

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Sappi North America, Inc. Cumberland County Westbrook, Maine A-29-70-L-A Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

FINDINGS OF FACT

After review of the Part 70 License amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Sappi North America, Inc.
LICENSE TYPE	Part 70 Significant License Modification
NAICS CODES	3222201
NATURE OF BUSINESS	Coated Paper Manufacturing
FACILITY LOCATION	89 Cumberland Street, Westbrook, Maine

The Westbrook mill of Sappi North America, Inc. (Sappi) is a non-integrated paper mill producing specialty coated papers from purchased paper.

New Source Review (NSR) license A-29-77-7-A (NSR #7), issued 12/7/2023, addressed the relicensing of Boilers #22 and #23 to allow them to operate concurrently with Boiler #21 and included a compliance demonstration with National Ambient Air Quality Standards (NAAQS) and increment standards through submission of an ambient air quality impact analysis pursuant to Condition (3) of NSR license A-29-77-5-A (NSR #5), issued 8/21/2020.

NSR #7 also included the following unrelated changes:

- 1. Permanent shutdown of Boilers #17 and #18 and removal of obsolete requirements due to this change;
- 2. Clarification of Boiler #21's coal-firing capacity; and
- 3. Augmenting PM₁₀ emission limits for Boiler #21 to include condensable particulate matter and establishing emission limits for PM_{2.5} where none previously existed.

¹ Due to changes made as part of the 2020 Restructuring Project, the facility's NAICS Code is being updated from 322121 (Paper Mill) to 322220 (Coated Paper Manufacturing).

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

Sappi has requested that the provisions of NSR #7 be incorporated into their Part 70 license.

New Source Review (NSR) license A-29-77-8-A (NSR #8), issued 12/21/2023, addressed temporary and permanent replacement engines for a failed emergency engine needed for back-up power to critical telecommunication equipment at the site. Sappi has requested that the provisions of this NSR license be incorporated into their Part 70 license. The Department will also address any additional applicable requirements associated with the engines.

In addition, this license amendment makes the following corrections, clarifications, and updates:

- 1. Inclusion of new applicable requirements due to changes to 40 C.F.R. Part 63, Subpart DDDDD;
- 2. Correction of typographical errors in the SO₂ emission limit fields for Boiler #21; and
- 3. Clarification of performance testing frequency required for PM from Boiler #21.

B. Emission Equipment

The following emission units are addressed by this Part 70 License Amendment:

Boilers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel	Manufacture Date	Install Date
Boiler #17	232.7 (199.0 limit)	distillate fuel, #6 fuel oil	1948	1948
Boiler #18	232.7 (199.0 limit)	distillate fuel, #6 fuel oil	1948	1948
Boiler #21	1,074 ^a 397 ^b 597 ^c	biomass, CDD, sludge, coal, distillate fuel, #6 fuel oil	1981	1981
Boiler #22	99.9	natural gas	2019	2020
Boiler #23	42.0	natural gas	2017	2020

^a When firing biomass and coal together.

Boilers #17 and #18 have been permanently shut down and are being removed from this license.

^b When firing only coal.

^c When firing only #6 fuel oil.

Engines

3

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Output (BHP)	Fuel Type	Mfr. Date	Install. Date
Temp Engine #5	0.65	89.6	distillate fuel	2014	12/2021
Engine #6	0.80	84.7	propane	TBD*	2024

^{*} Engine #6 will be either a model year 2023 or 2024.

The following equipment is being removed from the site:

	Max. Heat Input Capacity		Mfr.	Install.
Equipment	(MMBtu/hr)	Fuel Type	Date	Date
Engine #5	2.09	propane	2004	2005

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- · Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- · Kerosene, as defined in ASTM D3699;
- · Biodiesel, as defined in ASTM D6751; or
- · Biodiesel blends, as defined in ASTM D7467.

Records or *Logs* mean either hardcopy or electronic records.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

Sappi has requested incorporation into the Part 70 Air License the relevant terms and conditions of New Source Review (NSR) licenses A-29-77-7-A, issued 12/7/2023, and A-29-77-8-A, issued 12/21/2023, pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115. Sappi has also requested other unrelated but minor corrections of typographical errors and clarifications. Therefore, this license application was considered a Part 70 Significant License Modification and processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

E. History and Project Description

1. NSR #7

Sappi operates a specialty paper coating facility with a power boiler complex for the production of steam and power. In addition to the boiler complex, the facility consists of three offline coaters², paper winding and shipping operations, a Technology Center, and a wastewater treatment plant.

Sappi is licensed to operate Boiler #21 to supply building heat, process steam, facility power, and power for sale to the grid. Boilers #17 and #18 were most recently operated as limited-use boilers historically used as back-up for Boiler #21, but have been permanently shut down and are being removed from the Part 70 License.

NSR #5 was issued on August 21, 2020, and included the installation of two new natural gas-fired boilers (Boilers #22 and #23) to supply process steam and building heat. At the time, Sappi was unsure whether Boilers #22 and #23 would be temporary or permanent installations. Therefore, the Department agreed to postpone requiring a new ambient air quality impact analysis until May 1, 2023, to allow time for Sappi to decide whether these boilers would be made permanent or replaced. This agreement was contingent on the facility's East-Side Boilers (Boilers #22 and #23) not operating concurrently with the West-Side Boilers (Boiler #21 and previously licensed Boilers #17 and #18) except for Transitional Periods, i.e., the time when Sappi is transitioning from one boiler group to the other.

Sappi submitted an updated ambient air quality impact analysis to the Department on April 28, 2023. In addition, Sappi submitted a modification request to relicense Boilers #22 and #23 such that they may operate concurrently with Boiler #21. These changes were addressed in NSR #7, the requirements from which are now being incorporated into the facility's Part 70 license.

2. NSR #8

The previously licensed Engine #5 was an emergency engine associated with a generator used to provide back-up power to critical telecommunications equipment at the site. Engine #5 failed in December 2021. With the Department's approval, Sappi began operating Temporary Engine #5 as a temporary insignificant activity until the permanent replacement engine (Engine #6) could be installed.

Due to supply chain delays, Engine #6 is not expected to be installed until mid-2024, and continued supply chain problems may extend this estimate. Therefore, Sappi proposed to license both Engine #6 and Temporary Engine #5 until such time as Engine #6 can be installed.

² Sappi operates additional coaters that are considered insignificant activities.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

5

BPT for new sources and modifications is based on the demonstration contained in the underlying NSR license that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts. BACT for Boilers #22 and #23 was addressed in NSR #7 and explained in further detail below.

B. Boilers #22 and #23

Boilers #22 and #23 are package boilers with maximum heat inputs of 99.9 MMBtu/hr and 42.0 MMBtu/hr, respectively, firing natural gas. They were installed in 2020. However, in NSR #7 they were relicensed as if they were new emission units to remove the restriction on firing East-Side Boilers (Boilers #22 and #23) concurrently with West-Side Boilers (Boiler #21 and previously licensed Boilers #17 and #18).

