

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-J-R/A Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal with Amendment

FINDINGS OF FACT

After review of the Part 70 License renewal 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 License Renewal	
	Part 70 Administrative Revision
	Part 70 Significant Modification
NAICS CODES	322121
NATURE OF BUSINESS	Paper Mill
FACILITY LOCATION	89 Cumberland St, Westbrook, Maine

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

Sappi has the potential to emit more than 100 tons per year (tpy) of particulate matter (PM), particulate matter under 10 micrometers (PM $_{10}$), particulate matter under 2.5 micrometers (PM $_{2.5}$), sulfur dioxide (SO $_2$), nitrogen oxides (NO $_X$), and carbon monoxide (CO) and 50 tpy of volatile organic compounds (VOC). Therefore, Sappi is classified as a major source for criteria pollutants.

Sappi has the potential to emit 10 tpy or more of a single hazardous air pollutant (HAP) and 25 tpy or more of combined HAP. Therefore, the facility is classified as a major source for HAP.

B. Emission Equipment

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

Boilers/Hot Air Heaters

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Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel	Manufacture Date
Boiler #21	1,074	biomass, coal, waste paper, distillate fuel, #6 fuel oil, waste oil, oily secondary material	1981
Boiler #17	232.7 (199.0 limit)	distillate fuel, #6 fuel oil, waste oil	1948
Boiler #18	232.7 (199.0 limit)	distillate fuel, #6 fuel oil, waste oil	1948
Technology Center Boiler	8.4	natural gas	1969
Boiler #22	99.9	natural gas	2020
Boiler #23	42.0	natural gas	2020
MAU #1	2.75	natural gas	2020

Emergency Engines

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel Type, % sulfur	Mfr. Date	Install. Date
Engine #1 (Treatment Plant)	2.81	distillate fuel, 0.0015%	1998	1998
Engine #2 (Rotary Room)	1.91	distillate fuel, 0.0015%	1975	1975
Engine #3 (MacIntosh)	0.67	distillate fuel, 0.0015%	1972	1972
Engine #4 (Feedwater)	0.49	distillate fuel, 0.0015%	1987	1987
Engine #5 (IT)	2.09	propane, n/a	2004	2005

Other Fuel Burning Equipment

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Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel	Installation Date
Dryer (#35 Research Coater)	7.0	natural gas	1985
4 th Zone Dryer (#2 Coater)	6.0	natural gas	1971
Catalytic Incinerator (#20 Coater)	5.0	natural gas	1990
7 th Zone Dryer (#20 Coater)	4.0	natural gas	2010
Floatation Dryers (#20 Coater)	2 @ 4.0 each (8.0 total)	natural gas	2013

Process Equipment

	Process	Pollution Control	Installation
Equipment	Rate	Equipment	Date
#2 Coater	20 ton/day	N/A	1963
#20 Coater	70 ton/day	Catalytic Incinerator Wet Scrubbers	1984
#35 Research Coater	N/A	N/A	1999
Waste Water Treatment Plant System	10 MMgal/day	N/A	1976
Ultracast Roll Cleaning	N/A	N/A	pre-1980
Parts Washers	N/A	N/A	N/A
Ash Loading System	100 ton/day	Baghouse	1982

Petroleum Storage Tanks

Tank ID	Tank Size	Installation Date
#2 Fuel Oil Storage Tank (Boilers #17 & #18)	100,000 gal	1988
#6 Fuel Oil Storage Tank (Boilers #17 - #21)	500,000 gal	1973
Split Gasoline/Diesel Storage Tank (Gasoline storage only)	1,500 gal (gasoline)	2014

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Insignificant Activities

Sappi has additional insignificant activities including, but not limited to the equipment listed below, which do not need to be listed in the emission equipment tables above. A more comprehensive list of insignificant activities can be found in the Part 70 license application and in Appendix B of 06-096 C.M.R. ch. 140, *Part 70 Air Emission License Regulations*.

Equipment	Citation
#2 Fuel Oil Storage Tank for Boiler #21	06-096 C.M.R. ch. 140, Appendix B § B-7
LPG Storage Tanks	06-096 C.M.R. ch. 140, Appendix B § B-8
Cooling Pond	06-096 C.M.R. ch. 140, Appendix B § B-12
Sodium Hypochlorite Storage Tanks	06-096 C.M.R. ch. 140, Appendix B § B-18
Ultracast Coaters 1, 3, 4 (production), 50 (research)	06-096 C.M.R. ch. 140, Appendix B § B-1
Burner on #35 Research Coater	06-096 C.M.R. ch. 140, Appendix B § B-2
Split Gasoline/Diesel Storage Tank (Distillate storage only)	06-096 C.M.R. ch. 140, Appendix B § B-7

C. Acronyms and Units of Measure

AGL	Above Ground Level	
ASTM	American Society for Testing and Materials	
BACT	Best Available Control Technology	
BPT	Best Practical Treatment	
C.F.R.	Code of Federal Regulations	
C.M.R.	Code of Maine Rules	
CAA	Clean Air Act	
CAM	Compliance Assurance Monitoring	
CDD	Construction and Demolition Debris Wood	
CEMS	Continuous Emissions Monitoring System	
CMS	Continuous Monitoring System	
CO	Carbon Monoxide	
CO ₂ e	Carbon Dioxide equivalent	
COMS	Continuous Opacity Monitoring System	
CPMS	Continuous Parameter Monitoring System	
EPA or US EPA	United States Environmental Protection Agency	
ESP	Electrostatic Precipitator	
gal/hr	gallon per hour	
GHG	Greenhouse Gases	

