

Georgia-Pacific Consumer Operations LLC

Title V Basis Statement SW20-24-R0-A

ISSUED: December 17, 2020

ISSUED TO: Georgia-Pacific Consumer Operations LLC

401 NE Adams Street Camas, WA 98607

PLANT SITE: Georgia-Pacific Consumer Operations LLC

401 NE Adams Street Camas, WA 98607

PERMIT ENGINEER: Danny Phipps, Air Quality Engineer

REVIEWED BY: Paul T. Mairose, Chief Engineer

Southwest Clean Air Agency 11815 NE 99 Street, Suite 1294 Vancouver, WA 98682-2322 (360) 574-3058

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I. GENERAL INFORMATION AND CERTIFICATION

1. Company Name: Georgia-Pacific Consumer Operations LLC

2. Facility Name: Georgia-Pacific Consumer Operations LLC

3. **Responsible Official:** Shawn Wood, Vice President

4. Facility Contact Person: Jeffrey Dambrun, Environmental Manager

5. UBI Number: 603-096-925

6. SIC / NAICS Code: 2621 / 322121

7. Basis for Title V Applicability:

Georgia-Pacific Consumer Operations LLC (Georgia-Pacific) is subject to the Title V Air Operating Permit (AOP) program because the facility is a major source as defined in WAC 173-401-200(19) with potential emissions greater than 100 tpy of a regulated air pollutant. The facility is an area source for HAP.

8. Purpose of Current Permitting Action:

The purpose of the current permitting action is to incorporate Air Discharge Permit (ADP) 20-3413 requirements into Air Operating Permit SW20-24-R0. On July 14, 2020 the Southwest Clean Air Agency (SWCAA) issued ADP 20-3413 to Georgia-Pacific for the installation of a new package Boiler, following ADP application CL-3125. On August 13, 2020 SWCAA issued Air Operating Permit (AOP) SW20-24-R0 to Georgia-Pacific as part of the transition of the facility jurisdiction from the Washington Department of Ecology to SWCAA. In response to a request made by Georgia-Pacific on August 27, 2020, AOP SW20-24-R0-A will incorporate all requirements from ADP 20-3413.

9. Attainment Area:

Georgia-Pacific is located in an area which is in attainment for all criteria pollutants. The area is subject to a maintenance plan for carbon monoxide and ozone.

10. Facility Description:

The Georgia-Pacific Camas Mill is located in Camas, Washington. The facility consists of a mainland operation of approximately 190 acres, and the Lady Island wastewater treatment and landfill operation of approximately 476 acres. The mainland operation and Lady Island are separated by the Camas Slough, an arm of the Columbia River. The facility was originally constructed in 1883 to supply newsprint to the Portland area. The facility is an existing major source under the Prevention of Significant Deterioration (PSD) program. Facility operations previously included both a bleaching Kraft pulp mill and paper mill. Georgia-Pacific shutdown the facility's communication paper machine, fine paper converting assets and pulping operations in 2018. Upon shutdown of pulping operations, air pollution permitting authority for the facility transferred from the Department of Ecology to SWCAA consistent with WAC 173-405-012

Georgia-Pacific currently operates a single paper machine and associated converting operations at the facility to produce tissue and towel from purchased pulp. Two power boilers (#3 and #5) and a natural gas fired package boiler (Boiler #6) are used to provide process steam and power for the facility. One or both of the power boilers may be supplanted by Boiler #6 in the near future. The

facility operates various maintenance shops and minor construction equipment for the purpose of inspecting, maintaining and repairing production equipment and facility structures.

Air emissions from the Camas Mill are summarized as follows:

<u>Pollutants</u>	Potential Emissions (tpy)	2018 Emissions (tpy)
NO _X	895.75	156
CO	1,612.11	338
VOC	198.54	60
SO ₂	105.06	20
PM	119.33	135
PM ₁₀	95.90	68

Georgia-Pacific operates an industrial wastewater treatment plant to treat wastewater from the facility. Wastewater receives primary and secondary treatment before being discharged to the main channel of the Columbia River. The clarifier, aeration basins and an associated limited purpose solid waste landfill are located on Lady Island, a 476 acre site separated from the mill proper by the Camas Slough. Waste fiber from the clarifier is thickened and burned in the No. 3 Power Boiler or conveyed to the landfill. Sanitary wastewater from the main facility is discharged to the City of Camas for treatment. Wastewater Treatment permitting authority resides with the Washington Department of Ecology and Solid Waste permitting authority resides with the Clark County Public Health.



GP Consumer Operations (Camas, Washington)

11. Facility Permitting History:

The following table lists each Order of Approval issued to the Georgia-Pacific Camas Mill by SWCAA or the Department of Ecology. Permits listed in italics are no longer in effect. Requirements in those permits may have been superseded, may have been of limited duration, or affected equipment may have been removed from service.

Permit	Issue	
<u>Number</u>	<u>Date</u>	Permitting Action Description
ADP 20-3413	7/14/2020	This permitting action approved installation of a natural gas fired
		Package Boiler.
Order 16879	1/29/2020	This permitting action approved ERCs for shutdown of emission units associated with Kraft pulp mill operations at the Camas Mill.
Order 1147-AQ04	1/29/2020	This permitting action removed approval to burn #6 fuel oil, non-
Mod 1	1,23,2020	condensable gases and steam stripper off-gases in Power Boiler #5.
		3 3 3 3 3 3 3 3 3
Order 15696	8/3/2018	This permitting action approved installation of a new firewater
		system. The system includes a diesel engine emergency generator
		and a diesel engine driven backup fire pump.
PSD 88-3 Mod 2 /	3/25/1999	This permitting action made multiple changes to existing source
Order 88-360 Mod 2	3/23/1999	test language and unit specific emission limits.
01 d0 1 00 900 1 v10d 2		test language and unit specific emission mines.
Order 77-237	3/22/1977	This permitting action approved installation of a venturi scrubbing
		unit to control paper dust from the Paper Machine #11.
SERP 08-103	12/21/1972	This order approved a source emission reduction plan submitted by
		the Permittee. The emission reduction plan provides for a
		reduction in air contaminant emissions during declared air pollution episodes.
		ponunon opisodos.

Obsolete/Superseded

AOP SW20-24-R0	8/13/2020	This permitting action approved a permit renewal. Jurisdiction over the facility passed from the Department of Ecology to the Southwest Clean Air Agency (SWCAA).
Order 15610	4/23/2018	This permitting action approved installation of two trailer mounted, natural gas fired, package boilers. The boilers were not installed, and the approval has expired.
AOP 0000256	7/1/2014	This permitting action was issued by the Department of Ecology and covered all units that were not going to be shutdown in accordance with order 8883

Permit Number Agreed Order 8883	Issue <u>Date</u> 1/5/2012	Permitting Action Description Ecology and Georgia-Pacific Mill entered into Agreed Order No. 8883 for the purpose of documenting the permanent shutdown of certain equipment at the site. Affected equipment includes #3, #9 and #14 Paper Machines, K4 Pulp Mill, K4 Bleach Plant, #3 Recovery Furnace, #3 Smelt Dissolver and the Pulp Dryer.
Order 6699	5/18/2009	This permitting action approved Emission Reduction Credits (ECRs) for shutdown of the K4 Pulp Mill, K4 Bleach Plant, #3 Recovery Furnace and #3 Dissolver Vent.
Order 3330-AQ06	5/23/2006	This permitting action modified Order 1944-AQ05, rescinding the requirement to collect and treat NCG streams from the hardwood digester air evacuation vents.
Order 1944-AQ05	1/7/2005	This permitting action required the Camas Mill to either collect and treat NCG streams from the Pandia digester vents and hardwood digester air evacuation vents or install a Messing and Durkee digester. Camas Mill choose to collect and treat NCG streams from the existing equipment.
Order 1147-AQ04	6/30/2004	This permitting action approved conversion of the Magnefite Recovery Furnace to use as a power boiler (Power Boiler #5), implementation of a HVLC/TRS collection/control project and upgrade of the secondary air system on the #3 Kraft Recovery Furnace. Superseded by Order 1147-AQ04 Mod 1.
Order 03AQIS-5419	3/19/2003	This permitting action approved Emission Reduction Credits (ECRs) for shutdown of the Magnefite pulping operation, kraft screen room K4, #1 kraft evaporator, paper machines #10, #12, #15 and #16, and installation of a steam stripping system to treat kraft foul condensate.
Order 01AQIS-3304	11/2/2001	This action was an administrative order requiring the Camas Mill to be in compliance with select provisions of 40 CFR 63 Subpart S.
Order 01AQIS-2012	5/23/2001	This action was an administrative order formalizing actions to be taken by the Camas Mill to prevent the discharge and deposition of black liquor droplets on property adjacent to mill property.
Order 01AQIS-2684	4/25/2001	This order required Georgia-Pacific to submit a plan to prevent the venting of untreated non-condensable gas (NCG) during both planned and unplanned events. The pulp mill has shutdown so the facility no longer generates or vents NCG streams.