Boilers #22 and #23 each exhaust through their own stack, and each stack is at least 70-feet above ground level.

1. BACT

BACT for Boilers #22 and #23 was addressed in NSR #7.

a. Alternative Technologies

Sappi considered several alternative technologies to provide facility heat and process steam as part of their BACT analysis, including the use of hydrogen fuel boilers, solar technologies, and industrial heat pumps.

The Department found that the use of these alternative technologies, instead of installation of Boilers #22 and #23, were not technically feasible and did not represent BACT for this project.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

b. Particulate Matter (PM, PM₁₀, PM_{2.5})

The principal components of the particulate matter emissions from Boilers #22 and #23 include filterable and condensable particulate matter (CPM) from incomplete combustion. Natural gas combustion typically has low emissions of filterable PM. Potential control technologies considered included baghouses, electrostatic precipitators (ESP), wet scrubbers, and multicyclones.

6

The Department found the firing of natural gas and the following emission limits to represent BACT for particulate matter emissions from Boilers #22 and #23:

Units	PM (lb/MMBtu)	PM ₁₀ (lb/MMBtu)	PM _{2.5} (lb/MMBtu)
Boiler #22	0.005	0.005	0.005
Boiler #23	0.005	0.005	0.005

Units	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)
Boiler #22	0.50	0.50	0.50
Boiler #23	0.21	0.21	0.21

These standards apply at all times. Upon request by the Department, compliance with the particulate matter limits shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Methods 5, 201, or 201A for filterable PM and Method 202 for CPM, or other methods as approved by the Department.

Visible emissions from Boilers #22 and #23 shall each not exceed 10% opacity on a six-minute block average basis. Compliance shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department.

c. Sulfur Dioxide (SO₂)

Emissions of SO₂ from Boilers #22 and #23 are attributable to the oxidation of sulfur compounds contained in the fuel. Pollution control options to reduce SO₂ emissions considered include flue gas desulfurization by means of wet scrubbing and firing fuels with an inherently low sulfur content, such as natural gas.

The Department found the use of natural gas, which inherently has a low sulfur content, and the following emission limits to represent BACT for SO₂ emissions from Boilers #22 and #23.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

Units	SO ₂ (lb/MMBtu)	SO ₂ (lb/hr)
Boiler #22	0.001	0.10
Boiler #23	0.001	0.04

These standards apply at all times. Compliance with the SO₂ limit shall be based on monthly recordkeeping of the amount of natural gas fired in Boilers #22 and #23 and the most recent tariff sheet showing the sulfur content of the natural gas fired.

7

d. Nitrogen Oxides (NO_x)

 NO_x from combustion is generated through one of three mechanisms: fuel NO_x , thermal NO_x , and prompt NO_x . Fuel NO_x is produced by the oxidation of nitrogen in the fuel. Thermal NO_x forms in the high temperature area of the combustor and increases exponentially with increases in flame temperature and linearly with increases in residence time. Prompt NO_x forms from the oxidation of hydrocarbon radicals near the combustion flame; this produces an insignificant amount of NO_x .

The NO_x control options considered were the use of add-on controls, such as selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR), the use of combustion control techniques, such as low excess air firing, low NO_x burners (LNBs), ultra-low NO_x burners (ULNBs), water/steam injection, flue gas recirculation (FGR), and the combustion of clean fuel, such as natural gas.

The Department found the use of LNBs and FGR for control of NO_x emissions and the following emission limits to represent BACT for NO_x emissions from Boilers #22 and #23.

Units	NO _x (lb/MMBtu)	NO _x (lb/hr)
Boiler #22	0.036	3.60
Boiler #23	0.036	1.51

These standards apply at all times. Upon request by the Department, compliance shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 7 or other method as approved by the Department.

Sappi shall operate the FGR during all times the boiler is operating except during periods of startup and shutdown (as those terms are defined in 40 C.F.R. Part 63, Subpart DDDDD).

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

e. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

CO and VOC emissions are attributable to the incomplete combustion of organic compounds in the fuel. Emissions result when there is insufficient residence time or when there is insufficient oxygen available near the hydrocarbon molecule during combustion to complete the final step in oxidation. Combustion modifications taken to reduce NO_x emissions may result in increased emissions of CO. Pollution control options to reduce CO and VOC emissions considered include add-on technologies such as catalytic oxidation and thermal oxidizers as well as combustion controls.

The Department found the use of an oxygen trim system and the following emission limits to represent BACT for CO and VOC emissions from Boilers #22 and #23.

Units	CO (lb/MMBtu)	VOC (lb/MMBtu)
Boiler #22	0.038	0.004
Boiler #23	0.038	0.004

Units	CO (lb/hr)	VOC (lb/hr)
Boiler #22	3.80	0.40
Boiler #23	1.60	0.17

These standards apply at all times. Upon request by the Department, compliance shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 10 or 19 (CO) and Method 25A (VOC) or other methods as approved by the Department.

2. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Boilers #22 and #23 are subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr and less than 100 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

A summary of the currently applicable 40 C.F.R. Part 60, Subpart Dc requirements for Boilers #22 and #23 is listed below.

a. Standards

(1) Boilers #22 and #23 will fire only natural gas. As such, there are no applicable SO₂ emission limits in Subpart Dc.

Q

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

(2) Boilers #22 and #23 will fire only natural gas. As such, there are no applicable particulate matter emission limits in Subpart Dc.

9

b. Reporting and Recordkeeping

Sappi shall maintain records of the amounts of natural gas fired in Boilers #22 and #23 (each) during each calendar month. [40 C.F.R. § 60.48c(g)(2)]

3. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart DDDDD

Boilers #22 and #23 are subject to the *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD. Boilers #22 and #23 fire natural gas and are considered new boilers in the "units designed to burn gas 1 fuels" subcategory.

