Reactor (ETP-1) scrubber outlet be equipped with a device to continuously measure the hydrogen sulfide concentration of the ETP biogas. *This monitoring is required to determine compliance with the 250 ppmv limit on hydrogen sulfide from the scrubber outlet.*

### **Recordkeeping**

Condition 59.h, n, p, q, r, s, t of the 9/13/2022 NSR Permit (**Title V Condition 103**) includes requirements for maintaining records of all monitoring required for to demonstrate compliance with the limitations on the ETP Anaerobic Reactor (ETP-1) and the ETP-1 Flare. These records

include monthly and annual throughput of ETP biogas from the outlet of the scrubber to the ETP-1 Flare and Combination Boiler, annual throughput of VOC to the ETP for the treatment of ETP residuals, records of hydrogen sulfide concentration at the ETP-1 scrubber outlet, pilot flame records, dates and length of time that the ETP biogas is vented to the ETP-1 Flare, the number of times and length of each occurrence where visible emissions are observed from the ETP-1 Flare, and 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 demonstrate compliance with **Title V Conditions 93 and 94**.

## **Process Equipment Requirements – Starch Storage Silo (Emission Unit ID# SSI-1)**

### **Limitations**

Condition 10 of the 9/13/2022 NSR Permit (**Title V Condition 104**) requires that PM/PM-10 emissions from the Starch Silo be controlled by a fabric filter. *This is a BACT limitation.*

Condition 38 of the 9/13/2022 NSR Permit (**Title V Condition 105**) limits the throughput of starch to the Starch Silo.

Condition 54 of the 9/13/2022 NSR Permit (**Title V Condition 106**) limits visible emissions from the Starch Silo to 5% opacity. *This is a BACT limitation.*

### **Monitoring/Recordkeeping**

*Periodic monitoring was added to ensure compliance with the 5% opacity limitation in **Title V Condition 106**. Because the Starch Silo is only operated intermittently, a visible emissions observation is required once per loading of starch, which will not necessarily occur monthly.*

*The PM/PM-10 emissions from the Starch Silo are not subject to CAM, because there is no associated emission standard (actual emissions are less than 0.5 tons/yr and therefore no emissions limits were included in the underlying permit). Uncontrolled emissions were calculated to be 19.7 tons per year in 2021. Also, these emissions are controlled by a bin vent filter, which is a passive control device.*

### **Monitoring/Recordkeeping Requirements from the 9/13/2022 NSR Permit**

Condition 22 of the 9/13/2022 NSR Permit (**Title V Condition 107**) requires that the Starch Silo fabric filter be equipped with devices to continuously measure differential pressure across the fabric filter.

Condition 25 of the 9/13/2022 NSR Permit (**Title V Condition 108**) requires that to ensure good performance, the device required by **Title V Condition 107** be observed not less than once per loading of starch into the Starch Silo.

Condition 59.i and y of the 9/13/2022 NSR Permit (**Title V Condition 110.a and b**) require records of starch throughput and fabric filter differential pressure monitoring records.

### **Other Monitoring/Recordkeeping Requirements**

**Title V Condition 109** requires that the Starch Silo stack be observed once per loading of starch for the presence of visible emissions. The presence of *any* visible emissions shall be followed up by a Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible. Records shall be kept of the observations and any corrective actions taken (**Title V Condition 110.c**).

## **Process Equipment Requirements - Paper Machine (Emission Unit ID# PM-1)**

### **Limitations**

**Title V Conditions 111 & 112** require that emissions from operation and cleaning of the Paper Machine be controlled by good operating and cleaning practices. *The basis of these conditions is 9VAC5-50-20 E, which states, “At all times...owners shall, to the extent practicable, maintain and operate any affected facility...in a manner consistent with air pollutant control practices for minimizing emissions.”*

Conditions 35 & 36 of the 9/13/2022 NSR Permit (**Title V Conditions 113 & 114**) limit VOC throughput to the paper machine and for cleaning purposes. *It is assumed that all VOC used on the paper machine and for cleaning purposes is emitted.*