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HAP	Hazardous Air Pollutants	
HC1	Hydrogen Chloride or Hydrochloric Acid	
Hg	Mercury	
1b	pound	
lb/hr	pounds per hour	
lb/MMBtu	pounds per million British Thermal Units	
lb/ton	pounds per ton	
M.R.S.	Maine Revised Statutes	
MMBtu/hr	million British Thermal Units per hour	
NPDES	National Pollution Discharge Elimination System	
NESHAP	National Emissions Standards for Hazardous Air Pollutants	
NO _x	Nitrogen Oxides	
NSPS	New Source Performance Standards	
NSR	New Source Review	
O ₂	Oxygen	
PM	Particulate Matter less than 100 microns in diameter	
PM_{10}	Particulate Matter less than 10 microns in diameter	
ppmdv	parts per million on a dry volume basis	
PSD	Prevention of Significant Deterioration	
RACT	Reasonably Available Control Technology	
RICE	Reciprocating Internal Combustion Engine	
SNCR	Selective Non-Catalytic Reduction	
SO ₂	Sulfur Dioxide	
ton/hr	ton per hour	
tpy	ton per year	
VOC	Volatile Organic Compounds	

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D. Definitions

<u>1-hour Block Average</u> means the average of three (3) one-hour performance test runs conducted in accordance with the appropriate test method as approved by the Department.

<u>3-hr Rolling Average</u> means the arithmetic average of three contiguous one-hour periods.

<u>24-hr Daily Block Average</u> means the arithmetic average of twenty-four non-overlapping one-hour blocks starting at midnight each calendar day.

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<u>Biomass</u> means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition also includes wood chips and processed pellets made from wood or other forest residues.

For the purposes of this license, biomass also includes waste paper, sludge, and wood from construction and demolition debris (CDD). Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. Sappi shall consult with the Department before adding any new biomass type to its fuel mix.

<u>Clean Dry Biomass</u> means any biomass-based solid fuel that has not been painted, pigment-stained, or pressure treated, does not contain contaminants at concentrations not normally associated with virgin biomass materials, has a moisture content of less than 20%, and is not a solid waste.

<u>Clean Fuels</u> means distillate oil, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, paper, cardboard, clean dry biomass, or any other fuel listed in 40 C.F.R. Part 63, Subpart DDDDD, Table 3, Row 5(b) which the boiler is licensed to fire.

<u>Coating</u> means all inks, varnishes, adhesives, primers, solvents, reducers, and other coating materials applied to a substrate via web coating line for decorative, protective, or functional purposes. Materials used to form a substrate are not considered coating materials.

<u>Continuously</u>. With respect to the operation of parameter monitors, CEMS, and COMS required by this license, <u>continuously</u> means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitutes a valid hour.

For purposes of the periodic monitoring requirements in this license, "continuously" means that periodic monitors must be operated at all times the relevant emissions unit is operating except for periods of monitor malfunction or maintenance. Sappi shall be considered in compliance with a specific periodic monitoring requirement provided the monitor is up and operational such that Sappi is able to record the required periodic monitor data on the frequency required by this license.

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<u>Distillate Fuel</u> 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.

East-Side Boilers means Boilers #22 and #23 collectively.

<u>Portable Engine</u> means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. <u>A location is any single site</u> at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is <u>not</u> a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

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

<u>Specification Waste Oil</u> means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- · It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- · It does not otherwise exhibit hazardous waste characteristics; and
- · It has not been mixed with a hazardous waste.

<u>Transitional Period</u> means the time when Sappi is transitioning from one boiler group to the other, e.g., changing steam load from being supplied by West-Side Boilers to being supplied by East-Side Boilers. The transitional period begins when useful thermal energy is being supplied for any purpose from one of the boilers in the group the steam demand is being transitioned to. The transitional period ends when fuel is no longer being introduced

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into any of the boilers in the group the steam demand is being transitioned away from. Transitional periods shall not exceed 2 hours in length.

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West-Side Boilers means Boilers #17, #18, and #21 collectively.

<u>Useful Thermal Energy</u> means energy (i.e., steam, hot water, or process heat) that meets the minimum operating temperature, flow, and/or pressure required by any energy use system that uses energy provided by the affected boiler or process heater.

E. 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.

The application for Sappi is for the renewal of their existing Part 70 Air Emission License and subsequent Part 70 amendments, pursuant to Section 2(A) of *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

Sappi has also requested incorporation into the Part 70 Air License the relevant terms and conditions of the New Source Review (NSR) licenses issued to the facility pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, including A-29-77-5-A issued 8/21/2020, and A-29-77-6-A issued 11/30/2020.

Additionally, Sappi has requested a Part 70 Administrative Revision to their license to clarify that soot blowing in Boilers #17 and #18 is considered an approved maintenance activity for purposes of complying with *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101.

Therefore, the license is considered to be a Part 70 License renewal with a Part 70 Administrative Revision as well as a Part 70 Significant Modification for the incorporation of NSR requirements.

F. Facility Description

Sappi is a non-integrated paper mill producing specialty coated papers from purchased paper. Sappi uses different mixtures of coatings on three paper coating machines addressed in this license, and four paper coating machines which are considered insignificant activities. The facility includes a co-generation plant which can provide steam to the coaters, heat for the facility, and produce electricity. The facility also includes natural gasfired boilers which produce steam for the coaters and facility heating when the co-generation plant is off-line.