A summary of the currently applicable 40 C.F.R. Part 63, Subpart DDDDD requirements for Boilers #22 and #23 is listed below.

a. Initial Compliance Requirements

- (1) Boilers in the "units designed to burn gas 1 fuels" subcategory are not subject to the emission limits in Tables 1 and 2, or Tables 11 through 15, or the operating limits in Table 4. [40 C.F.R. § 63.7500(e)]
- (2) Fuel analyses are not required for boilers that fire a single type of fuel. [40 C.F.R. § 63.7510(a)(2)(i)]
- (3) Initial compliance shall be demonstrated by completing the required initial tune-up within 61 months of the initial startup of each boiler. [40 C.F.R. §§ 63.7510(g) and 63.7515(d)]

b. Continuous Compliance Requirements

(1) At all times, Sappi must operate and maintain Boilers #22 and #23, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

- (2) Sappi has proposed operation of an oxygen trim system as part of the BACT analysis for Boilers #22 and #23. Therefore, Sappi shall demonstrate continuous compliance by performing tune-ups on Boilers #22 and #23 every 5 years as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 61 months after the previous tune-up. Sappi may delay the burner inspection specified in § 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the burner shall be inspected at least once every 72 months. [40 C.F.R. §§ 63.7515(d) and 63.7540(a)(12)]
- (3) If either Boiler #22 or #23 is not operating on the required date for a tune-up, the tune-up for that boiler must be conducted within 30 calendar days of its startup. [40 C.F.R. § 63.7540(a)(13)]
- (4) The oxygen level shall be set no lower than the oxygen concentration measured during the most recent tune-up. [40 C.F.R. § 63.7540(a)(12)]

c. Recordkeeping

- (1) Records shall be kept for a period of 5 years. [40 C.F.R. § 63.7560(b)] [Note: All records must be kept for a period of six years pursuant to Standard Condition (6) of Air Emission License A-29-70-J-R/A (6/3/2021).]
- (2) Records shall be kept on-site, or be accessible from on site, for at least 2 years. Records may be kept off-site for the remaining 3 years. [40 C.F.R. § 63.7560(c)]
- (3) Sappi shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, copies of notifications and reports submitted to comply with the subpart and any supporting documentation. [40 C.F.R. § 63.7555(a)(1)]

a. Notifications and Reports

Sappi shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

- (1) Sappi shall prepare and submit a compliance report every 5 years which contains the following information:
 - (i) Company and Facility name and address;
 - (ii) Process unit information, emissions limitations, and operating parameter limitations;
 - (iii)Date of report and the beginning and ending dates of the reporting period;
 - (iv)Date of the most recent tune-up and date of the most recent burner inspection if not conducted with the tune-up;

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

(v) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 C.F.R. § 63.7550(c)(1)]

- (2) The first compliance report covers the period beginning on the date of startup of each boiler (Boiler #22 or #23) and ending on December 31 within 5 years after the startup. Subsequent compliance reports shall cover the 5-year period from January 1 through December 31 as applicable. Each compliance report shall be submitted or postmarked no later than January 31. [40 C.F.R. § 63.7550(b)]
- (3) All reports required by 40 C.F.R. Part 63, Subpart DDDDD shall be submitted electronically to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). [40 C.F.R. § 7550(h)(3)]

C. Boilers #17 and #18

Boilers #17 and #18 are 1940s vintage oil-fired boilers. These units have been permanently shut down and will no longer be used. Sappi has requested these emission units be removed from their license along with any conditions made obsolete by this action.

D. Boiler #21

1. Coal Firing

Boiler #21 has a maximum design heat input rating of 1,074 MMBtu/hr firing biomass fuel and coal, combined. Current licenses also state that it has a maximum design heat input capacity of 839 MMBtu/hr when firing only coal and 597 MMBtu/hr when firing only #6 fuel oil.

However, the listed coal capacity is predicated on the usage of stoker coal, i.e., larger pieces of coal that burn on the boiler's grate. The original boiler design specifications indicated that stoker coal could contribute up to 442 MMBtu/hr and pulverized coal could contribute up to 397 MMBtu/hr for a combined heat input of 839 MMBtu/hr.

After Boiler #21's initial installation, it was determined that the system could not reliably fire stoker coal and the mechanical equipment necessary to fire stoker coal was removed in the 1980s. Boiler #21 is not currently physically capable of firing any amount of stoker coal without significant capital expenditure and modifications to the boiler. Therefore, Sappi has requested that the license be updated to reflect that the maximum heat input when firing only coal is 397 MMBtu/hr. The maximum capacity of the boiler is unchanged since the unit is able to make up for the loss of stoker coal

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

with increased biomass firing. This change has no impact on licensed emission limits or actual emissions of any pollutant.

12

2. Combined Limits with Boilers #17 and #18

In air emission license A-29-71-AG-M, issued 6/5/2002, Sappi requested annual emission caps on PM, PM₁₀, SO₂, NO_x, and VOC for Boilers #21, #17, and #18 combined. These emission limitations were taken voluntarily through Best Practical Treatment and not established through a BACT analysis nor relied upon in an ambient air quality impact analysis. Therefore, these limits are Enforceable by State-only.

With the permanent shutdown of Boilers #17 and #18, the annual emission cap limits on PM, PM₁₀, NO_x, and VOC are obsolete since Boiler #21 alone does not have the potential to emit these pollutants in excess of the current limits. Therefore, these limits have been removed.

The previously licensed annual emission cap limit of 3,763.0 tpy of SO₂ is being retained because Boiler #21 alone does have the potential to emit SO₂ in excess of this limit.

Compliance shall be demonstrated by monthly calculations of annual (12-month rolling total) emissions. Continuous Emissions Monitoring System (CEMS) data shall be used whenever available. For periods when CEMS data is not available for Boiler #21, Sappi shall calculate emissions using an emission factor based on the licensed emission limit for SO₂ for the fuel (or combination of fuels) being fired.

3. Revisions to 40 C.F.R. Part 63, Subpart DDDDD

Boiler #21 is subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,* 40 C.F.R. Part 63, Subpart DDDDD. Boiler #21 is considered an existing boiler in the "stoker/sloped grate/others designed to burn wet biomass fuel" subcategory. Boilers in this subcategory are subject to emission limits and work practice standards.

In October 2022, EPA finalized revisions to Subpart DDDDD that affect Boiler #21. Applicable emission limits in Table 2 were lowered. Sappi may continue to comply with the previously licensed emission limits (which are now listed in Table 15 of the rule) until October 6, 2025. Sappi shall comply with the following revised limits for Boiler #21 beginning on October 6, 2025 [40 C.F.R. § 63.7500(a)(1)]:

4

Pollutant	Emission Limit
PM (filterable)	3.4 x 10 ⁻² lb/MMBtu
CO	1,100 ppm by volume on a dry basis corrected to 3% O ₂ ,
	3-run average
HCl	2.0 x 10 ⁻² lb/MMBtu
Hg	5.4 x 10 ⁻⁶ lb/MMBtu

[40 C.F.R. §§ 63.7500(a)(1) and (f) and Table 2, Rows 1 and 7]

4. Particulate Matter Limits

Boiler #21 had a PM₁₀ emission limit established through BACT of 0.08 lb/MMBtu that was based on filterable particulate matter only. This was due to the emission limit being established before the definition of PM₁₀ was revised to include condensable particulate matter (CPM). In NSR #7, the Department determined that this limit was high enough that it could be considered inclusive of CPM and would be going forward.

Additionally, Boiler #21 did not have established lb/hr emission limits for PM₁₀ or PM_{2.5}. As part of NSR #7, Sappi requested establishment of PM_{2.5} emission limits where none had previously existed in support of the ambient air quality impact analysis.