Permit Number Order 01AQIS-2001	Issue <u>Date</u> 2/16/2001	Permitting Action Description This action was an administrative order granting a conditional one year extension to the MACT I compliance deadline for the #1 M&D chip bin feeding system. The extension terminated April 16, 2002.
Order 01AQIS-1945	1/18/2001	This action was an administrative order granting a conditional 12-month extension of multiple MACT I compliance deadline for the K5 bleach plant. The extension terminated on April 16, 2002.
Order 00AQIS-1577	8/24/2000	This permitting action approved replacement of outside sections of the fines blow lines and replacement of the cyclone at the fines truck bin with an equivalent unit. This unit was shutdown in April 2018.
Order 99AQ-1008	3/17/1999	This order required Georgia-Pacific to implement short-term corrective action for, and a permanent solution to, fugitive dust emissions from the lime kiln lime handling system. This unit was shutdown in April 2018.
Order 96AQ-1059	8/21/1996	This permitting action approved installation of a white liquor scrubber at the K-3 and K-4 bleach plants and the tail gas scrubber vent of the R-8 chlorine dioxide system. These units were shutdown in April 2018.
Order 95AQ-1050	7/21/1995	This permitting action approved installation of the K-4 fiber blend line. This unit was shutdown in March 2009.
Order 93AQ-1140	1/8/1993	This permitting action approved installation of the #2 Cut-Size Sheeter facility. This facility has been permanently shutdown.
PSD 88-3 Mod 1 / Order 88-360 Mod 1	10/18/1991	This permitting action modified NO_X emission limits for the #3 and #4 Recovery Furnaces.
		This order was superseded by PSD 88-3-M2 / 88-360-M2.
PSD 88-3 / Order 88-360	2/17/1989	This permitting action approved an energy and recovery modernization project for the Camas mill. The project increased the facility's potential unbleached pulp production by 160 airdried tons per day. NO_X and CO emissions were subject to PSD review. All other pollutants were subject to minor NSR.
		This order was superseded by PSD 88-3-M1 / 88-360-M1.
Order 88-1011R	1/24/1989	This permitting action allocated VOC emission offsets in conjunction with the Camas Mill Energy and Recovery Modernization Project of June 1988 (PSD 88-3 / DE 88-360).

Permit Number Order 87-309	Issue <u>Date</u> 11/9/1987	Permitting Action Description This permitting action approved installation of a new chlorine dioxide generator, four new kraft batch digesters and conversion of the existing sawdust brown stock system to hardwood pulping. The chlorine dioxide generator was shutdown in April 2018. Remaining equipment was shutdown at various times between 2003 and 2014.
Order 81-585	5/13/1981	This permitting action approved installation of a mill sludge pelletizing operation. Intent of project was to divert sludge from the facility incinerator. This operation was shutdown in the early 1990's.
Order 79-498	12/19/1979	This permitting action approved installation of dust control systems for the #17 paper machine dryer and rewinder. Paper machine #17 was never installed.
Order 73-0601LET	6/1/1973	This permitting action approved installation of a Ducon scrubber on the facility sludge incinerator. This unit was removed from operation no later than 1985.
Order 73-0104LET	1/4/1973	This permitting action approved installation of a sludge scrubber on the facility sludge incinerator. This unit was removed from operation no later than 1985.
Order 72-0315LET	3/15/1972	This permitting action approved installation of a dry lay web former. This unit is no longer in operation at the facility.
Order 69-0611LET	6/11/1969	This permitting action approved installation of a sludge incinerator. This unit was removed from operation no later than 1985.
Order 69-0502LET	5/2/1969	This permitting action approved a Magnefite sulfite pulping operation. Magnefite sulfite pulping operations were shutdown in October 2001.

II. EMISSION UNIT INDENTIFICATION

ID	Generating Equipment/Activity	Emission Control
EU1	Power Boiler #3	PM – Electrostatic Precipitator (CAM)
EU2	Power Boiler #5	NO _X – Low Emission Burner (CAM)
		SO ₂ – Low Sulfur Fuel
EU3	Paper Machine #11	PM – Venturi Scrubber
EU4	Paper Machine #11 Heater	SO ₂ – Low Sulfur Fuel
EU5	Beater Room Heater	SO ₂ – Low Sulfur Fuel
EU6	Converting Process	PM – Converting Baghouses
EU7	Core Manufacturing	HAP – Low HAP Coating Materials
EU8	Engine – Dock Warehouse Pump	SO ₂ – Low Sulfur Fuel
EU9	Emergency Engine – Skid-Mounted Fire Pump	SO ₂ – Low Sulfur Fuel
EU10	Emergency Engine – Bar Screen	SO ₂ – Low Sulfur Fuel
EU11	Emergency Engine – Woodyard Grit Pump	SO ₂ – Low Sulfur Fuel
EU12	Emergency Engine – Converting	SO ₂ – Low Sulfur Fuel
EU13	Emergency Engine – Will II	SO ₂ – Low Sulfur Fuel
EU14	Emergency Engine – Unitizer	SO ₂ – Low Sulfur Fuel
EU15	Emergency Engine – Riverbank Fire Pump	SO ₂ – Low Sulfur Fuel
	Generator	
EU16	Boiler #6	Flue Gas Recirculation/Low Sulfur
		Fuel/Ultra Low NOx Burner

EU1 Power Boiler #3

Power Boiler #3 is a Foster-Wheeler boiler with a maximum rated heat input of 405 MMBtu/hr when fired on a combination of wood and natural gas. Rated heat input on wood alone is 350 MMBtu/hr. Rated heater input on natural gas alone is 319 MMBtu/hr. This unit is believed to have been installed in the 1960's and fired primarily on oil. In October 1992, the unit was converted to fire primarily on hog fuel with natural gas used to assist combustion. The conversion project included installation of a new electrostatic precipitator to control particulate matter. This shutdown and conversion were accomplished during the Camas Energy and Recovery Modernization Project, which was subject to PSD review and NSR (*PSD 88-3, Ecology Order 88-360*). Modifications to the orders were made in October 1991 and September 1998 to clarify permit language, control operating parameter addition for the recovery furnaces, correction of erroneous permit conditions, and limit revisions. In the past, Georgia-Pacific has utilized the unit to combust sludge from the facility's primary wastewater treatment plant.

Natural gas is fired with three burners. Hog fuel is supplied with three swept spout feeders to two water cooled vibrating hydrogates. Combustion air is preheated. Particulate matter emissions from the boiler are controlled by a Joy Multi-clone in series with an electrostatic precipitator. Overall particulate control is estimated at 99%.

This unit is subject to 40 CFR 60 Subpart Db and 40 CFR 63 Subpart JJJJJJ.

This unit is subject to the requirements of 40 CFR 64 (CAM) for emissions of PM/opacity. CAM requirements are met by implementing the CAM plan detailed in monitoring requirement M7.

EU2 Power Boiler #5

Power Boiler #5 is a Babcock and Wilcox designed boiler put into service in the early 1970's as a Magnefite sulfite recovery furnace. Operation as a recovery furnace ceased when the sulfite process at this facility was shutdown in October 2001. This unit was converted to service as a natural gas fired power boiler in September 2004 and has a rated heat input of 318 MMBtu/hr.

Conversion of the unit was subject to minor source NSR (*Order 1147-04*, 6/30/2004). BACT for the unit was determined to be low emission burners with over-fire air system and flue gas recirculation (NO_X), good combustion practices (CO) and a venturi scrubber in sequence with a packed-bed scrubber (*metals*, *acid gases*). Order 1147-AQ04 approved the boiler to fire on natural gas, No. 6 fuel oil, non-condensable process gases (NCGs) and steam stripper off-gases (SOGs). Concurrent with shutdown of the pulp mill, the facility no longer generates NCGs and SOGs and the ability to burn fuel oil was previously removed from the boiler.

In 2019, Georgia-Pacific requested modification of Order 1147-AQ04 to remove emission limits and monitoring for SO₂ and TRS, remove approval to fire fuel oil and remove the venturi and pack-bed scrubbers. This modification was subject to minor source NSR (*Order 1147-AQ04 Mod 1, 1/29/2020*). BACT for the unit was determined to be good combustion practices (*CO, VOC*) and low sulfur fuel (*SO*₂). BACT for NO_X remained unchanged. The venturi and packed bed scrubbers were determined to no longer be necessary due to the boiler firing only natural gas.

This unit is subject to the requirements of 40 CFR 64 (CAM) for emissions of NO_X. In lieu of CAM for NO_X, the unit is equipped with a CEMS maintained and operated in accordance with 40 CFR Part 60, Appendix B Performance Specification 2 and Appendix F.

EU3 Paper Machine #11

Paper Machine #11 is a 1930 Beloit Machine, modified several times over the years to increase capacity to nominally 65,700 machine-dried (approximately 4% moisture) short tons per year. Modifications included a new 12' Yankee Dryer and Yankee Dryer Hoods (1952), KMW Former twin wire section with a 171" head box deckle, a 12' TAD (Through Air Dryer) system (1975), a Honeywell control system, profile measurement and control actuators, and steam boxes (1985), and a Dry End Roll Handling improvement (2008).

Paper Machine #11 uses primarily purchased bleached Kraft pulp as well as purchased post-consumer recycle paper up to 40% content on specific grades. The sheet is dried with a combination of former and impression section vacuum sources, a natural gas fired TAD, and a steam heated Yankee with natural gas fired air cap hoods. There is a repulping pit under the Yankee dryer used for save-all and reuse of fiber as well as a dry end machine repulper.