Condition 48 of the 9/13/2022 NSR Permit (**Title V Condition 115**) limits the combined VOC emissions from paper machine and felt cleaning operations. *It is assumed that all VOC used in paper machine and felt cleaning operations is emitted.*

### **Monitoring/Recordkeeping**

Condition 59.j, l, m, w and x of the 9/13/2022 NSR Permit (**Title V Permit Condition 116.a through e**) require the facility to keep records of VOC throughput to the paper machine (PM-1) and for cleaning purposes, MSDS for all solutions added in the papermaking and cleaning processes, and the production of recycled containerboard (in bone dry tons). *Note that the underlying permit does not contain an annual limit on recycled containerboard production (in bone dry tons). The maximum production capacity is included in the equipment table, which does not represent an enforceable requirement. The requirement to keep records of recycled containerboard production is included in the underlying permit, but the phrase “compliance for*



*the consecutive 12-month period” has been removed in the Title V permit, since there is currently no limit on the production of recycled containerboard. VOC emissions are limited by the throughput of chemicals, and 100% of the VOC throughput is conservatively assumed to be emitted.*

## **Process Equipment Requirements - Recycle Fiber Plant – (Emission Unit ID#RFP-1, TMP-1C)**

### **Limitations**

#### **Limitations from the 9/13/2022 NSR Permit**

Condition 34 of the 9/13/2022 NSR Permit (**Title V Condition 118**) limits VOC throughput to the Recycle Fiber Plant pulping and screening equipment (RFP-1 and TMP-1C).

Condition 47 of the 9/13/2022 NSR Permit (**Title V Condition 119**) limits VOC emissions from the Recycle Fiber Plant pulping and screening equipment (RFP-1 and TMP-1C). *100% of the VOC throughput is conservatively estimated to be emitted.*

#### **Other Limitations**

**Title V Condition 117** requires that emissions from the operation of the Recycle Fiber Plant be controlled by good operating practices. *The basis of this condition is 9VAC5-50-20 E, which states, “At all times...owners shall, to the extent practicable, maintain and operate any affected facility...in a manner consistent with air pollutant control practices for minimizing emissions.”*

### **Monitoring/Recordkeeping**

Condition 59.k, w and x of the 9/13/2022 NSR Permit (**Title V Permit Condition 120.a, b & c**) require the facility to keep records of VOC throughput to the Recycle Fiber Plant pulping & screening equipment and MSDS for all VOC-containing material used in the Recycle Fiber Plant, as well as a monthly and annual material balance necessary to demonstrate compliance with VOC emission limits.

## **Process Equipment Requirements - Non-Halogenated Cold Solvent Degreasers – (Emission Unit ID# MI-I1)**

*The parts washers are subject to the following requirements from the Virginia Code:*

- *9VAC5 Chapter 40 Article 24 (Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents, Rule 4-24).*
- *9VAC5-40-3280 Standard for volatile organic compounds*

- 9VAC5-40-3290 *Control Technology Guidelines*
- 9VAC5-50-50 *Notifications, Recordkeeping, Reporting*

## Limitations

**Title V Condition 121** incorporates 9VAC5 Chapter 40, Article 24 (Rule 4-24) of the Virginia Code (Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents) by reference for the Parts Washers.

**Title V Condition 122** requires the parts washers to be 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 (9VAC5-40-3280 C)

**Title V Condition 123** requires the facility to meet the emission standard in **Title V Condition 121** (85% VOC reduction by weight) by meeting the control and operating requirements of 9VAC5-40-3290 C & D. *The control and operating requirements of 9VAC5-40-3290 C are included in Title V Conditions 123 & 124.*

**Title V Conditions 124** includes the cold cleaning control requirements of the VOC control technology guidelines referenced in Rule 4-24 (9VAC5-40-3290.C.1)

**Title V Condition 125** includes the cold cleaning operating requirements of the VOC control technology guidelines referenced in Rule 4-24 (9VAC5-40-3290 C.2)