The following tables outline the existing emission limits and the proposed new and revised emission limits, along with their associated compliance methods.

Table II-1: Existing PM₁₀ and PM_{2.5} Emission Limits

Emission Unit	Pollutant	Current Limit	Origin & Authority	Compliance Method
Boiler #21	PM_{10}	0.08 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-71-C-A/R, 6/23/1988)	Method 5
	PM _{2.5}	_	_	_

Table II-2: Proposed New and Updated PM₁₀ and PM_{2.5} Emission Limits

Emission Unit	Pollutant	Proposed Limit	Origin & Authority	Compliance Method
Boiler #21	PM_{10}	0.08 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)	Methods 5, 201, or 201A
Doller #21		75.0 lb/hr	06-096 C.M.R. ch. 115, § 7	and Method
	PM _{2.5}	75.0 lb/hr	06-096 C.M.R. ch. 115, § 7	202

The PM_{10} and $PM_{2.5}$ lb/hr emission limits assume 100% of filterable PM is also PM_{10} and $PM_{2.5}$. The filterable portion is based on an emission factor of 0.037 lb/MMBtu,

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

which is equivalent to an applicable emission limit in 40 C.F.R. Part 63, Subpart DDDDD. The condensable portion is based on emission factors of 0.017 lb/MMBtu for biomass (AP-42 Table 1.6-1) and 0.06 lb/MMBtu for coal (AP-42 Table 1.1-5 assuming a sulfur content of 0.9%) and assuming maximum coal firing (397 MMBtu/hr) with the remainder of the maximum heat content firing biomass (677 MMBtu/hr).

14

The Department found the proposed new and updated emission limits in Table II-2 either represent an administrative revision of BACT or are necessary to demonstrate compliance with ambient air quality standards (as indicated in Table II-2 above) for emissions of PM₁₀ and PM_{2.5}.

Compliance shall be demonstrated pursuant to 40 C.F.R. Part 60, Appendix A, Methods 5, 201, or 201A for filterable PM and Method 202 for CPM upon request by the Department.

5. Particulate Matter Performance Tests

Boiler #21 must demonstrate compliance with the unit's PM lb/hr emission limit through performance testing conducted at least once every five calendar years. The current license acknowledges that a similar requirement required by 40 C.F.R. Part 63, Subpart DDDDD satisfies this requirement provided test results are also provided in lb/hr.

Subpart DDDDD contains provisions, including deadlines, for performance testing when a unit is not operating at the time the test is scheduled to be performed. However, the Part 70 license contains a date that implies a deadline for testing regardless of the unit's operating status. Sappi has requested that the Department clarify that it is not its intent to require Boiler #21 to startup solely for the purposes of conducting performance testing.

The Department agrees that the date listed in the license condition, although included for clarity, was not intended to override any flexibility offered by Subpart DDDDD. The frequency of the Subpart DDDDD testing, including alternative schedules for equipment that is not operating, is sufficient to demonstrate compliance with this State requirement.

6. Correction of Typographical Errors

In the Findings of Fact for Boiler #21 (Section II(G)(7)) of Air Emission License A-29-70-J-R/A (issued 6/3/2021), the SO₂ lb/MMBtu emission limit when firing any combination of fuels is correctly listed as 0.8 lb/MMBtu on a 30-day rolling average. The averaging time was inadvertently left out of the corresponding Condition in the Order section of the license. Additionally, the Condition in the Order section reads "and

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

fuel(s)" instead of "any fuel(s)." These typographical errors will be corrected by this license amendment.

15

E. Temporary Engine #5

In NSR #8, Sappi proposed to operate Temporary Engine #5 until installation of Engine #6 is complete. Temporary Engine #5 is part of a generator set which provides emergency back-up power to telecommunications systems at the site. Temporary Engine #5 is rated at 0.65 MMBtu/hr firing distillate fuel. It was manufactured in 2014.

1. BACT

BACT for Temporary Engine #5 was addressed in NSR #8. The BACT emission limits for Temporary Engine #5 are based on the following:

PM/PM₁₀/PM_{2.5} – 0.31 b/MMBtu from AP-42 Table 3.3-1 dated 10/96

SO₂ – Combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO_x - 4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 CO - 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 VOC - 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 Visible - 06-096 C.M.R. chs. 101, § 4(A)(4) and 115, BACT

Emissions

The BACT emission limits for Temporary Engine #5 were determined to be the following:

	PM	PM_{10}	PM _{2.5}	SO_2	NO_x	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Temporary Engine #5	0.20	0.20	0.20	_	2.87	0.62	0.23

Visible emissions from Temporary Engine #5 shall not exceed 20% opacity on a six-minute block average basis.

2. Chapter 169

Stationary Generators, 06-096 C.M.R. ch. 169 (Chapter 169), is applicable to Temporary Engine #5. It is an emergency generator powered by an engine with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

a. Chapter 169 Emission Standards Requirements

For Temporary Engine #5, Sappi shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart IIII. [06-096 C.M.R. ch. 169, § 4(B)(1)]

b. Chapter 169 Stack Height Requirements

Chapter 169 identifies stack height requirements for any stack used to exhaust a generator engine or combination of generator engines with a combined rated output equal to or greater than 1,000 brake horsepower (747 kW). Individual generator engines with a maximum power capacity of less than 300 kW are not included in the assessment of the combined generator power capacity exhausted through a common stack. [06-096 C.M.R. ch. 169, § 6]

There are no stack height requirements in Chapter 169 applicable to Temporary Engine #5 because it exhausts through its own stack and its rated output is less than 1,000 brake horsepower (747 kilowatts). [06-096 C.M.R. ch. 169, § 6]

3. New Source Performance Standards

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Temporary Engine #5 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit also meets the requirements found in the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. Sappi may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

Sappi shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement

No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

Sappi shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

F. Engine #6

In NSR #8, Sappi proposed to install and operate Engine #6 as part of a generator set which provides emergency back-up power to telecommunications systems at the site. Engine #6 is rated at 0.80 MMBtu/hr firing propane. It is a new engine with a model year of 2023 or 2024.

1. BACT

BACT for Engine #6 was addressed in NSR #8. The BACT emission limits for Engine #6 are based on the following:

PM/PM₁₀/PM_{2.5} – 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT

SO₂ – Emissions of SO₂ for this emissions unit are considered

negligible based on the use of propane as a fuel

NO_x – 7.3 g/hp-hr based on manufacturer's data

CO – 0.557 lb/MMBtu from AP-42 Table 3.2-2 dated 7/00 VOC – 0.118 lb/MMBtu from AP-42 Table 3.2-2 dated 7/00

Visible – 06-096 C.M.R. ch. 115, BACT

Emissions

BACT for Engine #6 are the emission limits listed below.