Primary emission points from this unit are summarized in the table below. Additionally, there are VOC emissions from chemical usage.

Emission Point	Name	Description	
1	PM11-Former	Former Exhaust and 3rd Compartment Vacuum Pump Exhaust (mist elimination system)	
2	PM11-Repulper	Dry end machine pulper (broke, trim)	
3	PM11-Box1Vacuum	Vent for 1st de-watering box, pick-up box, and 2nd/3rd Uhle box vacuum pumps	
4	PM11-Box2Vacuum	Vent for 2nd de-watering box vacuum pump	
5	PM11-Box3Vacuum	Vent for 3rd de-watering box and 1st/4th Uhle box vacuum pumps	
6	PM11-SteamSucker	Vent for wet side of yankee under doctor blade	
7	PM11-TAD	Thru Air Dryer exhaust vent	
8	PM11-Yankee	Yankee hood exhaust vent	
9	PM11-MideastGravity	Paper machine room ventilator	
10	PM11-MidwestGravity	Paper machine room ventilator	
11	PM11-WestGravity	Paper machine room ventilator	
12	PM11-SkyblastWest	Paper machine room ventilator	
13	PM11-SkyblastNorth	Paper machine room ventilator	
14	PM11-SkyblastSouth	Paper machine room ventilator	
15	PM11-Scrubber	Dust collection from reel and winder, venturi scrubber followed by a wet cyclone scrubber	

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU4 Paper Machine #11 Heater

The Paper Machine #11 Heater is a natural gas fired system that provides space heating for the paper machine building to reduce condensation and fogging within the building. The system is composed of a fan, ductwork, and an in-line natural gas fired duct burner assembly. Exterior air is heated and routed through ductwork inside the paper machine building to help circulate air towards the existing building roofs. Heated air is eventually exhausted through existing building roof vents described above in EU3. Building air circulation is important to replace moisture released during the papermaking process and create a controlled environment for papermaking, personnel, and building integrity.

The Paper Machine #11 Room Heater natural-gas burner element is a custom-built Maxon NP-1 burner assembly with a rated capacity of 0.5 MMBtu/hr/ft. The Paper Machine #11 Room Heater element contains 16-linear feet of duct burner, providing a maximum heat input capacity of 8 MMBtu/hr.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU5 Beater Room Heater

The Beater Room Heater is a natural gas fired system that provides space heating for the paper machine building and adjacent buildings to reduce condensation and fogging within the buildings. The system is composed of a fan, ductwork, and an in-line natural gas fired duct burner assembly. Exterior air is heated and routed through ductwork inside the paper machine buildings to help circulate air towards the existing building roofs. Heated air is eventually exhausted through existing building roof vents described above in EU3.

Building air circulation is important to replace moisture released during the papermaking process and create a controlled environment for papermaking, personnel, and building integrity.

The Beater Room Heater natural-gas burner element is a custom-built Maxon NP-1 burner assembly with a rated capacity of 0.5 MMBtu/hr/ft. The Beater Room Heater element contains 24-linear feet of duct burner, providing a maximum heat input capacity of 12 MMBtu/hr.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU6 Converting Process

Paper made by Paper Machine #11 is processed into consumer products in associated converting operations. Central dust collection systems (Converting Dust Collection, Converting Baler and Trim Collection) are used to control paper dust produced by the converting operations. Each system is equipped with a baghouse that vents back inside the converting buildings.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU7 Core Manufacturing

Three core machines are used to manufacturer paper cores in the converting process. Cores are typically made of three plys of core stock which are received in ribbon form. The core ribbons are fed over a glue application wheel and then excess glue is doctored off by a doctor blade. The ribbons are then wrapped around a forming mandrel which is driven by a forming belt. As the core forms on the mandrel, a cut off saw cuts the forming material to the correct length for the machine the core will be used on. Process glue is stored in totes. Finished cores are air dried using ambient air.

Emissions from this unit are emitted fugitively into the headspace of the converting buildings and are eventually evacuated from the building through existing roof vents.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU8 Engine – Dock Warehouse Pump

This unit is an internal combustion engine used to power a supplemental stormwater pump in the dock warehouse basement which conveys stormwater to the process sewer. The engine operates when two existing electric stormwater pumps cannot adequately control stormwater in the dock warehouse basement. The engine is described as follows:

Make/Model: Koshin / SEV-50X

Power Rating: 4.7 hp
Fuel Type: Gasoline
Fuel Consumption: ~0.475 gal/hr

Model Year: 2013

Exhaust Stack: 2" dia at 20" above ground level

This emission unit is subject to the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ as a new, spark ignition engine. The emission unit meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with the requirements of 40 CFR 60 Subpart JJJJ.

EU9 Emergency Engine – Skid-Mounted Fire Pump

This unit is an internal combustion engine used to drive a skid-mounted fire pump. The engine is described as follows:

Make/Model: John Deere / JW6H-UFADF0

Power Rating: 327 hp
Fuel Type: Diesel
Fuel Consumption: 14.8 gal/hr
Model Year: 2017
EPA Certification: Tier 3

Exhaust Stack: 8" dia at 33' 9" above ground level

This emission unit is subject to the requirements of 40 CFR Part 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ as a new, emergency compression ignition engine. The emission unit meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with the requirements of 40 CFR 60 Subpart IIII.

EU10 Emergency Engine - Bar Screen

This unit is an internal combustion engine used to provide emergency power to the bar screen effluent pump. The engine is described as follows:

Make/Model: Caterpillar / 3412

Power Rating: 896 hp Fuel Type: Diesel

Fuel Consumption: 42.6 gal/hr (estimated)

Model Year: 2000

Exhaust Stack: ~14" dia at 11' 6" above ground level

This emission unit is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ as an existing, emergency compression ignition engine.

EU11 Emergency Engine – Woodyard Grit Pump

This unit is an internal combustion engine used to provide emergency power to the woodyard grit pump. The engine is described as follows:

Make/Model: Caterpillar / 3306

Power Rating: 382 hp Fuel Type: Diesel

Fuel Consumption: 21.2 gal/hr (estimated)

Model Year: 2001

Exhaust Stack: 6" dia at ~14' above ground level

This emission unit is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ as an existing, emergency compression ignition engine.

EU12 Emergency Engine – Converting

This unit is an internal combustion engine used to provide emergency power to a backup lighting system in the converting area of the mill. The engine is described as follows:

Make/Model: Onan / 5CCK-3RV

Power Rating: 13 hp Fuel Type: Gasoline

Fuel Consumption: ~1 gal/hr (estimated)

Model Year: 1980

Exhaust Stack: 2" dia at 16' 9" above ground level

This emission unit is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ as an existing, emergency spark ignition engine.

EU13 Emergency Engine -Will II

This unit is an internal combustion engine used to provide emergency power for two electric pumps which convey stormwater from a sump by the Will II building to the process sewer. The engine is described as follows:

Make/Model: Cummins / GGPA-1333296

Power Rating: 57.5 hp Fuel Type: Natural Gas

Fuel Consumption: 528 cfh (estimated)

Model Year: 2013

Exhaust Stack: 4" dia at 25' 3" above ground level

This emission unit is subject to the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ as a new, emergency spark ignition engine. The emission unit meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with the requirements of 40 CFR 60 Subpart JJJJ.

EU14 Emergency Engine – Unitizer

This unit is an internal combustion engine used to provide emergency power for two electric pumps which convey stormwater from a sump by the Unitizer building to the process sewer. The engine is described as follows:

Make/Model: Cummins / GGPA-1333296

Power Rating: 57.5 hp Fuel Type: Natural Gas

Fuel Consumption: 528 cfh (estimated)

Model Year: 2013

Exhaust Stack: 4" dia at 9' 9" above ground level

This emission unit is subject to the requirements of 40 CFR Part 60 Subpart JJJJ and 40 CFR 63 Subpart ZZZZ as a new, emergency spark ignition engine. The emission unit meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with the requirements of 40 CFR 60 Subpart JJJJ.

EU15 Emergency Engine – Riverbank Fire Pump Generator

This unit is an internal combustion engine used to drive an electric generator that provides emergency power to the riverbank fire pump. The engine is described as follows:

Make/Model: Caterpillar / C3 ACERT

Power Rating: 601 hp
Generator Rating: 400 kW
Fuel Type: Diesel
Fuel Consumption: 27.9 gal/hr
Model Year: 2017
EPA Certification: Tier 3

Exhaust Stack: 6" dia at 9' above ground level

This emission unit is subject to the requirements of 40 CFR Part 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ as a new, emergency compression ignition engine. The emission unit meets the requirements of 40 CFR 63 Subpart ZZZZ by complying with the requirements of 40 CFR 60 Subpart IIII.

EU16 Boiler #6

Boiler #6 is a Rentech RTD-66 water tube boiler with a ZEECO Free Jet burner. Boiler #6 is a permanent package boiler rated for 80,000 lb/hr and 97.74 MMBtu/hr heat input capacity which will be used to provide steam for the non-integrated paper mill. The boiler will be fired exclusively on pipeline natural gas fuel.