**Title V Condition 126** specifies the methods by which the waste solvent from the cold cleaning units may be disposed (9VAC5-40-3290 D)

## Monitoring/Recordkeeping

**Title V Condition 127** includes a requirement to conduct monthly cleaning machine inspections to ensure that all operational requirements are being met. This can be decreased to quarterly at the request of the permittee. *This condition was added to meet Part 70 periodic monitoring requirements.*

**Title V Condition 128** requires the facility to keep records to demonstrate compliance with the limitations in Title V Conditions 122-126. *This condition was added by the authority of 9VAC5-50-50 F and H.*

## Reporting

**Title V Condition 129** requires the facility to report all instances of non-compliance found during cleaning machine area inspections semi-annually. *This condition was added by the authority of 9VAC5-50-50 H.*

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

### **Limitations**

*There are no underlying applicable requirements for the industrial landfill. Generally, emissions would be due to fugitive dust, with control/work practice requirements included in Facility Wide Condition 144.*

**Title V Condition 130** requires that emissions from the operation of the industrial landfill be controlled by good operating practices. *The basis of this condition is 9VAC5-50-20 E, which states, “At all times...owners shall, to the extent practicable, maintain and operate any affected facility...in a manner consistent with air pollutant control practices for minimizing emissions.”*

## **Fuel Burning Equipment Requirements - Emergency Diesel Fire Pump Engine – (Emission Unit ID# MI-I5)**

*The emergency diesel fire pump engine (270 HP) is not subject to NSR permit requirements. It is subject to the visible emissions standard from 9VAC5-50-80 of the Virginia Code.*

### **Limitation**

**Title V Condition 131** incorporates the visible emission standard for New and Modified Sources. The standard is 20 percent opacity with no more than one six-minute period in any one hour of not more than 30 percent opacity.

### **Monitoring/Recordkeeping**

**Title V Condition 132** requires a monthly visible emissions observation of the emergency diesel fire pump engine. If any visible emissions are noted, the permittee shall take timely corrective action or perform a Method 9 VEE for six minutes. If the opacity is more than 20% opacity, the permittee shall take timely corrective action such that the engine resumes operation with visible emissions of 20% or less. The permittee shall maintain a log of all observations and corrective actions taken. *This condition was added to meet Part 70 monitoring requirements.*

**Title V Condition 133** requires the permittee to keep records of visible emissions observations, VEE results, and any corrective actions taken.

## **MACT Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Emission Unit ID#MI-15)**

*The emergency diesel fire pump is subject to the requirements of MACT Subpart ZZZZ. Because the emergency diesel fire pump engine (270 HP) is considered an existing emergency compression ignition RICE with a capacity of 500 horsepower or less, and is located at a major source of HAP, many Subpart ZZZZ requirements (emission standards, performance tests, NOCS reports, initial notifications) are not applicable.*

### **Limitations**

**Title V Permit Condition 134** incorporates MACT Subparts A (General Provisions) by reference, and states that Table 8 to Subpart ZZZZ of Part 63 shows which parts of MACT Subpart A apply to the emergency diesel fire pump engine.

**Title V Permit Condition 135** requires the facility to perform specific maintenance procedures from Table 2c(1) to Subpart ZZZZ for the emergency diesel fire pump engine (**40 CFR 63.6602**). *The condition allows the facility to utilize an oil analysis program as described in **40 CFR 63.6625(i)** in order to extend the specified oil change requirement. This is taken from footnote 2 to Table 2c. The condition also includes the provision to delay the requirements in case of emergency, as provided by footnote 1 to Table 2c.*

**Title V Permit Condition 136** requires the permittee to use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. *Sulfur content is limited to 0.0015%.*

**Title V Permit Condition 137** requires a maintenance plan for the diesel emergency fire pump engine (**40 CFR 63.6625(e)**). *This condition also includes the information which shall be used to determine whether such operation and maintenance procedures are sufficient to minimize emissions (**40 CFR 63.6640(a)**), using the criteria from **40 CFR 63.6605(b)**.*

**Title V Permit Condition 138** requires the emergency diesel fire pump to comply with the requirements for emergency engines at **40 CFR 63.6640(f)**. *If the operation of the engine does not meet the requirements of this section, it will be considered a non-emergency engine and may require a new or amended Article 6 (minor NSR) permit.*

**Title V Permit Condition 139** requires that idling time be minimized for the emergency diesel fire pump engine during startup (**40 CFR 63.6625(h)**).