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G. General Facility Requirements

Sappi is subject to the following state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

Citation	Requirement Title	
06-096 C.M.R. ch. 101	Visible Emissions Regulation	
06-096 C.M.R. ch. 102	Open Burning	
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard	
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard	
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation	
06-096 C.M.R. ch. 109	Emergency Episode Regulations	
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	
06-096 C.M.R. ch. 117	Source Surveillance – Emissions Monitoring	
06-096 C.M.R. ch. 123	Control of VOC from Paper, Film and Foil Coating Operations	
06-096 C.M.R. ch. 130	Solvent Cleaners	
06-096 C.M.R. ch. 134	5	
06.006 GMP 1 127	Emit Volatile Organic Compounds	
06-096 C.M.R. ch. 137		
06-096 C.M.R. ch. 138	Reasonably Available Control Technology for Facilities that	
0(00(CM D 1 140	Emit Nitrogen Oxides	
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations	
06-096 C.M.R. ch. 143	New Source Performance Standards	
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants	
40 C.F.R. Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Engines	
40 C.F.R. Part 63,	National Emission Standards for Hazardous Air Pollutants:	
Subpart JJJJ	Paper and Other Web Coating	
40 C.F.R. Part 63,	National Emission Standard for Hazardous Air Pollutants for	
Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines	
40 C.F.R. Part 63,	National Emission Standards for Hazardous Air Pollutants for	
Subpart DDDDD	Industrial, Commercial, and Institutional Boilers and Process	
_	Heaters	
40 C.F.R. Part 70	State Operating Permit Programs	
40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting	

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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.

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BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. NO_x RACT (Reasonably Available Control Technology)

Whenever EPA updates the National Ambient Air Quality Standard (NAAQS) for ozone, Maine is required to reassess Reasonably Available Control Technology (RACT) for emissions of NO_x and VOC for applicable facilities located in the Ozone Transport Region (OTR). NO_x RACT applies to equipment constructed prior to 1995 that has the potential to emit quantities of NO_x equal to or greater than 100 tpy. Boilers #17, #18, and #21 are subject to NO_x RACT. A site-specific RACT determination was issued on 6/12/1996 (A-29-71-Y-A), and a single source SIP (State Implementation Plan) revision was published in the Federal Register (67 FR 57154, 4/18/2000).

Although several updates to the ozone NAAQS have been promulgated since 1996, Maine held a NO_x waiver exempting facilities from having to reassess NO_x RACT. The most recent NO_x waiver expired on 8/3/2018. The Department has since reevaluated NO_x RACT for Boilers #17, #18, and #21.

Boilers #17 and #18 are subject to the NO_x limit established in *Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 C.M.R. ch. 138, for medium size oil-fired boilers (0.30 lb/MMBtu). The firing capacity of these boilers is limited to 199.0 MMBtu/hr each, exempting them from the requirement to install NO_x CEMS. Sappi has also accepted a license restriction limiting Boilers #17 and #18 (each) to firing less than 10% of their annual firing capacity in order to be considered "limited use boilers" for purposes of 40 C.F.R. Part 63, Subpart DDDDD. The limited use status of these boilers makes the addition of any new control equipment for NO_x reduction cost prohibitive. Therefore, the Department has determined that the existing NO_x limit, heat input limit, and firing capacity limit represent RACT for Boilers #17 and #18.

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Boiler #21 is subject to NO_x emission limits of 0.30 – 0.70 lb/MMBtu on a 3-hour block average (depending on the fuel mix being fired) and 0.38 lb/MMBtu on a 24-hour block average. Compliance is demonstrated through the continuous operation of a NO_x CEMS. The Department has determined that the existing NO_x limits represent RACT for Boiler #21 provided the boiler does not exceed annual NO_x emissions of 100.0 tpy on a 12-month rolling total basis. If Boiler #21 emits more than 100.0 tons of NO_x in any consecutive 12-month period, Sappi shall either install selective non-catalytic reduction (SNCR) technology to control NO_x to a level not to exceed 0.20 lb/MMBtu on a 24-hour block average basis or submit an updated NO_x RACT proposal to the Department for a different control strategy which meets an equivalent emission rate of 0.20 lb/MMBtu on a 24-hour block average basis. Sappi shall begin operating to the new NO_x RACT standard (0.20 lb/MMBtu) within 24 months of Boiler #21 exceeding NO_x emissions of 100.0 tpy (12-month rolling total). This requirement takes effect as of the issuance of this license, i.e., the first 12-month period begins the month this license is issued.

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The NO_X RACT requirements described above are incorporated in this renewal.

C. VOC RACT (Reasonably Available Control Technology)

Whenever EPA updates the NAAQS for ozone, Maine is required to reassess RACT for emissions of NO_x and VOC for applicable facilities located in the OTR. VOC RACT applies to sources that have the potential to emit quantities of VOC equal to or greater than 40 tpy from non-exempt equipment.

The facility's coaters are subject to Control of Volatile Organic Compounds from Paper, Film and Foil Coating Operations, 06-096 C.M.R. ch. 123, which is a VOC control regulation based on a Control Techniques Guidelines (CTG) document. Maine's VOC RACT rule (06-096 C.M.R. ch. 134) exempts VOC-emitting equipment or processes that receive RACT pursuant to a VOC control regulation based on a CTG document [06-096 C.M.R. ch. 134 (1)(C)(3)(a)]. Therefore, this equipment is exempt from the requirements of VOC RACT.

The VOC emitted from the facility's boilers are from incomplete combustion. Therefore, this equipment is exempt from the requirements of VOC RACT.

The only remaining applicable equipment is the facility's Waste Water Treatment Plant. A site-specific VOC RACT determination was issued on 12/18/1995 (A-29-71-Z-M) and a single source SIP revision published in the Federal Register (65 FR 20754, 4/18/2000). This determination concluded that VOC RACT for the Waste Water Treatment Plant was demonstrated by complying with the facility's National Pollution Discharge Elimination System (NPDES) permit. The Department has determined that this still represents VOC RACT for this equipment, and this requirement is incorporated into this renewal.

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D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the following three categories, pursuant to *General Provisions, Who must report?*, 40 C.F.R. § 98.2.

- (a)(1) A facility that contains any source category that is listed in Table A–3 of this subpart in any calendar year starting in 2010.
- (a)(2) A facility that contains any source category that is listed in Table A-4 of this subpart and that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A-3 and Table A-4 of this subpart.
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.
 - (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
 - (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
 - (iii) The facility emits 25,000 metric tons CO₂e or more per year in combined emissions from all stationary fuel combustion sources.