This unit is subject to the requirements of 40 CFR 60 Subpart Dc. Steam generating units that meet the requirements for this subpart are generally subject to SO₂ or PM limits but since the boiler only burns natural gas it is not subject to those limits.

BACT for the unit was determined to be Ultra low NO_x burners, proper combustion controls, use of low sulfur fuel, and internal flue gas recirculation.

Compliance Assurance Monitoring Applicability Review

Title V facilities are required to implement the compliance monitoring provisions of 40 CFR Part 64 Compliance Assurance Monitoring (CAM). CAM provisions are applicable to pollutant-specific emissions units that meet all of the following criteria:

- The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof);
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in 40 CFR 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

Part 64 exempts certain emission limitations or standards as set forth in 40 CFR 64.2(b). Two notable exemptions are emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Federal Clean Air Act and emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1.

Emission Unit CAM Applicability

Power Boiler #3 Power Boiler #3 is subject to emission limitations for PM/opacity, NOx, CO,

SO₂ and VOC. A control device or technology is used to comply with emission limitations for PM/opacity. Potential pre-control emissions of filterable PM are greater than 100 percent of the major source threshold.

CAM provisions are applicable for PM. See Section M7 of this Permit. CAM provisions would be applicable for opacity but a continuous compliance determination method (COMS) is in use so the unit is exempt from CAM.

Power Boiler #5 Power Boiler #5 is subject to emissions limitations for PM, NO_X, CO, SO₂

and VOC. A control device or technology is used to comply with emission limitations for NO_X . Potential pre-control emissions of NO_X are greater than

100 percent of the major source threshold.

CAM provisions would be applicable for NO_X , but a continuous compliance determination method (NO_X CEM) is in use so the unit is exempt from CAM.

Boiler #6 Boiler #6 is subject to emission limitations for PM, NO_X, CO, SO₂ and

VOC. A control device or technology is used to comply with emission limitations for CO and NO_x, however this boiler has no add-on control device. Potential pre-control emissions of all pollutants are less than 100

percent of the major source threshold.

CAM provisions are not applicable.

Paper Machine #11 Paper Machine #11 is not subject to any pollutant specific emission

limitation.

CAM provisions are not applicable.

Paper Machine #11 The room heaters at the Camas Mill are not subject to any pollutant Heater / Beater Room specific emission limitation.

CAM provisions are not applicable.

Converting Process Paper converting processes at the Camas Mill are subject to the general

process unit PM emission limit in SWCAA 400-050. A control device is used to comply with the emission limitation (baghouses). As noted in Section 1.4 of the AOP renewal application, potential pre-control emissions of PM from each emission point is less than 100 percent of the major source

threshold.

CAM provisions are not applicable.

Emergency and Fire Older emergency and fire pump engines at this facility are not subject to Pump Engines emission limitations. Newer emergency and fire pump engines are subject to

emission limitations and may use a control device. Due to limited service restrictions, potential pre-control emissions are less than 100 percent of the

major source threshold.

CAM provisions are not applicable.

Permit No. SW20-24-R0-A

Heater

III. INSIGNIFICANT EMISSION UNIT IDENTIFICATION

In accordance with WAC 173-401-530, an emission unit or activity is considered insignificant if:

- The emission unit or activity generates only fugitive emissions and is not subject to applicable requirements other than generally applicable requirements of the state implementation plan. [WAC 173-401-530(1)(d)]
- Actual emissions of all regulated air pollutants from an emission unit or activity are less than the emission thresholds established in WAC 173-401-530(4).
- The emission unit or activity is listed as categorically exempt in WAC 173-401-532.
- The emission unit or activity is listed in WAC 173-401-533 and its size or production rate based on maximum rated capacity is below the specified level.

Identified insignificant emission units at this facility are listed in the table below.

Process	IEU Name/Description	Designation Basis
General Facility	Roads & traffic activities.	WAC 401-530(1)(d)
	Process water chlorination.	WAC 401-530(1)(d)
	Effluent treatment ditches & aeration/settling basins.	WAC 401-530(1)(d)
	Secondary solids: stabilization with lime, loading, transport and placement in landfill.	WAC 401-530(1)(d)
	Waste fiber conveyors & landfill.	WAC 401-530(1)(d)
	Cleaning and sweeping of streets and paved surfaces.	WAC 401-532(35)
	Flares used to indicate danger to the public.	WAC 401-532(44)
	General vehicle maintenance including vehicle exhaust from repair facilities.	WAC 401-532(45)
	Repair and maintenance activities not involving installation of an emission unit and not increasing potential emissions of a regulated air pollutant.	WAC 401-532(74)
	Operation, loading and unloading of #1 or #2 diesel fuel storage tanks, ten thousand gallons capacity or less, with lids or other appropriate closure.	WAC 401-533(2)(c)
	Operation, loading and unloading of liquefied petroleum gas (LPG) storage tanks, vessel capacity under forty thousand gallons.	WAC 401-533(2)(d)
	Space heaters and hot water heaters using natural gas and generating less than five million Btu/hr each.	WAC 401-533(2)(r)
	93% sulfuric acid tank for wastewater pH control.	WAC 401-533(2)(s)
	Boiler feedwater testing and analytical laboratory operations and equipment including fume hoods and vacuum pumps.	WAC 401-533(3)(c)

Process	IEU Name/Description	Designation Basis
	 Solvent cleaners (19 units) where: The unit does not use solvents listed in chapter 173-460 WAC, The air-vapor interface of the unit is not more than ten square feet, and The solvent used in the unit has a true vapor pressure of not more than 30 mm Hg at 68 degrees Fahrenheit. 	WAC 401-530(4)
	Welding using not more than one ton per day of welding rod.	WAC 401-533(2)(i)
	Batch solvent distillation not greater than fifty-five gallons batch capacity.	WAC 401-533(2)(o)
	Cleaning and stripping activities and equipment using solutions having less than one percent VOCs by weight. On metallic substrates, acid solutions are not considered for listing as insignificant.	WAC 401 533(2)(z)
Hog Fuel Handling	Wood chip, sawdust and hog fuel; receiving, unloading, storage, handling and delivery to pulping processes.	WAC 401-530(1)(d)
Papermaking	Repulper – Outside	WAC 401-532(98)
	Repulper – Halsey	WAC 401-532(98)
	Repulper – PM9	WAC 401-532(98)
	Repulper – PM20 Winder	WAC 401-532(98)
	Stock cleaning and pressurized pulp washing.	WAC 401-532(110)
	Air make up, #11 machine room.	WAC 401-533(2)(e)
	Paper testing and analytical laboratory operations and equipment including fume hoods and vacuum pumps.	WAC 401-533(3)(c)
Paper Converting	Hot melt adhesive application with no VOCs in the adhesive formulation.	WAC 401-532(37)

IV. EXPLANATION OF SELECTED PERMIT PROVISIONS AND GENERAL TERMS AND CONDITIONS

P12. Unavoidable Excess Emissions

SWCAA 400-107

SWCAA 400-107 establishes criteria and procedures for determining when excess emissions are considered unavoidable. Emissions that meet the requirements to be classified as unavoidable are still considered excess emissions and are reportable but are excused and not subject to penalty. Notification of excess emissions is required as soon as possible and shall occur no later than 48 hours after the excess emissions event. Excess emissions due to startup or shutdown conditions are considered unavoidable if the Permittee adequately demonstrates the excess emissions could not have been prevented through careful planning and design. Upset excess emissions are considered unavoidable if the Permittee adequately

demonstrates the upset event was not caused by poor or inadequate design, operation, maintenance, or other reasonably preventable condition, and the Permittee takes appropriate corrective action that minimizes emissions during the event, taking into account the total emissions impact of that corrective action.

G2. Chemical Accident Prevention Program

40 CFR 68

None of the processes at the facility currently store or handle affected substances in quantities large enough to trigger applicability of the provisions in 40 CFR 68. However, the regulation has been included in the general terms of the permit in order to address future operations that may store or handle substances that are subject to the regulation.

G8. Permit Renewal Application

WAC 173-401-710(1)

An Air Operating Permit has an effective term of 5 years from the date of final issuance. Pursuant to WAC 173-401-710(1), the permit specifies a date by which a renewal application is required to be submitted to SWCAA.

A preliminary renewal application for this facility must be submitted no later than 12 months prior to permit expiration. A complete renewal application must be received no later than 6 months prior to permit expiration. Early submittal of a preliminary application is intended to provide SWCAA with the opportunity to review the application for completeness and allow the Permittee sufficient time to amend the application, if necessary, prior to the final submission date.

SWCAA 400-036

G13. Portable Sources

SWCAA 400-110(6)

SWCAA 400-110(6) establishes procedures for approving the operation of portable sources of air emissions that locate temporarily at project sites. These requirements are general standards, and apply to all portable sources of air contaminants. Equipment commonly subject to these conditions include emergency generators, engine-powered pumps, rock crushers, concrete batch plants, and hot mix asphalt plants that operate for a short time period at a site to fulfill the needs of a specific contract. Portable sources exempt from registration under SWCAA 400-101 are also exempt from SWCAA 400-110 and not subject to the portable source requirements.