### **Monitoring/Recordkeeping**

*By default, the MACT Subpart ZZZZ testing, monitoring, recordkeeping and reporting requirements are deemed sufficient for periodic monitoring and CAM purposes (40 CFR 64.1), since it was promulgated after November 15, 1990.*

**Title V Condition 140** requires the permittee to install a non-resettable hour meter) (**40 CFR 63.6625(f)**), as well as to record the reason for operation and length of time operated (**40 CFR 63.6655(f)**).

**Title V Condition 141** requires the permittee to keep records of fuel supplier certifications, a copy of each notification necessary to demonstrate compliance with 40 CFR 63 Subparts A and ZZZZ, records of the occurrence and duration of any malfunction of the emergency diesel fire pump engine and any actions taken during the malfunction to restore the engine to normal operation, all required maintenance, and records of the reason and hours of operation for the emergency diesel fire pump.

## **FACILITY WIDE CONDITIONS**

### **Limitations**

#### **Limitation from the 9/13/2022 NSR Permit**

Condition 45 of the 9/13/2022 NSR Permit (**Title V Condition 142**) limits total annual emissions from all boilers (including Rental Boilers) at the facility.

Condition 65 of the 9/13/2022 NSR Permit (**Title V Condition 143**) requires operating practices to minimize emissions, including maintenance and operator training.

Condition 13 of the 9/13/2022 NSR Permit (**Title V Condition 144**) includes requirements for the minimization of fugitive dust from the facility.

Condition 14 of the 9/13/2022 NSR Permit (**Title V Condition 145**) requires the permittee to employ work practices that minimize VOC emissions.

### **Monitoring/Recordkeeping**

#### **Monitoring/Recordkeeping from the 9/13/2022 NSR Permit**

Condition 68 of the 9/13/2022 NSR Permit (**Title V Condition 147**) requires the facility to 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.

#### **Other Monitoring Requirement**

**Title V Condition 146** includes recordkeeping requirements to demonstrate compliance with the emission limitations and requirements for maintenance/operator training in **Title V Conditions 142 and 143**.

## Testing

### **Testing Requirement from the 9/13/2022 NSR Permit**

Condition 60 of the 9/13/2022 NSR Permit (**Title V Condition 150**) requires the facility to be constructed so as to allow for emissions testing at any time upon reasonable notice.

### **Other Testing Requirement**

**Title V Condition 151** requires that if testing is conducted in addition to the monitoring specified in the permit, the permittee shall use the appropriate methods as approved by DEQ. *This method is unchanged with this modification.*

## Reporting

Condition 61 of the 9/13/2022 NSR Permit (**Condition 152**) requires initial notifications for construction/modification, start-up, and performance testing.

## General Compliance Assurance Monitoring (CAM) Provisions

*The CAM requirements of 40 CFR 64 will apply to the Combination Boiler (PH-1) upon re-commencement of firing any biomass fuel because it has the potential to emit PM-10 at a level above the major source threshold, it is subject to PM-10 emission limits, and the emission unit will use a control device (multi-cyclone followed by ESP) to achieve compliance with the emission limit. CAM will not apply when the Combination Boiler is burning natural gas only, as discussed previously (no particulate control device is required when the boiler is burning only natural gas). When the boiler becomes subject to CAM requirements, the provisions of **Title V Conditions 153-161** will apply.*