If Sappi emits more than 25,000 metric tons CO₂e in a calendar year, the facility will meet all three conditions listed in paragraph (a)(3) above and will be subject to the recordkeeping and reporting requirements of 40 C.F.R. Part 98.

E. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (50 tpy for VOC and 100 tpy for any other pollutant).

This regulation's 40 C.F.R. § 64.2(b)(1)(vi) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. Furthermore, 40 C.F.R. § 64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards in a NSPS or NESHAP regulation proposed by the Administrator after November 15, 1990. [40 C.F.R. Part 64 § 64.2(b)]

The following table lists all the specific pollutants for each unit meeting CAM applicability criteria and the determination of the applicability of CAM requirements for each.

40 C.F.R. Part 64 Applicability Table

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Unit	Pollutant	CAM Required	Reason	Regulatory Authority
Boiler #21	PM/PM ₁₀	No	Subject to standard in NESHAP 40 C.F.R. Part 63, Subpart DDDDD proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
#20 Coater	VOC	No	Subject to standard in NESHAP 40 C.F.R. Part 63, Subpart JJJJ proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(i)

Therefore, there are no units at this facility subject to CAM requirements.

F. Fuel Sulfur Content Requirements

Sappi is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Pursuant to 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use at this facility shall not exceed 0.0015% by weight (15 ppm).

Sappi is licensed to fire #6 fuel oil (i.e., residual fuel). Pursuant to 38 M.R.S. § 603-A(2)(A)(1) and (2), as of July 1, 2018, no person shall import, distribute, or offer for sale any residual fuel oil with a sulfur content greater than 0.5% by weight. Therefore, the residual fuel purchased or otherwise obtained for use at this facility shall not exceed 0.5% by weight.

G. Boiler #21

Boilers #17, #18, and #21 (referred to as West-Side Boilers) are maintained as backup for Boilers #22 and #23. They are capable of providing facility heating and production steam. Boiler #21 is also capable of providing facility power and producing electricity for sale. It was manufactured in 1981 by Babcock & Wilcox.

Boiler #21 is licensed to combust biomass fuel, coal, #6 fuel oil, specification and non-specification waste oil, and oily secondary material. It may also utilize distillate fuel as an igniter fuel. Biomass fuel includes wood chips, bark, waste paper, wood waste, sludge, and wood from construction or demolition debris (CDD). Oily secondary material includes oily rags and oil-soaked absorbent materials that have been generated on-site from maintenance and spill cleanup activities.

Boiler #21 has a maximum design heat input rating of 1,074 MMBtu/hr firing biomass fuel and coal. 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.

Emissions exit through a stack which has an inside diameter of 126 inches and an above ground level (AGL) height of 360 feet.

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1. Control Equipment

PM emissions from Boiler #21 are controlled by a multiple centrifugal cyclone separator (multiclone) followed by an electrostatic precipitator (ESP).

During normal operation, Sappi shall operate, at a minimum, the number of ESP fields in operation during the most recent stack test demonstrating compliance with licensed PM emission limits. During periods of ESP malfunction or maintenance, Sappi shall operate, at a minimum, five fields or the number of ESP chambers and number of fields per chamber that operated during the most recent performance test for PM, whichever is less.

Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Performance Testing Guidance*, Sappi may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall Sappi be relieved of its obligation to meet its licensed emission limits.

As described on page 4 of A-29-70-A-I (12/31/2003), Sappi was required to monitor the current and voltage to each ESP field until such time as the monitoring requirements of 40 C.F.R. Part 63, Subpart DDDDD came into effect. Since Subpart DDDDD addresses continuous compliance requirements for particulate matter, these obsolete monitoring requirements have been removed from this license.

2. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

Boiler #21 is exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 because it is subject to visible emission standards under 40 C.F.R. Part 60, Subpart D and 40 C.F.R. Part 63, Subpart DDDDD. [06-096 C.M.R. ch. 101, §§ 1(C)(7) and (8)]

3. Low Sulfur Fuel, 06-096 C.M.R. ch. 106

Boiler #21 fires coal, a solid fossil fuel, and is not located in the Portland Peninsula Air Quality Region. The coal fired in Boiler #21 shall not exceed 0.96 lb of sulfur per MMBtu on a calendar quarter average. [06-096 C.M.R. ch. 106, § 3(B)(1)]

Compliance shall be demonstrated by certification records of the fuel analysis provided by the supplier. [06-096 C.M.R. ch. 106, § 4(A)]

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4. NO_x Control Program, 06-096 C.M.R. ch. 145

Boiler #21 is not subject to NO_x Control Program, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located in counties not covered by a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act. In 06-096 C.M.R. ch. 145, "fossil fuel-fired" is defined as "the combustion of fossil fuel or, if in combination with any other fuel, fossil fuel comprises 51% or greater of the annual (calendar year basis) heat input on a Btu basis."

Although Boiler #21 fires fossil fuel, it makes up less than 51% of the boiler's heat input on an annual basis. Sappi shall keep records to demonstrate that fossil fuel continues to comprise less than 51% of the boiler's annual heat input on a calendar year basis.

5. New Source Performance Standards (NSPS)

Boiler #21 is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Electric Utility Steam Generating Units*, 40 C.F.R. Part 60, Subpart Da. These standards apply to electric utility steam generating units capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hr and constructed after September 18, 1978. An electric utility steam generating unit is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW net-electrical output to any utility power distribution system for sale. Boiler #21 does not meet the definition of an electric utility steam generating unit.

Boiler #21 is subject to the NSPS titled *Standards of Performance for Fossil-Fuel-Fired Steam Engines*, 40 C.F.R. Part 60, Subpart D. These standards apply to fossilfuel and wood-residue-fired steam generating units capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hr and constructed after August 17, 1971.

a. Standards

The following standards apply at all times, including periods of startup, shutdown, and malfunction.