WAC 173-400-117, WAC 173-400-720 WAC 173-460 (Effective 8/21/1998) SWCAA 400-109, SWCAA 400-110

G14. New Source Review

SWCAA 400-820

Construction or modification of an air pollution source is subject to review to ensure that applicable emission standards are met, and appropriate control technology is employed. The program under which a new source or modification is reviewed depends on the type and quantity of potential air emissions associated with the project. New sources or modifications meeting the definition of a 'major stationary source' and located in attainment or unclassified areas are subject to review under the Prevention of Significant Deterioration (PSD) program administered by the Department of Ecology. New sources or modifications meeting the definition of a 'major stationary source' and located in a nonattainment area and minor (area) sources are subject to review under SWCAA's new source review program. New sources or modification of existing sources that increase the emission of toxic air pollutants are subject to review

under SWCAA's toxic air pollutant program, which implements the February 14, 1994 version of WAC 173-460.

V. EXPLANATION OF OPERATING TERMS AND CONDITIONS

Reg 1-8

General Standards for Maximum Emissions

SWCAA 400-040

Req 1 through Req 8 incorporate general maximum emission standards for various air contaminants established in SWCAA 400-040. These standards apply to all emission units at the facility, both EU and IEU. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 6 prohibits emissions of a gas containing in excess of 1,000 ppm (@ 7% O₂) of SO₂ from any emission unit. The 1,000 ppm SO₂ emission limit cannot be exceeded if Georgia-Pacific burns approved fuels based on stoichiometric analysis and sulfur content of the fuels, and source testing data (natural gas, diesel fuel, wastewater treatment plant sludge). The highest SO₂ emission concentration would result from the combustion of the fuel with the highest sulfur content. EPA defines pipeline natural gas as having a sulfur content below 0.5 grains per 100 scf. The maximum concentration of SO₂ that can be produced from combusting natural gas, assuming 0.5gr/100scf sulfur content is show below.

$$\frac{0.005 \text{gr}}{scf} * \frac{11 \text{bS}}{7000 \text{ gr}} * \frac{scf}{1,020 \text{Btu}} * \frac{10^6 \text{Btu}}{\text{MMBTU}} * \frac{1 \text{MMBtu}}{8710 \text{dscf}} * \frac{1 \text{IbmoleSO2}}{32.065 \text{lbs}} * \frac{379.3 \text{dscfSO2}}{1 \text{bmoleSO2}} * \frac{20.9\%}{20.9\% - 7\%} = 1.43 \text{ PPM SO2@7\%O2}$$

A source test performed September 1, 2015 by Horizon Engineering measured an average SO₂ concentration of 13.43ppm at Power Boiler #3. The boiler was firing a combination of biomass/wastewater treatment solids and natural gas with approximately 90% of the heat content provided by the solids. Natural gas is a relatively small contributor to SO₂ emissions; therefore this test reflects the worst case scenario for SO₂ emissions. It is reasonable to conclude based on this data that Georgia-Pacific will not exceed the emission limit.

Req 7 prohibits the installation or use of any means to conceal or mask an emission which would otherwise cause a violation. The Permittee does not operate any equipment capable of concealing or masking emissions, so monitoring is limited to compliance certification by the responsible official.

Req 9

Emission Standards for Combustion and Incineration Units

SWCAA 400-050

Req 9 incorporates particulate matter emission limit for combustion or incineration units established in SWCAA 400-050(1). This requirement applies to all combustion and incineration units at the facility, both EUs and IEUs. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for affected IEUs except those specifically identified by the underlying requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 10

Emission Standards for General Process Units

SWCAA 400-060

Req 10 incorporates a particulate matter emission limit for general process units that applies to all general process units at the facility, both EUs and IEUs. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for affected IEUs except those specifically identified by the underlying requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 11

Abrasive Blasting

SWCAA 400-070(8) *Local*

Req 11 incorporates a general requirement for abrasive blasting operations at the plant site. This requirement applies to all emission units at the facility, both EU and IEU. The rule provision does not contain requirement specific monitoring requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 12-20 Power Boiler #3 Emission Limits 40 CFR 60.44b(d)

PSD 88-3 Mod 2 / Order 88-360 Mod 2 Cond 26-31

Power Boiler #3 is subject to a New Source Review approval order (PSD 88-3 Mod 2 / Order 88-360 Mod 2) as well as the NSPS for Industrial-Commercial Steam Generating Units (40 CFR 60 Subpart Db).

Req 12 establishes a NO_X emission limit for Power Boiler #3 of 0.25 lb/MMBtu heat input (30-day rolling average). The limit streamlines two separate underlying emission limits. 40 CFR 44b(d) establishes a limit of 0.30 lb/MMBtu (30-day rolling average). PSD 88-3 Mod 2 / Order 88-360 Mod 2 Condition 29 establishes a limit of 0.25 lb/MMBtu (30-day rolling average). Req 13 imposes the more stringent of the two limits.

Req 13-17 and 19 establish annual criteria pollutant emission limits for Power Boiler #3. These limits are taken directly from PSD 88-3 Mod 2 / Order 88-360 Mod 2. The approval order identifies the limit for CO as BACT and the limit for VOC as LAER.

Req 18 establishes a filterable PM emission limit for Power Boiler #3 of 0.10 lb/million Btu heat input. This limit is taken directly from 40 CFR 60.43b(c)(1).

Req 20 establishes a visible emissions limit for Power Boiler #3 of an average of 20% opacity in any 6-minute period. The limit streamlines two separate underlying limits. 40 CFR 60.43b(f) establishes a limit of 20% opacity (6-minute average) with an exception for one 6-minute period per hour of \leq 27% opacity. PSD 88-3 Mod 2 / Order 88-360 Mod 2 Condition 27 establishes a limit of 20% opacity (6-minute average) with no exception periods. Req 19 imposes the more stringent of the two limits.

Req 21-22

40 CFR 60.44b(d)

Power Boiler #3 Operational Requirements PSD 88-3 Mod 2 / Order 88-360 Mod 2 Cond 32, 34 Req 21 limits the inlet temperature of gases entering the Power Boiler #3 ESP. This limit is taken directly from PSD 88-3 Mod 2 / Order 88-360 Mod 2 Condition 32. The intent of the limit is to minimize the emission of metallic compounds from wood combustion. Operational information indicates large portions of the metallic compounds condense at or below 500°F. In Orders 88-360 and PSD-88-3, Ecology established operation of Power Boiler #3 at a level below 500°F as BACT for trace metals.

Req 22 requires Power Boiler #3 to be equipped with sampling ports and platforms after the final pollution control device that meet the requirements of 40 CFR·60 Appendix A Method 1. This requirement is taken directly from PSD 88-3 Mod 2 / Order 88-360 Mod 2 Condition 34 and is intended to facilitate periodic emission testing of the unit.

Req 23

Power Boiler #3 Operational Requirements

40 CFR 61.52(b)

Req 23 establishes a mercury emission limit for Power Boiler #3 ESP. This limit is taken from 40 CFR 61 Subpart E. Power Boiler #3 is subject to Subpart E whenever the unit combusts wastewater treatment plant sludge. Subpart E is specifically applicable to any unit that dries or combusts treatment plant sludge. It is not a general incinerator rule and energy recovery does not exempt affected units.

Req 24-25

40 CFR 63.11223(a)

Power Boiler #3 Subpart JJJJJJ Requirements

Subpart JJJJJJ Table 2

Req 24 requires the permittee to conduct performance tune-ups of Power Boiler #3 at once every 60 months. The tune-up requirement is a work practice mandated by 40 CFR 63 Subpart JJJJJJ for wood fired boilers at area sources of HAP that are equipped with oxygen trim systems.

Req 25 requires the permittee to minimize startup and shutdown periods for Power Boiler #3 following manufacturer's recommended procedures. This is an operational requirement taken from Subpart JJJJJJ.

Req 26-33

Power Boiler #5 Emission Limits

Order 1147-AQ04 Mod 1 Cond 1

Power Boiler #5 is subject to a New Source Review approval order (Order 1147-AQ04).

Req 26 establishes a NO_X emission limit for Power Boiler #5 of 99.2 lb/hr (24-hr average). The limit is taken from Order 1147-AQ04 Mod 1 Condition 1.5.

Req 28 establishes a CO emission limit for Power Boiler #5 of 0.19 lb/MMBtu (30-day rolling average). The limit is taken from Order 1147-AQ04 Mod 1 Condition 1.7.

Req 31 establishes a filterable PM10 emission limit for Power Boiler #5 of 0.0164 gr/dscf @ 8% O2 (1-hr average). The limit is taken from Order 1147-AQ04 Mod 1 Condition 1.1.

Req 27, 29-30 and 32 establish annual criteria pollutant emission limits for Power Boiler #5. These limits are taken from Order 1147-AQ04 Mod 1 Conditions 1.2, 1.6, 1.8 and 1.9.

Req 33 establishes a visible emissions limit for Power Boiler #5 of 20% opacity, not to be exceeded for more than 3 minutes in any 60-minute period. The limit is taken from Order 1147-AQ04 Mod 1 Condition 1.3.