## STREAMLINED AND OBSOLETE REQUIREMENTS

*Many of the requirements in the Title V permit effective September 3, 2019 have become obsolete, because the facility type was converted from a thermomechanical newsprint mill with a wood and recycled paper feedstock, to a recycled containerboard facility with an old corrugated containerboard feedstock, resulting in the removal of much of the existing process equipment. The two boilers producing steam for the process were also modified such that coal and fuel oil will no longer be utilized. Many of the requirements in the 2019 Title V permit pertained to the combustion of coal and fuel oil and are therefore being removed.*

*Additionally, some of the initial testing requirements from the September 13, 2022 NSR permit have been completed and are no longer applicable. These were included in the Title V significant modification dated December 14, 2022.*

## **Obsolete Requirements from the 2019 Title V Renewal**

### **Combination Boiler (PH-1)**

**Condition 2 of the 2019 Title V Renewal** limited fuel sulfur content to 0.2 percent by weight per shipment. *This condition was removed from the Title V permit because the facility is no longer authorized to burn fuel oil.*

**Condition 5 of the 2019 Title V Renewal** required a minimum flue gas oxygen content of 2% by weight when the boiler is firing woodwaste and paper sludge/paper waste in excess of 450 tons per day. *This condition was removed from the Title V permit, since the throughput of woodwaste and paper sludge/paper waste is limited to 450 tons/day in the 9/13/2022 NSR Permit.*

**Condition 7 of the 2019 Title V Renewal** limited the sulfur and ash content of the coal burned in the Combination Boiler. *This condition was removed from the Title V permit, since the facility is no longer authorized to burn coal, and the referenced equipment has been removed.*

**Condition 11 of the 2019 Title V Renewal** limited visible emissions from the affected facilities in the coal preparation plant. *This condition was removed from the Title V permit since the facility is no longer authorized to burn coal.*

**Condition 13 of the 2019 Title V Renewal** required a NO<sub>x</sub> CEMS to be installed on the Combination Boiler unless it was demonstrated during performance tests that NO<sub>x</sub> emissions are more than 30% below the allowable 0.70 lb/MMBtu standard (less than 0.49 lb/MMBtu heat input). *This requirement was included in the 1977 permit for a coal-fired boiler. Potential NO<sub>x</sub> emissions are significantly reduced with the elimination of coal and distillate oil as fuel. The 46.7 lb/hr NO<sub>x</sub> emissions limitation in **Title V Condition 8**, which will be verified by an initial performance test and ongoing periodic testing, provides assurance that the emissions will be far lower than the NO<sub>x</sub> emission standard set for coal combustion.*

**Condition 16 of the 2019 Title V Renewal** requires the permittee to conduct an observation of the presence of visible emissions on the affected facilities in the coal preparation plant at least once each calendar month. *This condition was removed because the facility is no longer authorized to burn coal, and the referenced equipment has been removed.*

### **Package Boiler (PH-2)**

**Condition 22 of the 2019 Title V Renewal** limited fuel sulfur content to 0.2 percent by weight per shipment. *This condition was removed from the Title V permit because the facility is no longer authorized to burn fuel oil.*

**Condition 25 of the 2019 Title V Renewal** limited the nitrogen and sulfur content of the fuel oil to be burned in the Package Boiler and included fuel certification requirements. *This condition was removed from the Title V permit because the facility is no longer authorized to burn fuel oil.*

**Conditions 31 & 32 of the 2019 Title V Renewal** required a COMS to measure opacity when the Package Boiler is burning No. 2 fuel oil (and stated that COMS data generated by the opacity monitor may be used as evidence of violation of the emission standards. **Condition 33 of the 2019 Title V Renewal** set minimum data availability requirements for the COMS. *These conditions were removed from the Title V permit because the facility is no longer authorized to burn fuel oil. For the Package Boiler, which will burn natural gas only, periodic monitoring of visible emissions by an observer has been added in place of a COMS.*

Recordkeeping requirements corresponding to obsolete conditions have been removed. These include **Condition 34b, e, and g of the 2019 Title V Renewal**.