	PM	PM_{10}	PM _{2.5}	SO ₂	NO _x	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Engine #6	0.10	0.10	0.10	l	1.36	0.45	0.09

Visible emissions from Engine #6 shall not exceed 10% opacity on a six-minute block average basis.

The Department has determined that the BACT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for Engine #6 has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the air emission license.

2. Chapter 169

Stationary Generators, 06-096 C.M.R. ch. 169 (Chapter 169), is applicable to Engine #6. It is an emergency generator powered by an engine with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

a. Chapter 169 Emission Standards Requirements

For Engine #6, Sappi shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart JJJJ. [06-096 C.M.R. ch. 169, § 4(B)(1)]

b. Chapter 169 Stack Height Requirements

Chapter 169 identifies stack height requirements for any stack used to exhaust a generator engine or combination of generator engines with a combined rated output equal to or greater than 1,000 brake horsepower (747 kW). Individual generator engines with a maximum power capacity of less than 300 kW are not included in the assessment of the combined generator power capacity exhausted through a common stack. [06-096 C.M.R. ch. 169, § 6]

There are no stack height requirements in Chapter 169 applicable to Engine #6 because it exhausts through its own stack and its rated output is less than 1,000 brake horsepower (747 kilowatts). [06-096 C.M.R. ch. 169, § 6]

3. New Source Performance Standards

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is applicable to the Engine #6 listed above since the unit was ordered after June 12, 2006, and manufactured after January 1, 2009. [40 C.F.R. § 60.4230] By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, the unit also meets the requirements found in the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart JJJJ requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart JJJJ, a stationary reciprocating internal combustion engine (ICE) is considered an emergency stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart JJJJ, resulting in the engine being subject to requirements applicable to non-emergency engines.

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

21

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

22

b. 40 C.F.R. Part 60, Subpart JJJJ Requirements

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. § 60.4233]

(2) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237]

(3) Operation and Maintenance Requirement

The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Sappi that are approved by the engine manufacturer. Sappi may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

Sappi shall have available for review by the Department a copy of the manufacturer's written instructions or procedures developed by Sappi that are approved by the engine manufacturer for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(4) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance and testing. The emergency engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]

(5) Recordkeeping

Sappi shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4245(b)]

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

G. Facility Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Operation of Boiler #21 at 100% for 8,760 hr/yr for all pollutants except SO₂;
- An annual emission limit of 3,763.0 tpy for SO₂ for Boiler #21 as established in A-29-71-AG-M;
- Unlimited operation of Boilers #22 and #23 and MAU #1;
- A 10% annual capacity factor limitation for the Technology Center Boiler;
- Operating each generator for 100 hr/yr;
- Eventual replacement of Temporary Engine #5 with Engine #6;
- Maximum operation (100% load for 8,760 hr/yr) of the fuel burning equipment associated with the coaters; and
- Maximum licensed VOC emissions for the coaters and Ultracast Roll Cleaning process.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

Total Licensed Annual Emissions for the Facility Tons/year

24

(used to calculate the annual license fee)

	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Boiler #21	173.9	328.5	328.5	3,763.0	1,787.6	2,163.9	178.8
Boiler #22	2.2	2.2	2.2	0.4	15.8	16.6	1.8
Boiler #23	0.9	0.9	0.9	0.2	6.6	7.0	0.7
Technology Center Boiler	0.1	0.1	0.1	_	0.4	0.3	_
MAU #1	0.6	0.6	0.6	_	1.2	1.0	0.1
Engine #1	_	_	ı	_	0.4		0.1
Engine #2	_	_	ı	_	0.4	0.1	-
Engine #3	_	_	ı	_	0.2		-
Engine #4	-	_	ı	_	0.1		-
Engine #6	-	_	ı	_	0.1	0.1	-
#35 Coater Dryer	1.5	1.5	1.5	_	3.0	2.5	0.2
#2 Coater 4 th Zone Dryer	0.9	0.9	0.9	_	2.6	2.1	0.2
#20 Coater 7 th Zone Dryer	0.9	0.9	0.9	_	1.7	1.4	0.1
#20 Coater Floatation Dryers	1.8	1.8	1.8	_	3.4	2.9	0.2
Catalytic Incinerator	4.0	4.0	4.0	_	4.4	7.8	-
#2 & #20 Coaters (combined, non-combustion)	_	_	l	_	_	_	139.7
Ultracast Roll Cleaning	_	_	_	_	_	_	2.0
Total TPY	186.8	341.4	341.4	3,763.6	1,827.9	2,205.7	323.9

III.AMBIENT AIR QUALITY ANALYSIS

Sappi previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-29-77-7-A, issued on 12/7/2023). An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

The Department hereby grants the Part 70 License Amendment A-29-70-L-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Air Emission License A-29-70-J-R/A, in amendment A-29-70-K-A, and the following conditions.

25

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following shall replace Conditions (15)(C) of Air Emission License A-29-70-J-R/A:

(15) **Boiler #21**

C. Emission Limits

Unless otherwise stated, emission limits are on a 1-hour block average basis or are based on other applicable performance test protocols.

1. Emissions from Boiler #21 shall not exceed the following limits:

Pollutant	ppmdv	Origin and Authority	Enforceability
	1,500 @ 3% O ₂	40 C.F.R. Part 63, Subpart DDDDD,	Federally
CO	See Notes 3 & 7	Table 15, Row 7(a)	Enforceable
	1,100 @ 3% O ₂	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Notes 3 & 8	Table 2, Row 7(a)	Enforceable

2. Emissions from Boiler #21 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
	0.037	40 C.F.R. Part 63, Subpart DDDDD,	Federally
PM	See Note 3 & 7	Table 15, Row 7(b)	Enforceable
PIVI	0.034	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Note 3 & 8	Table 2, Row 7(b)	Enforceable
DM	0.08	06-096 C.M.R. ch. 115, BACT	Federally
PM_{10}	0.08	(A-29-77-7-A, 12/7/2023)	Enforceable