(1) Particulate Matter

Boiler #21 shall not exceed an emission limit for PM of 0.10 lb/MMBtu. [40 C.F.R. § 60.42(a)(1)]

(2) Opacity

Visible emissions from Boiler #21 shall not exceed 20% opacity on a 6-minute block average basis, except for one 6-minute block average per hour of not more than 27% opacity. [40 C.F.R. § 60.42(a)(2)]

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(3) Sulfur Dioxide (SO₂)

- (i) Boiler #21 shall not exceed an emission limit for SO₂ of 0.80 lb/MMBtu when firing only liquid fossil fuel or liquid fossil fuel and biomass. [40 C.F.R. § 60.43(a)(1)]
- (ii) Boiler #21 shall not exceed an emission limit for SO₂ of 1.2 lb/MMBtu when firing only solid fossil fuel or solid fossil fuel and biomass. [40 C.F.R. § 60.43(a)(2)]
- (iii) When firing a mixture of fossils fuels, the emission limit for SO₂ shall be prorated based on the formula contained in 40 C.F.R. § 60.43(b).

(4) Nitrogen Oxides (NO_x)

- (i) Boiler #21 shall not exceed an emission limit for NO_x of 0.30 lb/MMBtu when firing only liquid fossil fuel or liquid fossil fuel and biomass. [40 C.F.R. § 60.44(a)(2)]
- (ii) Boiler #21 shall not exceed an emission limit for NO_x of 0.70 lb/MMBtu when firing only solid fossil fuel or solid fossil fuel and biomass. [40 C.F.R. § 60.44(a)(3)]
- (iii) When firing a mixture of fossils fuels, the emission limit for NO_x shall be prorated based on the formula contained in 40 C.F.R. § 60.44(b).

b. Monitoring Requirements

- (1) Sappi shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) on Boiler #21. [40 C.F.R. § 60.45(a)]
- (2) Sappi shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) on Boiler #21 for SO₂, NO_x, and either oxygen (O₂) or carbon dioxide (CO₂). [40 C.F.R. § 60.45(a)]
- (3) Sappi shall use the procedures in 40 C.F.R. § 60.45(e) to convert the continuous monitoring data into units of the applicable standard (lb/MMBtu).

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c. Reports

Sappi shall submit excess emission and monitoring system performance reports to the Department and EPA semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and monitoring system performance report shall include the information required by 40 C.F.R. § 60.7(c).

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Periods of excess emissions and monitoring system downtime that shall be reported are defined as follows:

Excess emissions of opacity are defined as any 6-minute period during which the average visible emissions exceed 20% opacity, except that one 6-minute average per hour of up to 27% opacity need not be reported.

Excess emissions for SO₂ are defined as any 3-hour period during which the average emissions (arithmetic average of three contiguous 1-hour periods) of SO₂ as measured by the CEMS exceed the applicable standard.

Excess emissions of NO_x are defined as any 3-hour period during which the average emissions (arithmetic average of three contiguous 1-hour periods) of NO_x as measured by the CEMS exceed the applicable standard.

6. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Boiler #21 is located at a major source of HAP and therefore is not subject to NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers, 40 C.F.R. Part 63, Subpart JJJJJJ.

Boiler #21 is not subject to NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 C.F.R. Part 63, Subpart UUUUU. Boiler #21 cogenerates steam and electricity. However, less than one-third of its potential electric output is supplied to a utility distribution system. Therefore, Boiler #21 is not an Electric Utility Steam Generating Unit (EGU) as defined in this subpart.

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 in Table 2 and work practice standards in Table 3 of 40 C.F.R. Part 63, Subpart DDDDD.

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Boiler #21 uses an ESP to comply with the PM emission limit demonstrated through stack testing and is therefore subject to operating limits in Table 4 for opacity. Sappi is also required to operate a COMS.

Although Boiler #21 uses an ESP, it is not required (under this regulation) to monitor the ESP total secondary power output pursuant to Table 8, Row 7, as that requirement applies to boilers with ESPs followed by a wet scrubber.

Boiler #21 is subject to emission limits for hydrogen chloride (HCl), mercury (Hg), and CO. Sappi will demonstrate compliance with these limits through regular stack testing.

The following monitors are considered Continuous Monitoring Systems (CMS) for Boiler #21 under 40 C.F.R. Part 63, Subpart DDDDD:

- Oxygen (O₂) Analyzer System
- COMS
- Boiler #21 Operating Load

Boiler #21 does not have a continuous oxygen trim system.

Sappi does not utilize emissions averaging or efficiency credits to comply with Subpart DDDDD.

Boiler #21 uses definition 1 of startup as follows: Either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler or process heater is supplied for heating, and/or producing electricity, or for any other purpose.

Performance tests for the initial compliance demonstration were conducted in November 2015 and July 2016. The Notification of Compliance Status was submitted to EPA and the Department on September 21, 2016.

A summary of some of the currently applicable 40 C.F.R. Part 63, Subpart DDDDD requirements is listed below. Sappi may be subject to additional requirements based upon the compliance strategy chosen.

a. Emission Limits and Operating Limits

(1) Boiler #21 is subject to the following emission limits at all times except for periods of startup and shutdown, during which time Sappi shall comply with the applicable work practice standards:

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Pollutant	Emission Limit	
PM (filterable)	3.7 x 10 ⁻² lb/MMBtu	
СО	1,500 ppm by volume on a dry basis corrected to 3% O ₂ ,	
	3-run average	
HC1	2.2 x 10 ⁻² lb/MMBtu	
Hg	5.7 x 10 ⁻⁶ lb/MMBtu	