**Condition 36 of the 2019 Title V Renewal** requires ongoing performance testing (at least every five years) for PM, NO<sub>x</sub>, CO, VOC and lead emissions from the Package Boiler. *Testing requirements have been removed for PM and lead since the boiler will be burning natural gas only. Opacity will be monitored as a surrogate for PM.*

**Condition 37 of the 2019 Title V Renewal** requires quarterly fuel quality reports for distillate oil. *This condition was removed from the Title V permit, because the facility is no longer authorized to burn fuel oil*

**Condition 38 of the 2019 Title V Renewal** requires opacity monitoring reports. *This condition was removed from the Title V permit because the facility longer burns fuel oil and is not required to install a COMS.*

Wood Yard (no longer included in equipment list)

**Title V Conditions 41-47 of the 2019 Title V Renewal** included limitations, monitoring, and recordkeeping requirements applicable to the Wood Yard. *This process area has been removed.*

Thermomechanical Pulp Mill (no longer included in equipment list)

**Title V Conditions 48-60 of the 2019 Title V Renewal** included limitations, monitoring, and recordkeeping requirements applicable to the Thermomechanical Pulp Mill. *This process area and all associated emission units have been removed.*

Wastewater Treatment Plant (Replaced by Effluent Treatment Plant with Anaerobic Reactor)

**Title V Conditions 62 & 63 of the 2019 Title V Renewal** included monitoring and recordkeeping requirements for the WWTP. *The WWTP is being replaced with an Effluent Treatment Plant (ETP) with Anaerobic Reactor. Requirements for the ETP have been added to the permit, and the WWTP requirements are obsolete.*



Paper Mill Equipment – Paper Machine

**Title V Condition 66** required that “operating and cleaning practices and established parameters used to calculate emissions from the operation of and cleaning of the paper machine shall be monitored.” *The new permit limits VOC throughput to the paper machine and for cleaning. Monitoring consists of records of the VOC throughput, which is sufficient monitoring to demonstrate compliance with both the VOC throughput and emission limits, since it is assumed that 100% of VOC is emitted. Therefore, this condition has been removed.*

Facility Wide Conditions

**Title V Condition 82 of the 2019 Title V Renewal** required the thermomechanical pulp and paper mill to be constructed and operated as proposed in the initial submittals received by the Board up to and including May 25, 1977. *The thermomechanical pulp mill was removed and replaced with a recycled containerboard manufacturing facility.*

**Title V Condition 83 of the 2019 Title V Renewal** limits fuel sulfur content to 0.2 percent by weight per shipment of oil. *The facility is no longer authorized to burn fuel oil.*

**Title V Condition 84 of the 2019 Title V Renewal** requires the permittee to provide certification for each coal shipment. *The facility is no longer authorized to burn coal.*

**Obsolete Requirements from the December 14, 2022 TV Modification**

Condition 57 of the 9/13/2022 NSR Permit (**Condition 43 of the 2022 TV Modification**) required initial performance testing for NO<sub>x</sub> and CO within 60 days after achieving maximum production rate, but in no event later than 180 days after startup of the Package Boiler. *This testing has been completed.*

Condition 58 of the 9/13/2022 NSR Permit (**Condition 44 of the 2022 TV Modification**) required an initial VEE for the Package Boiler. *The VEE has been completed.*

**Condition 91 of the 2022 TV Modification** required that “operating and cleaning practices and established parameters used to calculate emissions from the operation of the Recycle Fiber Plant pulping and screening equipment shall be monitored.” *The new permit limits VOC throughput to the Recycle Fiber Plant. Monitoring consists of records of the VOC throughput, which is sufficient monitoring to demonstrate compliance with both the VOC throughput and emission limits, since it is assumed that 100% of VOC is emitted. Therefore, this condition has been removed.*

## **INSIGNIFICANT EMISSIONS UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the 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.