Reg 34-35

Power Boiler #5 Operational Requirements

Order 1147-AQ04 Mod 1 Cond 1

Req 34 restricts Power Boiler #5 fuel to natural gas only. The fuel restriction is a BACT requirement taken from Order 1147-AQ04 Mod 1 Condition 1.4.

Req 35 requires flue gas recirculation (FGR) to be operated continuously whenever Power Boiler #5 fires natural gas. The operating requirement is taken from Order 1147-AQ04 Mod 1 Condition 1.5. At this point, Power Boiler #5 only fires natural gas so FGR is effectively required at all times.

Req 36

PSD 88-3 Mod 2 / Order 88-360 Mod 2 Cond 38

Operation and Maintenance Manual

Order 1147-AQ04 Mod 1 Cond 4

Req 36 requires the permittee to maintain and follow an Operation and Maintenance manual for Power Boilers #3 and #5. This requirement is taken directly from the approval orders for each boiler. The manual details general operating and maintenance procedures designed to keep the boilers operating properly and minimize emissions.

40 CFR 60.4231, 40 CFR 60.4233

Req 38-39, 44, 48, 49

40 CFR 60.4234, 40 CFR 60.4243

Subpart JJJJ Emission Standards

SWCAA 400-115

Req 38-39 and 49 require the permittee to operate and maintain affected engines and control devices according to manufacturer's emission-related instructions.

Req 44 and 48 requires the permittee to operate and maintain affected engines to achieve applicable emission standards over the life of the engine.

The above requirements are taken from 40 CFR 60 Subpart JJJJ. Subpart JJJJ emission standards are applicable to the Will II, Unitizer and Dock Warehouse Pump engines.

Req 40-43, 47

40 CFR 60.4202, 40 CFR 60.4205

Subpart IIII Emission Standards

40 CFR 60.4206, 40 CFR 60.4211 SWCAA 400-115

Req 40-43 and 47 require the permittee to operate and maintain affected engines and control devices according to manufacturer's emission-related instructions. These requirements are directly taken from 40 CFR 60 Subpart IIII. Subpart IIII emission standards are applicable to the Skid-Mounted Fire Pump and Riverbank Fire Pump Generator engines.

Req 45

40 CFR 60.4243(e)

Emergency Engines – Alternative Fuel

SWCAA 400-115

Req 45 incorporates an NSPS provision that allows the use of propane as an alternative to natural gas in engines that are only certified to natural gas emission standards. This allowance is taken directly from 40 CFR 60 Subpart JJJJ. The allowance is applicable to the Will II and Unitizer emergency engines.

Req 37, 46

40 CFR 60.4207(b), 40 CFR 60.4235

Engines – Fuel Standards

SWCAA 400-115

Req 37 and 46 require the permittee to use fuel that meets identified fuel specifications. These requirements are taken directly from 40 CFR 60 Subpart IIII and 40 CFR 60 Subpart JJJJ. Gasoline fuel must meet the sulfur limit in 40 CFR 80.195. Diesel fuel must meet the requirements of 40 CFR 80.510(b) for non-road diesel. These standards are applicable to the Dock Warehouse Pump, Skid-Mounted Fire Pump and Riverbank Fire Pump Generator emergency engines.

Req 50 Emergency Engines - Hour Meter 40 CFR 60.4209(a), 40 CFR 60.4237

40 CFR 63.6625(f)

SWCAA 400-075, 400-115

Req 50 incorporates MACT (40 CFR 63 Subpart ZZZZ) and NSPS (40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ) requirements to equip emergency engines with a non-resettable hour meter. The requirement is taken directly from the applicable federal regulations. The purpose of the hour meter is to provide a reliable record of unit operation that can be used to demonstrate compliance with applicable operational limits. This requirement is applicable to all emergency engines at the facility.

Req 51

40 CFR 63.6625(h), Table 2d

Emergency Engines – Idle and Startup

SWCAA 400-075

Req 51 requires the permittee to minimize the time each emergency engine spends at idle and in startup. This requirement is taken directly from 40 CFR 63 Subpart ZZZZ. This requirement is applicable to the Bar Screen, Woodyard Grit Pump and Converting emergency engines.

Req 52

40 CFR 63.6605(a)

Subpart ZZZZ Emission Standards

SWCAA 400-075

Req 52 requires the permittee to keep each affected engine in compliance with applicable emission and operating limitations at all times. The requirement is taken directly from 40 CFR 63 Subpart ZZZZ. This requirement is applicable to the Bar Screen, Woodyard Grit Pump and Converting emergency engines.

Req 53-54

40 CFR 63.6605(b), 40 CFR 63.6625(e)

40 CFR 63.6640(a), Table 6

Emergency Engines – O/M Requirements

SWCAA 400-075

Req 53-54 require the permittee to operate and maintain affected emergency engines in a manner consistent with good air pollution control practice to minimize emissions. This requirement is taken directly from 40 CFR 63 Subpart ZZZZ. This requirement is applicable to the Bar Screen, Woodyard Grit Pump and Converting emergency engines.

40 CFR 63.6603, Table 2d

Req 55-56

40 CFR 63.6625(i) & (j) 40 CFR 63.6640(a)

Emergency Engines – Maintenance Requirements

SWCAA 400-075

Req 55-56 require the permittee to conduct basic maintenance for affected emergency engines in accordance with the schedule in Table 2d of 40 CFR 63 Subpart ZZZZ. These requirements are taken directly from 40 CFR 63 Subpart ZZZZ. This requirement is applicable to the Bar Screen, Woodyard Grit Pump and Converting emergency engines.

40 CFR 60.4211(f)

40 CFR 60.4243(d)

Req 57-59

40 CFR 63.6640(f)

Emergency Engines – Operational Restrictions

SWCAA 400-075, 400-115

Req 57-59 incorporate MACT (40 CFR 63 Subpart ZZZZ) and NSPS (40 CFR 60 Subpart IIII, 40 CFR 60

Subpart JJJJ) limitations on emergency engine operation. The limitations allow up to 100 hours per year of operation for maintenance checks and emergency demand response and up to 50 hours per year of nonemergency operation. The wording of the limitations is different from one regulation to another, so SWCAA has chosen not to streamline the requirements into a single provision. All emergency engines at the facility are subject to operational restriction.

Req 60-65

Boiler #6 Operational Requirements

ADP 20-3413 Cond 1-2, 5, 7-8

Req 60 establishes limits for criteria air pollutants NO_x, CO, PM, VOCs, and SO₂. The limits are taken from ADP 20-3413 Condition 1.

Req 61 establishes a visible emission limit for Boiler #6 of 0% opacity, not to be exceeded for more than 3 minutes in any 60-minute period. This limit is taken from ADP 20-3413 Condition 2.

Req 62 establishes that Boiler #6 may only be fired on natural gas as proposed by applicant in ADP 20-3413. This condition is taken from ADP 20-3413 condition 7.

Req 63 requires that exhaust from Boiler #6 be discharged vertically. This condition is taken from ADP 20-3413 condition 9.

Req 64 requires that Boiler #6 be maintained in accordance with ADP 20-3413 and that the facility may be required to cease operations if the permit conditions cannot be met. This condition is taken from ADP 20-3413 condition 6.

Req 65 requires that all pollution control devices must be in use and operated according to permit conditions in ADP 20-3413 any time Boiler #6 is operating. This condition is taken from ADP 20-3413 condition 5.

VI. EXPLANATION OF FUTURE REQUIREMENTS

No future requirements identified.

VII. EXPLANATION OF MONITORING TERMS AND CONDITIONS

The monitoring terms listed below incorporate formal monitoring taken from applicable regulations as well as 'gap-fill' monitoring designed to assure compliance for requirements that do not contain formal monitoring. For applicable requirements that have one-time applicability or apply primarily to equipment design or installation, SWCAA relies upon compliance certification by the responsible official to provide compliance assurance.

General

M1. Visible Emissions Monitoring

Reg 1, 33, 61

This monitoring section is applicable to requirements drawn from SWCAA 400-040 and ADP 20-3413. These requirements limit visible emissions, but do not directly establish any specific regime of monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

The monitoring scheme specified by this requirement is designed to provide periodic assurance of compliance and identify potential visible emission violations in a timely fashion, prompting corrective action when necessary. A monthly inspection frequency is considered adequate to assure compliance with applicable opacity requirements.

General

M2. Fugitive Emissions/Particulate Matter Monitoring

Reg 2-3, 8-11

This monitoring section is applicable to general requirements drawn from SWCAA 400-040, 400-050 and 400-060. These requirements do not establish a specific regime of monitoring or recordkeeping so SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

This monitoring requirement is designed to assure compliance through periodic visual inspections of the facility and prompt corrective action. A lack of visual emissions or material accumulation is considered indicative of compliance with the applicable emission limits and work practices. If visual emissions or evidence of a process upset is observed, corrective action requirements result in the affected unit being promptly repaired or taken out of operation.

General

M3. Complaint Monitoring

Reg 4-5

This monitoring section is applicable to general requirements drawn from SWCAA 400-040. These requirements do not directly establish any specific regime of monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

The affected requirements primarily involve unacceptable impacts on neighboring properties and/or surrounding populations. While many of the prohibited impacts might be observed from the facility itself, compliance with all provisions can not be assured by onsite observations alone (e.g., offsite odor impact). Therefore, this monitoring scheme relies on input from affected parties. The monitoring is designed to assure compliance through prompt complaint response and corrective action.