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

- (2) Boiler #21 is subject to the following operating limits at all operating times except for periods of startup and shutdown, during which time Sappi shall comply with the applicable work practice standards:
 - (i) Visible emissions from Boiler #21 shall not exceed 10% opacity or the highest hourly average opacity reading measured during the most recent successful performance test demonstrating compliance with the PM emission limit. Compliance is based on a daily block average. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 4(a)]
 - (ii) The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]
 - (iii) The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]

b. Work Practice Standards

(1) Boiler #21 does not have a continuous oxygen trim system. Therefore, as a work practice standard Sappi shall perform annual tune-ups on Boiler #21 as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 13 months after the previous tune-up. Sappi shall conduct the tune-up while burning the type of fuels that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

[40 C.F.R. §§ 63.7515(d), 63.7540(a)(10), and Table 3, Row 3]

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- (2) If Boiler #21 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

 [40 C.F.R. § 63.7540(a)(13)]
- (3) Sappi shall operate all CMS during startup and shutdown. [40 C.F.R. § 63.7500(a)(1) and Table 3]
- (4) Startup begins when fuel is fired in Boiler #21 and ends when steam or heat is supplied for any purpose. Boiler #21 is subject to the following work practice standards during startup:
 - (i) Sappi shall operate all continuous monitoring systems (CMS) during startup.
 - (ii) Sappi shall use only clean fuels during startup. (See Definitions section.)
 - (iii)Once Boiler #21 starts firing fuels that are not clean fuels, Sappi shall engage all applicable control devices so as to comply with the emission limits

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 5]

- (5) Shutdown begins when Boiler #21 no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler (whichever is earlier) and ends when Boiler #21 is no longer supplying useful thermal energy and no fuel is being combusted in the boiler. Sappi is subject to the following work practice standards during shutdown:
 - (i) Sappi shall operate all CMS during shutdown.
 - (ii) When firing fuels that are not clean fuels during shutdown, Sappi shall operate all PM controls.

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 6]

c. Performance Tests

- (1) Except as provided for in the next paragraph, Sappi must conduct performance stack tests for PM, CO, HCl, and mercury annually. Annual performance tests must be completed no more than 13 months after the previous performance test. [40 C.F.R. § 63.7515(a)]
- (2) If the performance tests for a given pollutant for at least 2 consecutive years show that emissions are at or below 75% of the emission limit for that pollutant, and there are no changes in the operation of Boiler #21 or its associated air pollution control equipment that could increase emissions, Sappi may elect to conduct performance tests for that pollutant every third year. The subsequent performance tests must be conducted no more than 37 months after the previous

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performance test. If a performance stack test shows emissions exceed 75% of the emission limit for a pollutant, Sappi shall resume conducting annual performance stack testing for that pollutant until all performance stack tests for that pollutant over a 2-year period are at or below 75% of the pollutant's emission limit. [40 C.F.R. §§ 63.7515(b) and (c)]

- (3) Sappi shall conduct performance tests for PM, CO, HCl, and mercury in accordance with Table 5. [40 C.F.R. § 63.7520(b)]
- (4) Sappi shall:
 - (i) Conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury (more than one performance test may be required);
 - (ii) Demonstrate compliance and establish operating limits based on these performance tests; and
 - (iii)Comply with the operating limit for operating load conditions specified in Table 4 following each performance test and until the next performance test. [40 C.F.R. § 63.7520(c)]
- (5) Sappi shall conduct a minimum of three separate test runs for each performance test required. [40 C.F.R. § 63.7520(d)]
- (6) Sappi shall use the methodology in § 63.7520(e) to convert measured concentrations to lb/MMBtu emission rates for compliance purposes. If the measured concentration is below the detection level of the method used, Sappi shall use the method detection level as the measured emissions level for the pollutant in calculating compliance. [40 C.F.R. §§ 63.7520(e) and (f)]
- d. Continuous Compliance and Monitoring Requirements
 - (1) At all times, Sappi must operate and maintain Boiler #21, 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)]
 - (2) Sappi shall operate and maintain an oxygen analyzer system, as defined in § 63.7575. The oxygen analyzer system is considered a CMS. [40 C.F.R. § 63.7525(a)]

- (3) Sappi shall operate and maintain a COMS according to the procedures in §§ 63.7525(c)(1) (7). The COMS is considered a CMS. [40 C.F.R. § 63.7525(c)]
- (4) Sappi shall install, operate, and maintain a CMS in order to demonstrate compliance with the operating load limit in accordance with §§ 63.7525(d)(1) through (5). [40 C.F.R § 63.7525(d)]
- (5) For each CMS, Sappi shall develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.8(d) and 63.7505(d)(1)(i) through (iii). Sappi is not required to develop or submit a site-specific monitoring plan for existing COMS operated according to the performance specifications of 40 C.F.R. Part 60, Appendix B and which meet the requirements of § 63.7525. [40 C.F.R. § 63.7505(d)(1)]
- (6) Sappi shall monitor and collect CMS data according to 40 C.F.R. § 63.7535. [40 C.F.R. § 63.7535(a)]
 - (i) Sappi shall operate the monitoring systems and collect data at all required intervals at all times that Boiler #21 is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the facility's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Sappi shall complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [40 C.F.R. § 63.7535(b)]
 - (ii) Sappi may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. Sappi shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. Sappi shall use all the data collected during all other periods in assessing

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compliance and the operation of the control device and associated control system. [40 C.F.R. § 63.7535(c)]

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- (iii)Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, no data shall be used that was collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. Sappi shall calculate monitoring results using all other monitoring data collected while the process is operating. Sappi shall report all periods when the monitoring system is out of control in the semi-annual report. [40 C.F.R. § 63.7535(d)]
- (iv)Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. [40 C.F.R. § 63.7540(a)(1)]

e. 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 6 years pursuant to Standard Condition (6)]
- (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, the following:
 - (i) Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
 - (ii) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]
 - (iii) For the COMS, the records described in 40 C.F.R. §§ 63.7555(b)(1) through (5);