Insignificant emission units include the following:

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation</b>	<b>Pollutant(s) Emitted (5-80-720 B)</b>	<b>Rated Capacity (5-80-720 C)</b>
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- <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I3	Chillers - <u>Non-VOC/Haps</u>	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	

<sup>1</sup>The citation criteria for insignificant activities are as follows:  
 9VAC5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application  
 9VAC5-80-720 B - Insignificant due to emission levels  
 9VAC5-80-720 C - Insignificant due to size or production rate

## PERMIT SHIELD AND INAPPLICABLE REQUIREMENTS

<b>Citation</b>	<b>Title of Citation</b>	<b>Description of Applicability</b>
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 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))

## GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9VAC5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting

semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

## **Comments on General Conditions**

### **Condition 163.Federal Enforceability**

Article 1 (9VAC5-80-110 N) states that all terms and conditions in the Title V permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

### **Condition 164.Permit Expiration**

This condition refers to the DEQ taking action on a permit application. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the Code of Virginia, and the “Department of Environmental Quality Agency Policy Statement No. 2-09”.

[This general condition cite(s) the Article(s) that follow(s):

(For TV): Article 1 (9VAC5-80-50 et seq.), Part II of 9VAC5 Chapter 80. Federal Operating Permits for Stationary Sources

[This general condition cites the sections that follow:

9VAC5-80-80. Application

9VAC5-80-140. Permit Shield

9VAC5-80-150. Action on Permit Applications

### **Condition 170.Failure / Malfunction Reporting**

Section 9VAC5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9VAC5-20-180 is from the general regulations. All affected facilities are subject to section 9VAC5-20-180 including Title V facilities. A facility may make a single report that meets the requirements of 9VAC5-20-180. The report must be made within four daytime business hours of discovery of the malfunction.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors meeting the requirements of 9VAC5-50-410 or 9VAC5-40-41.

This general condition cites the sections that follow:

9VAC5-40-41. Emissions Monitoring Procedures for Existing Sources

9VAC5-40-50. Notification, Records and Reporting

9VAC5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:  
40 CFR 60.13 (h). Monitoring Requirements.

### **Condition 177. Permit Modification**

This general condition cites the sections that follow:

9VAC5-80-50. Applicability, Federal Operating Permit for Stationary Sources  
9VAC5-80-190. Changes to Permits  
9VAC5-80-260. Enforcement  
9VAC5-80-1100. Applicability, Permits For New and Modified Stationary Sources  
9VAC5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications  
Located in Prevention of Significant Deterioration Areas  
9VAC5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications  
Locating in Nonattainment Areas

### **Condition 191. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follows:  
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.  
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.  
40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9VAC5-60-70. Designated Emissions Standards  
9VAC5-80-110. Permit Content

## **FUTURE APPLICABLE REQUIREMENTS**

**Good Neighbor Plan** - Cascades Containerboard Packaging – Bear Island has a primary NAICS code of 322130 (Paperboard Mills), and has two boilers (Combination Boiler PH-1 and Package Boiler PH-2) with design heat input capacity  $\geq 100$  MMBtu/hr that receive 90% or more of heat input from natural gas in the previous ozone season. They are not low-use boilers under 40 CFR 52.45(b)(2).

Package Boiler (PH-2) is equipped with low-NOx burners and already meets the Good Neighbor Plan standard of 0.08 lb/MMBtu for natural gas. The Combination Boiler (PH-1) does not have

low-NO<sub>x</sub> burners and has hourly NO<sub>x</sub> emission limits that correspond to approximately 0.14 lb/MMBtu. According to the Good Neighbor Plan, Cascades would have to meet the 0.08 lb/MMBtu by 2027 for the Combination Boiler.

The Good Neighbor Plan was stayed by the U.S. Supreme Court on June 27, 2024. Thus, though the facility may be subject to the rule in the future, this is unclear as the rule goes through the judicial review process.

## **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## **PUBLIC PARTICIPATION**

The proposed permit will be placed on public notice from November 20, 2024 to December 20, 2024. The notice will be published in the *Richmond Times-Dispatch* newspaper on November 20, 2024. The draft permit and SOB will also be sent to EPA Region III on November 20, 2024 for a concurrent 45-day review period.