1	4
1.	•

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
SO ₂ (firing oil w/o coal) See Notes 1 & 4	0.80	40 C.F.R. Part 60, Subpart D,	Federally
	(3-hr rolling avg.)	§ 60.43(a)(1)	Enforceable
SO ₂ (firing coal) See Notes 2 & 4	1.2 (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.43(a)(2)	Federally Enforceable
SO ₂ any fuel(s)	0.8 (30-day rolling avg.)	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
NO _x (firing oil w/o coal) See Notes 1 & 5	0.30	40 C.F.R. Part 60, Subpart D,	Federally
	(3-hr rolling avg.)	§ 60.44(a)(2)	Enforceable
NO _x (firing coal) See Notes 2 & 5	0.70	40 C.F.R. Part 60, Subpart D,	Federally
	(3-hr rolling avg.)	§ 60.44(a)(3)	Enforceable
NO _x (any fuel) See Note 6	0.38 lb/MMBtu (24-hr daily block avg.)	06-096 C.M.R. ch. 138, §§ 3(B)(4) & (8)	Federally Enforceable
СО	0.46	06-096 C.M.R. ch. 115, BACT (A-29-71-C-A/R, 6/23/1988)	Federally Enforceable
HC1	2.2 x 10 ⁻²	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Note 3 & 7	Table 15, Row 1(a)	Enforceable
	2.0 x 10 ⁻²	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Note 3 & 8	Table 2, Row 1(a)	Enforceable
Hg	5.7 x 10 ⁻⁶	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Note 3 & 7	Table 15, Row 1(b)	Enforceable
	5.4 x 10 ⁻⁶	40 C.F.R. Part 63, Subpart DDDDD,	Federally
	See Note 3 & 8	Table 2, Row 1(b)	Enforceable

- Note 1: For periods when oil is fired alone or in conjunction with other licensed fuels except for coal.
- Note 2: For periods when coal is fired alone or in conjunction with any other licensed fuels.
- Note 3: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.
- Note 4: When firing a mix of fossil fuels, the lb/MMBtu emission limit for SO₂ shall be prorated based on the formula contained in 40 C.F.R. § 60.43(b). However, at no time may the emission limit exceed 0.96 lb/MMBtu.
- Note 5: When firing a mix of fossil fuels, the lb/MMBtu emission limit for NO_x shall be prorated based on the formula contained in 40 C.F.R. § 60.44(b).
- Note 6: Chapter 138 contains emission limits based on what the boiler was designed for and licensed to fire. Since Boiler #21 is licensed to fire both biomass and coal and uses a NO_x CEMS, it is subject to a limit of 0.38 lb/MMBtu on a 24-hour block average pursuant to 06-096 C.M.R. ch. 138, §§ 3(B)(4) and (8).
- Note 7: This limit applies until October 6, 2025.
- Note 8: This limit applies beginning October 6, 2025.

27

3. Emissions from Boiler #21 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	39.7	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
PM_{10}	75.0	06-096 C.M.R. ch. 115, § 7 (A-29-77-7-A, 12/7/2023)	Federally Enforceable
PM _{2.5}	75.0	06-096 C.M.R. ch. 115, § 7 (A-29-77-7-A, 12/7/2023)	Federally Enforceable
SO_2	1,031	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
NO _x (firing coal)	751.8	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
NO _x (when coal is not fired)	322.2	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
CO	494.0	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC	40.8	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only

The following shall replace Condition (15)(E)(2) of Air Emission License A-29-70-J-R/A:

(15) **Boiler #21**

E. Compliance Methods

2. Sappi shall demonstrate compliance with the PM lb/hr emission limit through performance testing conducted at least once every five calendar years. The performance testing for PM lb/MMBtu required pursuant to 40 C.F.R. § 63.7515 satisfies this testing requirement if results are also provided in lb/hr. [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) and 38 M.R.S. § 589.2] **Enforceable by State-only**

The following shall replace Condition (15)(F)(6) of Air Emission License A-29-70-J-R/A:

(15) **Boiler #21**

F. Periodic Monitoring

6. Records of annual emissions from Boiler #21 on a 12-month rolling total basis used to demonstrate compliance with the annual SO₂ tpy emission limit. [06-096 C.M.R. ch. 115 (A-29-71-AG-M, 6/5/2002)] **Enforceable by State-only**

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

Condition (16) of Air Emission License A-29-70-J-R/A is deleted. (Conditions specific to Boilers #17 and #18)

The following shall replace Conditions (17)(A) & (B) of Air Emission License A-29-70-J-R/A:

(17) Annual Emission Limits for Boiler #21

A. Emissions from Boiler #21 shall not exceed the following limits on a 12-month rolling total basis:

Pollutant	Tons/year
SO_2	3,763.5

[06-096 C.M.R. ch. 115, BPT (A-29-71-AG-M, 6/5/2002)] **Enforceable by State-only**

B. Compliance shall be demonstrated by monthly calculations of annual (12-month rolling total) emissions. Continuous Emissions Monitoring System (CEMS) data shall be used whenever available. For periods when CEMS data is not available for Boiler #21, Sappi shall calculate emissions using an emission factor based on the licensed emission limit for the fuel (or combination of fuels) being fired.

[06-096 C.M.R. ch. 115, BPT (A-29-71-AG-M, 6/5/2002)] Enforceable by State-only

The following shall replace Condition (18)(A) of Air Emission License A-29-70-J-R/A: (Removal of language referring to Boilers #17 and #18)

(18) Waste Oil Firing

A. Sappi is licensed to fire a total of 10,000 gallons per year of specification and off-specification waste oil in Boiler #21 on a 12-month rolling total basis. Only waste oil generated on-site and meeting the criteria for "specification waste oil" and "off-specification waste oil" as defined in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860 is permitted. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

References to Boilers #17 and #18 are removed from Condition (20) of Air Emission License A-29-70-J-R/A. (Subpart DDDDD requirements for Limited Use Boilers)

The following shall replace Condition (21) of Air Emission License A-29-70-J-R/A:

(21) **Boilers #22 and #23**

A. Boilers #22 and #23 shall fire only natural gas. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

29

B. Boilers #22 and #23 shall each exhaust through a stack that is at least 70-feet above ground level. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

C. Control Equipment

- 1. Sappi shall operate and maintain LNBs on Boilers #22 and #23 for control of NO_x during all times the boiler is operating. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]
- 2. Sappi shall operate and maintain FGR on Boilers #22 and #23 for control of NO_x during all times each boiler is operating except during periods of startup and shutdown. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]
- 3. Sappi shall operate and maintain an oxygen trim system on Boilers #22 and #23 for control of CO and VOC during all times each boiler is operating. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

D. Emission Limits and Standards

These limits apply at all times (including periods of startup, shutdown, and malfunction). Unless otherwise stated, limits are on a 1-hour block average basis. [06-096 C.M.R. ch. 115, BACT]

1. Emissions from Boilers #22 and #23 (each) shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.005	06-096 C.M.R. ch. 115, BACT	Federally
FIVI	0.003	(A-29-77-7-A, 12/7/2023)	Enforceable
PM_{10}	0.005	06-096 C.M.R. ch. 115, BACT	Federally
PIVI ₁₀	0.003	(A-29-77-7-A, 12/7/2023)	Enforceable
DM	0.005	06-096 C.M.R. ch. 115, BACT	Federally
$PM_{2.5}$	0.003	(A-29-77-7-A, 12/7/2023)	Enforceable
SO_2	0.001	06-096 C.M.R. ch. 115, BACT	Federally
SO_2	0.001	(A-29-77-7-A, 12/7/2023)	Enforceable
NO _x	0.036	06-096 C.M.R. ch. 115, BACT	Federally
NO_{x}	0.036	(A-29-77-7-A, 12/7/2023)	Enforceable
СО	0.038	06-096 C.M.R. ch. 115, BACT	Federally
CO	0.038	(A-29-77-7-A, 12/7/2023)	Enforceable
VOC	0.004	06-096 C.M.R. ch. 115, BACT	Federally
VOC	0.004	(A-29-77-7-A, 12/7/2023)	Enforceable