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- (iv) Records required by 40 C.F.R. Part 63, Subpart DDDDD, Table 8 including records of all monitoring data and calculated averages for applicable operating limits (including opacity and operating load) to show continuous compliance with each emission limit; [40 C.F.R. § 63.7555(c)]
- (v) Monthly fuel use including the types and amounts of fuel fired; [40 C.F.R. § 63.7555(d)(1)]
- (vi) Copies of all calculations and supporting documentation of maximum chlorine fuel input that were done to demonstrate continuous compliance with the HCl emission limit. [40 C.F.R. § 63.7555(d)(3)]
- (vii) Copies of all calculations and supporting documentation of maximum mercury fuel input that were done to demonstrate continuous compliance with the mercury emission limit. [40 C.F.R. § 63.7555(d)(4)]
- (viii) If Sappi elects to stack test less frequently than annually, records that document that the emissions in the previous stack test(s) were less than 75% of the applicable emission limit and documentation that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year; [40 C.F.R. § 63.7555(d)(5)]
- (ix) Records of the occurrence and duration of each malfunction of Boiler #21 or of the associated air pollution control and monitoring equipment; [40 C.F.R. § 63.7555(d)(6)]
- (x) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in § 63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.7555(d)(7)]
- (xi) Records of the calendar date, time, occurrence, and duration of each startup and shutdown; [40 C.F.R. § 63.7555(d)(9)]
- (xii) Records of the type(s) and amount(s) of fuel used during each startup and shutdown. [40 C.F.R. § 63.7555(d)(10)]

f. 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 submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.7545(d)]
- (2) Pursuant to 40 C.F.R. § 63.7550(h)(1), Sappi is required to submit the results of a performance test to EPA within 60 days after the date of completing each performance test. However, 06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(c), i.e., Standard Condition (8)(C), requires results of performance tests to be submitted

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to the Department within 30 days from the date of test completion. Sappi has requested that these requirements be streamlined to avoid confusion. Therefore, only the more stringent (30-day) requirement is referenced in the Order of this license.

The performance stack test report must verify that the operating limits for Boiler #21 have not changed or provide documentation of the revised operating limits established. [40 C.F.R. §§ 63.7515(f)]

- (3) Sappi shall prepare and submit to the Department and EPA a compliance report every six months which contains the information contained in §§ 63.7540(b) and 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]
- (4) Semi-annual compliance reports, results of compliance tests, and results of CEMS performance evaluations shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, Sappi shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

7. Emission Limits and Streamlining

For Boiler #21, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, emission limits are on a 1-hour block average basis or other applicable performance test protocols.

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Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits	
Tonutant	0.08 lb/MMBtu (firing coal but not oil or biomass)	06-096 C.M.R. ch. 103, § 2(A)(2)(b)	Limits	
	0.20 lb/MMBtu (firing oil but not biomass)	06-096 C.M.R. ch. 103, § 2(A)(1)		
	0.30 lb/MMBtu (firing biomass)	06-096 C.M.R. ch. 103, § 2(A)(3)(b)	0.037 lb/MMBtu * See Note 3	
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (#1615, Amend. #1, 3/11/1981)		
	0.10 lb/MMBtu	40 C.F.R. Part 60, Subpart D, § 60.42(a)(1)		
	0.037 lb/MMBtu See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 7(b)		
	85.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	39.7 lb/hr *	
	39.7 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only		
	0.08 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-71-C-A/R, 6/23/1988)	0.08 lb/MMBtu	
PM_{10}	85.9 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	39.7 lb/hr *	
	39.7 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only		
SO ₂ (firing oil w/o coal) See Notes 1 & 4	0.80 lb/MMBtu (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.43(a)(1)	0.80 lb/MMBtu (3-hr rolling avg.)	
SO ₂ (firing coal) See Notes 2 & 4	1.2 lb/MMBtu (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.43(a)(2)	1.2 lb/MMBtu (3-hr rolling avg.)	
SO ₂ any fuel(s)	0.8 lb/MMBtu (30-day rolling avg.)	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.8 lb/MMBtu (30-day rolling avg.)	
	1,031 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	1,031 lb/hr	

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Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO _x (firing oil w/o coal) See Notes 1 & 5	0.30 lb/MMBtu (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.44(a)(2)	0.30 lb/MMBtu (3-hr rolling avg.)
NO _x	0.70 lb/MMBtu (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.44(a)(3)	0.70 lb/MMBtu (3-hr rolling avg.)
(firing coal) See Notes 2 & 5	751.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	751.8 lb/hr
NO _x (when coal is not fired)	322.2 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	322.2 lb/hr
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)	0.38 lb/MMBtu (24-hr daily block avg.)
	1,500 ppmdv @ 3% O ₂ See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 7(a)	1,500 ppmdv @ 3% O ₂ See Note 3
	0.46 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-71-C-A/R, 6/23/1988)	0.46 lb/MMBtu
СО	644.4 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	494.0 lb/hr *
	494.0 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	
VOC	40.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	40.8 lb/hr
HC1	2.2 x 10 ⁻² lb/MMBtu See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(a)	2.2 x 10 ⁻² lb/MMBtu See Note 3
Hg	5.7 x 10 ⁻⁶ lb/MMBtu See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(b)	5.7 x 10 ⁻⁶ lb/MMBtu See Note 3

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Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
	20% opacity on a 6-minute block average basis, except for one (1) 6-minute period per hour of not more than 27% opacity	40 C.F.R. Part 60, Subpart D, § 60.42(A)(2)	20% opacity on a 6-minute block average basis, except for one (1) 6-minute period per hour of not more than 27% opacity
Visible Emissions	10% opacity on a daily block average or the highest hourly average opacity reading measured during the last NESHAP performance test (See Note 3)	40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 4(a)	10% opacity on a daily block average or the highest hourly average opacity reading measured during the last NESHAP performance test (See Note 3)

- 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).

8. Annual Emission Limits

Boilers #21, #17, and #18 are subject to combined annual emission limits. See Section II(I).