General

M4. Compliance Certification

Req 7, 22, 25, 35-36, 62-65

This monitoring section is applicable to requirements cited in this monitoring section are drawn from SWCAA 400-040, PSD 88-3 Mod 2/Order 88-360 Mod 2 and Order 1147-AQ04 Mod1. The applicable requirements do not have a specific regime of monitoring or recordkeeping. SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

Applicable requirements cited in this section are divided into two broad categories, equipment configuration and general work practice requirements. The equipment configuration requirements apply to fundamental equipment characteristics that do not change once installed (no masking, sampling ports/platforms). Hence, periodic certification that no changes have been made to equipment function or design is an appropriate means of assuring compliance for these requirements. The general work practice requirements (flue gas recirculation, O&M manual) are primarily a function of worker training and process management. Compliance with these requirements is best ensured through active oversight by facility managers. The due diligence associated with periodic compliance certification will serve to confirm compliance.

Power Boiler #3

M5. Operations Monitoring

Req 6, 14-16, 19, 21, 23

This monitoring section is applicable to requirements drawn from PSD 88-3 Mod 2 / Order 88-360 Mod 2. Monitoring provisions require the Permittee to record primary operational parameters for Power Boiler #3 and maintain records of CMS downtime, boiler malfunctions, and maintenance and repair activities. Some of the monitoring provisions are not directly cited in the underlying order and have been implemented via gap-filling. The recorded information is to be used to calculate emissions and demonstrate proper operation of the boiler.

Power Boiler #3

M6. Continuous Emission Monitoring

Reg 12-13, 20

This monitoring section is applicable to requirements drawn from PSD 88-3 Mod 2 / Order 88-360 Mod 2 Conditions 27 and 29, which require the Permittee to monitor NO_X and visible emissions from Power Boiler #3 using continuous emission monitoring systems. Monitoring systems are to be operated at all times during boiler operation.

Emissions of NO_X from Power Boiler #3 are calculated from recorded CEM data on an hourly basis. Compliance with annual limits is demonstrated by summing calculated monthly emission rates on a rolling 12-month basis.

Compliance with the visible emission limit is demonstrated based on recorded one-minute average opacity data.

Power Boiler #3

M7. PM/Opacity CAM

Reg 17-18, 21

This monitoring section is applicable to an operational restriction drawn from PSD 88-3 Mod 2 / Order 88-360 Mod 2 Condition 32. Condition 32 identifies ESP inlet temperature as a continuous indicator of compliance with PM and opacity limits. A maximum limit on ESP inlet temperature is established with the intent of minimizing PM and heavy metal emissions. The requirement does not identify any type of continuous monitoring. Consequently, a monitoring regime has been implemented to monitor/record ESP inlet temperature on an hourly basis and provide for corrective action in cases where maximum inlet temperature is exceeded.

Power Boiler #3

M8. Emission Testing

Reg 6, 14-19, 23

This monitoring section is applicable to emission limits drawn from PSD 88-3 Mod 2 / Order 88-360 and 40 CFR 61 Subpart E and the general SO₂ limit in SWCAA 400-040(6). The required emission testing is intended to periodically quantify emissions of CO, VOC, SO₂, PM and mercury from Power Boiler #3 and assure compliance with applicable limits.

PSD 88-3 Mod 2 / Order 88-360 requires only initial testing for CO, VOC and SO₂. Given the nature of the unit and the potential quantity of emissions, once only testing is not deemed sufficient to assure compliance on an ongoing basis. SWCAA has determined emission testing for CO, VOC and SO₂ at least once every five years to be sufficient to assure compliance and has established a corresponding requirement in Section M8.

PSD 88-3 Mod 2 / Order 88-360 requires monthly emission testing for PM, but allows the use of an alternative testing schedule approved by the permitting authority. PM testing is required to demonstrate compliance with applicable limits when Power Boiler #3 is combusting hog fuel. At the current time, Power Boiler #3 is only combusting natural gas and is not likely to combust hog fuel in the near future. Georgia-Pacific has proposed, and SWCAA has approved, an alternative test schedule that requires testing for PM within 30 days of recommencing hog fuel combustion and monthly thereafter. If test results indicate emissions are less than 75% of the emission limit for six consecutive months, testing frequency may be reduced to once every three months (quarterly).

40 CFR 61 Subpart E requires any unit that dries or combusts wastewater treatment plant sludge to conduct initial emission testing for mercury using the procedures in either 40 CFR 61.53 or 40 CFR 61.54. Sources with tested mercury emissions less than half of the applicable emission standard are not required to perform further testing. Sources with tested mercury emissions greater than half of the applicable emission standard are required to perform periodic testing at least once per year. Power Boiler #3 is not currently in operation and may not combust sludge if/when it is put back into service. Therefore, Section M8 requires mercury testing within 90 days of combusting sludge and annually thereafter rather than specifying specific test dates.

Emissions of CO, VOC, SO₂, PM and mercury from Power Boiler #3 are calculated for each calendar month based on recorded operation and emission factors derived from the most recent emission test results. All filterable PM emissions are assumed to be PM₁₀. Compliance with annual limits are demonstrated by summing calculated monthly emission rates on a rolling 12-month basis.

Power Boiler #3

M9. Performance Tune-up

Reg 24

This monitoring section incorporates the performance tune-up procedure for existing wood fired boilers from 40 CFR 63 Subpart JJJJJJ (40 CFR 63.11223(b)). Power Boiler #3 is equipped with an oxygen trim system so tune-ups are to be conducted every 60 months. The purpose of the tune-up is to ensure proper operation of Power Boiler #3 and optimize emissions of CO.

Power Boiler #5

M10. Operations Monitoring

Req 6, 29-30, 32, 34

This monitoring section is applicable to requirements drawn from Order 1147-AQ04. Monitoring provisions require the Permittee to record primary operational parameters for Power Boiler #5 and maintain records of CMS downtime and maintenance and repair activities. Some of the monitoring provisions are not directly cited in the underlying order and have been implemented via gap-filling. The recorded information is to be used to calculate emissions and demonstrate proper operation of the boiler.

Power Boiler #5

M11. Continuous Emission Monitoring

Req 26-27

This monitoring section is applicable to requirements drawn from Order 1147-AQ04 Mod 1 Condition 1, which requires the Permittee to monitor NO_X emissions from Power Boiler #5 using a continuous emission monitoring system. Monitoring systems are to be operated at all times during boiler operation.

Emissions of NO_X from Power Boiler #5 are calculated from recorded CEM data on an hourly basis. Compliance with annual limits is demonstrated by summing calculated monthly emission rates on a rolling 12-month basis.

Power Boiler #5

M12. Emission Testing

Req 28-32

This monitoring section is applicable to emission limits drawn from Order 1147-AQ04 Mod 1 Conditions 1 and 2. The required emission testing is intended to periodically quantify emissions of CO, VOC and PM from Power Boiler #5 and assure compliance with applicable limits.

Order 1147-AQ04 identifies reference test methods for CO, VOC and SO₂ (Condition 1) and cites the need for emission testing to demonstrate that PSD review is not required for affected pollutants. Emission testing for PM is required annually, but no testing frequency is cited for CO and VOC testing. Given the quantity of potential emissions and the use of CO emissions as an indicator of proper combustion, SWCAA has determined that annual emission testing for CO and VOC is appropriate to assure compliance and has established a corresponding requirement in Section M12.

Emissions of CO, VOC and PM from Power Boiler #5 are calculated for each calendar month based on recorded operation and emission factors derived from the most recent emission test results. All filterable PM emissions are assumed to be PM_{10} . Compliance with annual limits are demonstrated by summing calculated monthly emission rates on a rolling 12-month basis.

Paper Machine #11

M13. Operations Monitoring

Paper Machine #11 is not subject to any specific emission limits or operational requirements, but is subject to general requirements and emission inventory reporting. SWCAA has gap-filled basic monitoring provisions for paper production, fuel consumption and maintenance activity. The intent of the monitoring provisions is to quantify air emissions and assure proper maintenance/operation of affected equipment.

Emissions from Paper Machine #11 are calculated from recorded paper production and a compilation of emission factors developed from company information, historic stack tests, and documented emission factors.

Paper Machine #11 Heater / Beater Room Heater

M14. Operations Monitoring

The Paper Machine #11 and Beater Room heaters are not subject to any unit specific emission limits or operational requirements, but are subject to general requirements and emission inventory reporting. SWCAA has gap-filled basic monitoring provisions for fuel consumption and maintenance activity. The intent of the monitoring provisions is to quantify air emissions and assure proper maintenance/operation of affected equipment.

Emissions from heater operation are calculated from recorded fuel consumption and emission factors from the manufacturer and EPA AP-42.

Converting Process

M15. Operations Monitoring

Paper converting operations are not subject to any unit specific emission limits or operational requirements, but are subject to general requirements and emission inventory reporting. SWCAA has gap-filled basic monitoring provisions for hours of operation and maintenance activity. The intent of the monitoring

provisions is to quantify air emissions and assure proper maintenance/operation of affected equipment.