30

2. Emissions from Boiler #22 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.50	06-096 C.M.R. ch. 115, BACT	Federally
FIVI	0.50	(A-29-77-7-A, 12/7/2023)	Enforceable
PM ₁₀	0.50	06-096 C.M.R. ch. 115, BACT	Federally
F1V110	0.50	(A-29-77-7-A, 12/7/2023)	Enforceable
PM _{2.5}	0.50	06-096 C.M.R. ch. 115, BACT	Federally
F1V12.5	0.50	(A-29-77-7-A, 12/7/2023)	Enforceable
SO_2	0.10	06-096 C.M.R. ch. 115, BACT	Federally
SO_2		(A-29-77-7-A, 12/7/2023)	Enforceable
NOx	2.60	06-096 C.M.R. ch. 115, BACT	Federally
NO _x	3.60	(A-29-77-7-A, 12/7/2023)	Enforceable
СО	3.80	06-096 C.M.R. ch. 115, BACT	Federally
CO		(A-29-77-7-A, 12/7/2023)	Enforceable
VOC	0.40	06-096 C.M.R. ch. 115, BACT	Federally
		(A-29-77-7-A, 12/7/2023)	Enforceable

3. Emissions from Boiler #23 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.21	06-096 C.M.R. ch. 115, BACT	Federally
r ivi	0.21	(A-29-77-7-A, 12/7/2023)	Enforceable
PM ₁₀	0.21	06-096 C.M.R. ch. 115, BACT	Federally
F1V110	0.21	(A-29-77-7-A, 12/7/2023)	Enforceable
PM _{2.5}	0.21	06-096 C.M.R. ch. 115, BACT	Federally
F1V12.5	0.21	(A-29-77-7-A, 12/7/2023)	Enforceable
SO_2	0.04	06-096 C.M.R. ch. 115, BACT	Federally
SO_2		(A-29-77-7-A, 12/7/2023)	Enforceable
NO _x	1.51	06-096 C.M.R. ch. 115, BACT	Federally
NO _x	1.31	(A-29-77-7-A, 12/7/2023)	Enforceable
СО	1.60 06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)	06-096 C.M.R. ch. 115, BACT	Federally
CO		(A-29-77-7-A, 12/7/2023)	Enforceable
VOC	0.17	06-096 C.M.R. ch. 115, BACT	Federally
		(A-29-77-7-A, 12/7/2023)	Enforceable

4. Visible emissions from Boilers #22 and #23 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3) and 06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

E. Compliance Demonstration

- 1. Upon request by the Department, compliance with the particulate matter, NO_x, CO, and VOC emission limits shall be demonstrated through performance testing in accordance with the appropriate test method as approved by the Department. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]
- 2. Compliance with the SO₂ limits is based on monthly recordkeeping of the amount of natural gas fired in Boilers #22 and #23 and the most recent tariff sheet showing the sulfur content of the natural gas fired. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]
- 3. Upon request by the Department, compliance with the visible emission limits shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

F. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Boilers #22 and #23.

- 1. Hours Boilers #22 and #23 (each) were active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- 2. Amount of natural gas fired in Boilers #22 and #23 (each) on a calendar month basis; [40 C.F.R. § 60.48c(g)(2)] and
- 3. The current tariff sheet showing the maximum total sulfur content of the natural gas fired. [06-096 C.M.R. ch. 115, BACT (A-29-77-7-A, 12/7/2023)]

G. 40 C.F.R. Part 63, Subpart DDDDD

Following are applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD for Boilers #22 and #23 not addressed elsewhere in this Order:

- 1. Initial compliance with 40 C.F.R. Part 63, Subpart DDDDD shall be demonstrated by completing the required initial tune-up within 61 months of the initial startup of each boiler. [40 C.F.R. §§ 63.7510(g) and 63.7515(d)]
- 2. At all times, Sappi must operate and maintain Boilers #22 and #23, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

32

maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

- 3. Sappi shall demonstrate continuous compliance by performing tune-ups on Boilers #22 and #23 every 5 years as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 61 months after the previous tune-up. Sappi may delay the burner inspection specified in § 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the burner shall be inspected at least once every 72 months. [40 C.F.R. §§ 63.7515(d) and 63.7540(a)(12)]
- 4. If either Boiler #22 or #23 is not operating on the required date for a tune-up, the tune-up for that boiler must be conducted within 30 calendar days of its startup. [40 C.F.R. § 63.7540(a)(13)]
- 5. The oxygen level shall be set no lower than the oxygen concentration measured during the most recent tune-up. [40 C.F.R. § 63.7540(a)(12)]

6. Recordkeeping

- a. Records shall be kept on site, or be accessible from on site, for at least 2 years. Records may be kept off site for the remaining 3 years. [40 C.F.R. § 63.7560(c)]
- b. Sappi shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, copies of notifications and reports submitted to comply with the subpart and any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]

7. Notifications and Reports

Sappi shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

- a. Sappi shall prepare and submit a compliance report every 5 years which contains the following information:
 - (1) Company and Facility name and address;
 - (2) Process unit information, emissions limitations, and operating parameter limitations;
 - (3) Date of report and the beginning and ending dates of the reporting period;
 - (4) Date of the most recent tune-up and date of the most recent burner inspection if not conducted with the tune-up;
 - (5) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 C.F.R. § 63.7550(c)(1)]

- 33
- b. The first compliance report covers the period beginning on the date of startup of each boiler (Boiler #22 or #23) and ending on December 31 within 5 years after the startup. Subsequent compliance reports shall cover the 5-year period from January 1 through December 31 as applicable. Each compliance report shall be submitted or postmarked no later than January 31. [40 C.F.R. § 63.7550(b)]
- c. All reports required by 40 C.F.R. Part 63, Subpart DDDDD shall be submitted electronically to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). [40 C.F.R. § 7550(h)(3)]

Condition (22) of Air Emission License A-29-70-J-R/A is obsolete and deleted. (Submission of Ambient Air Quality Dispersion Modeling)

The following shall replace Condition (24) of Air Emission License A-29-70-J-R/A:

(24) **Emergency Engines**

A. Allowable Fuels

- 1. Engines #1 #4 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] **Enforceable by State-only**
- 2. Temporary Engine #5 is licensed to fire distillate fuel. [06-096 C.M.R. ch. 115, BACT (A-29-77-8-A, 12/21/2023)]
- 3. Engine #6 is licensed to fire propane. [06-096 C.M.R. ch. 115, BACT (A-29-77-8-A, 12/21/2023)]

B. Emission Limits

Emissions shall each not exceed the following limits. Emission limits are on a 1-hour block average basis unless otherwise stated.