Emissions from baghouse operation are calculated from recorded operation and emission factors derived from emission test results or filter manufacturer's specifications.

Core Manufacturing

M16. Operations Monitoring

Core manufacturing operations were subject to the requirements of 40 CFR 63, Subpart JJJJ when the facility was a major source of HAP. The facility is now an area source of HAP so those requirements are no longer applicable. At this time, core manufacturing operations are only subject to general requirements and emission inventory reporting. SWCAA has gap-filled basic monitoring provisions for coating consumption and maintenance activity. The intent of the monitoring provisions is to quantify air emissions and assure proper maintenance/operation of affected equipment.

Emissions from core manufacturing operations are calculated from recorded coating material usage and the VOC/HAP/TAP content of each coating material using mass balance methodology.

Emergency Engines

M17. Operations Monitoring

Req 37-59

This monitoring section is applicable to emission limits, operational limits and work practice requirements drawn from 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII and 40 CFR 60 Subpart JJJJ. Each of the subparts requires sources to record operational information for each affected engine. The required information is similar for each regulation, but not identical. All required recordkeeping from the regulations is cited in Section M17. Those requirements that are not applicable to all of the engines are annotated with unit specific references.

Emissions from emergency engine operation are calculated based on recorded operation and applicable emission factors. Emission factors are taken from manufacturer's data or EPA AP-42 Chapters 3.3 and 3.4.

Greenhouse Gas

M18. Emission Monitoring

WAC 173-441 requires owners and operators to quantify and report emissions of greenhouse gases from applicable source categories if actual emissions from their facility are ten thousand metric tons CO₂e or more per year. Annual greenhouse gas emissions from this facility are greater than ten thousand tons so the facility is subject to the reporting program. The reporting program is administered by Ecology, and all required reports are to be submitted directly to that agency. SWCAA generally receives copies of each report, but report review and approval of calculation methodology is performed by Ecology. This is a local only condition.

Boiler #6

M19. Emission Testing

Rea 60

This testing section is applicable to emission limits drawn from ADP 20-3413. Emission testing is required to demonstrate that the boiler is meeting emission limits for NO_x and CO. Emission testing shall be conducted after initial operation and every five years afterwards.

Emissions of CO, NOx, SO₂, VOC and PM from Boiler #6 must be calculated for each calendar month based on recorded fuel use and applicable emission factors. Compliance with annual limits must be demonstrated by summing calculated monthly emission rates on a rolling 12-month basis.

Boiler #6

M20. Emission Monitoring

Reg 60

This monitoring section is applicable to requirements drawn from ADP 20-3413. Boiler #6 must be emission monitored on an annual cycle, no later than the end of the calendar month in which the initial emission testing was performed. Emission monitoring is not required in any year in which emission testing is performed. Emission monitoring results must be recorded and reported to SWCAA in writing within 15 days of completion. Annual monitoring is part of an ongoing operation and maintenance program and is not for demonstrating compliance. If the results of emission monitoring indicate values higher than the emission limit corrective action is required but the monitoring results are not considered a permit deviation.

Boiler #6

M21. Operations Monitoring

Req 6, 60

This monitoring section is applicable to emission limits drawn from ADP 20-3413 which requires the permittee to record natural gas usage, hours of operation, startup/shutdowns, and maintenance activities for Boiler #6.

VIII. EXPLANATION OF RECORDKEEPING TERMS AND CONDITIONS

General Recordkeeping Requirements

The requirements cited in this recordkeeping section are drawn from provisions in WAC 173-401-615(2). Recordkeeping requirements have been separated into sub-categories for easier reference.

IX. EXPLANATION OF REPORTING TERMS AND CONDITIONS

R1. Deviations from Permit Conditions

The Permittee is required to promptly report all permit deviations pursuant to WAC 173-401-615(3), SWCAA 400-107 and Order 1147-AQ04 Mod 1. Reporting timelines vary depending on the type of deviation involved.

The general timeline for deviation reporting (within 30 days following the end of the month of discovery) is cited in WAC 173-401-615(3)(b). The timeline for reporting if the Permittee wishes to claim excess emissions as unavoidable (within 48 hours of discovery) is defined in SWCAA 400-107. The timeline for deviations that pose a potential threat to human health and safety (within 12 hours of discovery) is taken directly from WAC 173-401-615(3).

In all cases, SWCAA requires submission of a written report with basic information regarding the event. Permit deviations are also to be identified in the subsequent semi-annual report.

R2. Complaint Reports

The Permittee is required to report all complaints to SWCAA within three business days of receipt. This reporting section is based on WAC 173-401-615(3), and SWCAA's definition of "prompt" for reporting of complaints. The intent is to ensure a timely and effective response to complaints by either the facility or SWCAA.

R3. Monthly Reports

This reporting requirement is taken from PSD 88-3 Mod 2 / Order 88-360 Mod 2 and Order 1147-AQ04 Mod 1. The Permittee is required to report CEM data and criteria pollutant emissions from Power Boilers #3 and #5 on a monthly basis. Monthly reports are to include a cumulative summary for the preceding 12-month period. This purpose of this report is to demonstrate with applicable CO and VOC emission limits. Each report must be certified by a responsible official consistent with WAC 173-401-520.

R4. Semi-Annual Reports - General

WAC 173-401-615(3)(a) requires monitoring records and certification to be reported at least semi-annually. The type of data to be reported consists of general monitoring results, operating parameters, and a summary of facilitywide emissions. Each report must be certified by a responsible official consistent with WAC 173-401-520.

The Permittee is also required to submit a list of all deviations from permit conditions that have occurred in the preceding semi-annual period consistent with WAC 173-401-615(3)(a).

R5. Emission Inventory Reports

This reporting requirement is drawn from SWCAA 400-105(1). The Permittee is required to submit an emissions inventory report to SWCAA by March 15th for the previous calendar year. A complete emissions inventory includes quantification of air emissions from all emission units at the facility. SWCAA's Executive Director may extend the submittal date by up to 60 days, pursuant to SWCAA 400-105(1).

R6. Greenhouse Gas Emission Reports

This reporting requirement is taken from WAC 173-441-050(2). The Permittee is required to submit to Ecology an annual report containing the data elements identified in WAC 173-441-050(3). The report shall be submitted electronically in a format specified by Ecology pursuant to WAC 173-441-070 and certified by a designated representative pursuant to 173-441-060(5). This is a local only condition.

The GP Camas Mill is subject to the Washington GHG reporting requirements (WAC 173-441) and the federal GHG reporting requirements (40 CFR Part 98) because GHG emissions from Kraft pulp mill operations are above 10,000 metric tons per year and 25,000 metric tons per year, respectively. The federal GHG reporting requirements are not "applicable requirements" for the purposes of Title V permits.

R7. Annual Compliance Certification

The Permittee is required to report and certify the compliance status of all permit terms and conditions on an annual basis pursuant to SWCAA 401-630(5). Insignificant emission units are not included in this requirement.

Biennial Reports – 40 CFR 63 Subpart JJJJJJ

The Permittee is required to submit a compliance certification for affected units required to conduct a performance tune-up pursuant to 40 CFR 63 Subpart JJJJJJ. Power Boiler #3 is the affected unit for the Subpart JJJJJJ tune-up requirement. A tune-up is required every 60 months so the certification report is also only required once every five years. This requirement is taken directly from 40 CFR 63.11225(b).

X. COMPLIANCE HISTORY

SWCAA has not issued any Field Notices of Correction (FNOC) and/or Field Notices of Violation (FNOV) to Georgia-Pacific during the last five-year period.

XI. TITLE V PERMIT ACTIONS

Current Permitting Action

Administrative Amendment (SW20-24-R0-A)

Request received:

August 27, 2020

Final permit issued:

December 17, 2020

Previous Permitting Action

Renewal Permit (SW20-24-R0)

Application received:

September 6, 2018

Application complete:

October 24, 2018

Application sent to EPA:

October 19, 2018

Draft permit issued: Proposed permit issued: May 22, 2020

July 14, 2020

Final permit issued:

August 13, 2020

Previous Permitting Action 3.

Renewal Permit (Ecology - AOP 000025-6)

Final permit issued:

June 25, 2014

Final permit effective:

July 1, 2014

Permit amended: Permit amended

June 14, 2016 January 29, 2020

XII. APPENDICES

Appendix A Power Boiler #3 – Emission Testing Requirements

Appendix A contains an emission testing protocol to be used when conducting periodic testing of Power Boiler #3. The testing protocol is based on testing requirements from PSD 88-3 Mod 2 / Order 88-360 Mod 2.

Appendix B Power Boiler #5 – Emission Testing Requirements

Appendix B contains an emission testing protocol to be used when conducting periodic testing of Power Boiler #5. The testing protocol is based on testing requirements from Order 1147-AQ04 Mod 1.

Appendix C Boiler #6 – Emission Testing Requirements

Appendix C contains an emission testing protocol to be used when conducting periodic testing of Boiler #6. The testing protocol is based on testing requirements from ADP 20-3413.

Appendix D Boiler #6 – Emission Monitoring Requirements

Appendix D contains an emission monitoring protocol to be used when conducting periodic monitoring of Boiler #6. The monitoring protocol is based on monitoring requirements from ADP 20-3413.