Engine #1			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.34	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
PM ₁₀	0.34	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
NO _x	7.43	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
СО	0.63	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
VOC	0.98	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only

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Engine #2			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.23	06-096 C.M.R. ch. 140, BPT	Enforceable by
FIVI	0.23	(A-29-70-I-R, 7/18/2014)	State-only
PM_{10}	0.23	06-096 C.M.R. ch. 140, BPT	Enforceable by
F1V1 ₁₀		(A-29-70-I-R, 7/18/2014)	State-only
NOx	8.42	06-096 C.M.R. ch. 140, BPT	Enforceable by
NOx		(A-29-70-A-I, 12/31/2003)	State-only
СО	1.81	06-096 C.M.R. ch. 140, BPT	Enforceable by
		(A-29-70-A-I, 12/31/2003)	State-only
WOO	0.65	06-096 C.M.R. ch. 140, BPT	Enforceable by
VOC	0.67	(A-29-70-A-I, 12/31/2003)	State-only

Engine #3			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.08	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
PM ₁₀	0.08	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
NO _x	2.95	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
CO	0.64	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
VOC	0.23	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only

Engine #4			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.06	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
PM ₁₀	0.06	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only
NO _x	2.16	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
СО	0.47	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only
VOC	0.17	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)	Enforceable by State-only

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Temporary Engine #5			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.20	06-096 C.M.R. ch. 115, BACT	Federally
r ivi	0.20	(A-29-77-8-A, 12/21/2023)	Enforceable
PM_{10}	0.20	06-096 C.M.R. ch. 115, BACT	Federally
F1V1 ₁₀	0.20	(A-29-77-8-A, 12/21/2023)	Enforceable
DM	0.20	06-096 C.M.R. ch. 115, BACT	Federally
$PM_{2.5}$		(A-29-77-8-A, 12/21/2023)	Enforceable
NO_x	2.87	06-096 C.M.R. ch. 115, BACT	Federally
NO _x		(A-29-77-8-A, 12/21/2023)	Enforceable
CO	0.62	06-096 C.M.R. ch. 115, BACT	Federally
СО	0.62	(A-29-77-8-A, 12/21/2023)	Enforceable
VOC	0.23	06-096 C.M.R. ch. 115, BACT	Federally
		(A-29-77-8-A, 12/21/2023)	Enforceable

Engine #6			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.10	06-096 C.M.R. ch. 115, BACT	Federally
FIVI	0.10	(A-29-77-8-A, 12/21/2023)	Enforceable
PM_{10}	0.10	06-096 C.M.R. ch. 115, BACT	Federally
PIVI10	0.10	(A-29-77-8-A, 12/21/2023)	Enforceable
$PM_{2.5}$	0.10	06-096 C.M.R. ch. 115, BACT	Federally
F1V12.5		(A-29-77-8-A, 12/21/2023)	Enforceable
NOx	1.36	06-096 C.M.R. ch. 115, BACT	Federally
NOx	1.50	(A-29-77-8-A, 12/21/2023)	Enforceable
CO	0.45	06-096 C.M.R. ch. 115, BACT	Federally
CO	0.43	(A-29-77-8-A, 12/21/2023)	Enforceable
WOC	0.00	06-096 C.M.R. ch. 115, BACT	Federally
VOC	0.09	(A-29-77-8-A, 12/21/2023)	Enforceable

C. Temporary Engine #5 shall be removed from the site within 30 days once Engine #6 becomes operational. [06-096 C.M.R. ch. 115, BACT (A-29-77-8-A, 12/21/2023)]

D. Visible Emissions

- 1. Visible emissions from Engines #1 #4 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Sappi shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.
 - a. The duration of the startup shall not exceed 30 minutes per event;
 - b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
 - c. Sappi shall keep records of the date, time, and duration of each startup.

36

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

- 2. Visible emissions from Temporary Engine #5 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4) and 06-096 C.M.R. ch. 115, BACT (A-29-77-8-A, 12/21/2023)]
- 3. Visible emissions from Engine #6 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT (A-29-77-8-A, 12/21/2023)]

E. Compliance Methods

Compliance with the emission limits associated with Engines #1 - #4, Temporary Engine #5, and Engine #6 shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [40 C.F.R. § 70.6(c)(1)]

F. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Engines #1 - #4, Temporary Engine #5, and Engine #6.

- 1. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
- 2. Log of the duration and reasons for all operating times as they occur. [40 C.F.R. §§ 63.6655(f)]
- 3. Records of all maintenance conducted. [40 C.F.R. §§ 63.6655(e)]
- 4. Sulfur content of the distillate fuel fired. (Engines #1 #4 and Temporary Engine #5 only) [06-096 C.M.R. ch. 140, BPT]

G. 40 C.F.R. Part 63, Subpart ZZZZ

Following are applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ for Engines #1 - #4 not addressed elsewhere in this Order:

- 1. Sappi shall meet the following operational limitations for each of the compression ignition emergency engines (Engines #1 #4):
 - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

- b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6602 and Table 2(c) and 06-096 C.M.R. ch. 140, BPT]

2. Oil Analysis Program Option

Sappi has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Sappi must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R.§ 63.6625(i)]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

- 4. Maintenance, Testing, and Non-Emergency Operating Situations
 - a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]
 - b. Sappi shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Sappi shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

6. Startup Idle and Startup Time Minimization

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

H. 40 C.F.R. Part 60, Subpart IIII

Temporary Engine #5 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

[40 C.F.R. § 60.4200(a) and 06-096 C.M.R. ch. 169]

1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b)]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f)]
- b. Sappi shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #2

hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. Sappi may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

Sappi shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [40 C.F.R. § 70.6(c)(1)]

I. 40 C.F.R. Part 60, Subpart JJJJ

Engine #6 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart JJJJ, including the following:

[40 C.F.R. § 60.4230(a) and 06-096 C.M.R. ch. 169]

1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1.

2. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237 and 06-096 C.M.R. ch. 115, BPT]

3. Annual Time Limit for Maintenance and Testing

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). The limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4243(d)]
- b. Sappi shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4245(b)]

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

4. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Sappi that are approved by the engine manufacturer. Sappi may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

Sappi shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [40 C.F.R. \S 70.6(c)(1)]

Done and dated in augusta, maine this 29^{th} day of MARCH, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, COMMISSIONER

for

The term of this amendment shall be concurrent with the term of Air Emission License A-29-70-J-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 4/28/2023
Date of application acceptance: 4/28/2023

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

FILED

MAR 29, 2024

State of Maine Board of Environmental Protection