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9. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler #21 shall be demonstrated in accordance with the methods and frequencies indicated below or other methods or frequencies as approved by the Department.

- a. Sappi shall demonstrate compliance with the PM lb/MMBtu emission limit through performance testing conducted pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- b. Sappi shall demonstrate compliance with the PM lb/hr emission limit through performance testing conducted at least once every five calendar years. The next compliance test is due no later than 12/31/2022. The performance testing for PM lb/MMBtu required under 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**
- c. Sappi shall demonstrate compliance with the SO₂ lb/MMBtu emission limits through the use of a SO₂ CEMS. [40 C.F.R. § 60.45(a)]
- d. Sappi shall demonstrate compliance with the NO_x lb/MMBtu emission limits through use of a NO_x CEMS. [06-096 C.M.R. ch. 117 § 1(B)(2) and 40 C.F.R. § 60.45(a)]
- e. Sappi shall demonstrate compliance with the CO ppmdv emission limits through performance testing conducted pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- f. Sappi shall demonstrate compliance with the visible emission limits through the use of a COMS. [40 C.F.R. § 60.45(a) and 40 C.F.R. § 63.7525(c)]
- g. Sappi shall demonstrate compliance with the HCl and Hg emission limits pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- h. Upon request by the Department, Sappi shall conduct performance testing to demonstrate compliance with the PM₁₀ lb/MMBtu emission limit and the PM₁₀, SO₂, NO_x, CO, and VOC lb/hr emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]

10. Compliance Assurance Monitoring

CAM is not applicable to Boiler #21.

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11. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Boiler #21 and its associated air pollution control equipment.

- a. Hours Boiler #21 was active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- b. Types and amounts of each fuel fired on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. 63.7555(d)(1)]
- c. Sulfur content (% by weight) of all liquid fuels fired. [06-096 C.M.R. ch. 137]
- d. Certification records of the coal fuel analysis provided by the supplier. [06-096 C.M.R. ch. 106, § 4(A)]
- e. Records to demonstrate that fossil fuel comprises less than 51% of the annual heat input on a calendar year basis for Boiler #21. [06-096 C.M.R. ch. 145]
- f. Records of annual emissions from Boiler #21 on a 12-month rolling total basis used to demonstrate compliance with the combined annual emission limits for Boilers #21, #17, and #18. [06-096 C.M.R. ch. 115 (A-29-71-AG-M, 6/5/2002)] **Enforceable by State-only**
- g. For the COMS, the records described in 40 C.F.R. §§ 63.7555(b)(1) through (5);
- h. Records of the occurrence and duration of each malfunction of Boiler #21 or of the associated air pollution control and monitoring equipment; [40 C.F.R. § 63.7555(d)(6)]
- i. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.7555(d)(7)]
- j. Records of the calendar date, time, occurrence, and duration of each startup and shutdown; [40 C.F.R. § 63.7555(d)(9)]
- k. Records of the type(s) and amount(s) of fuel used during each startup and shutdown. [40 C.F.R. § 63.7555(d)(10)]
- 1. Pressure drop across the multiclone monitored continuously and recorded at least once per shift. [40 C.F.R. § 70.6(c)(1)]
- m. Records of any maintenance activities performed (planned or unplanned) on the multiclone and ESP. [40 C.F.R. § 70.6(c)(1)]

12. Parameter Monitors

During all operating times, Sappi shall continuously operate, record data, and maintain records from the following parameter monitors for Boiler #21:

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Parameter	Averaging Period	Origin and Authority
Operating Load		40 C.F.R. § 63.7525(d)
O ₂ Analyzer	30-day rolling average	40 C.F.R. § 60.45(a) and
		40 C.F.R. § 63.7525(a)
		& Table 8

13. CEMS and COMS

For Boiler #21, the table below lists the required continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS).

Continuous			
Monitors	Units	Averaging Period	Origin and Authority
NO _x CEMS	lb/MMBtu	24-hr block avg. and 3-hr rolling avg.	06-096 C.M.R. ch. 117 and 40 C.F.R. § 60.45(a)
SO ₂ CEMS	lb/MMBtu	3-hr rolling avg.	40 C.F.R. § 60.45(a)
COMS	%	6-minute block average 24-hr block average	06-096 C.M.R. ch. 117, 40 C.F.R. § 60.45(a), and 40 C.F.R. § 63.7525(c) & Table 8

H. Boilers #17 & #18

Boilers #17, #18, and #21 (referred to as West-Side Boilers) are maintained as backup for Boilers #22 and #23. Boilers #17 and #18 were built and installed by Combustion Engineering in 1948. They are twin boilers, located side-by-side and originally designed to burn pulverized coal as primary fuel with #6 fuel oil as a back-up. In 1961, both boilers were converted to firing only fuel oil, primarily #6 fuel oil.

In addition to #6 fuel oil, Boilers #17 and #18 utilize distillate fuel as a startup fuel. They are also licensed to fire specification and non-specification waste oil.

Emissions exit through a common stack. Air emission license A-29-71-AB-M, issued 7/17/1997, permitted Sappi to lower the stack from 353 feet to 250 feet above ground level. At that time air dispersion modeling was performed to demonstrate compliance with ambient air quality standards at the reduced stack height. To date, Sappi has lowered the height of the stack by only eight feet. However, Sappi is permitted to lower the stack further, provided it is not reduced to less than 250 feet.

1. Fuel Restrictions

In 1961, both boilers were converted to firing only fuel oil, primarily #6 fuel oil. They are designed to each fire a maximum of 1,572 gal/hr, equivalent to 232.7 MMBtu/hr. However, air emission license A-29-71-Y-A, issued 6/12/1996, established heat input restrictions on Boilers #17 and #18 of 199.0 MMBtu/hr per boiler to avoid the requirement to install and operate a NO_x CEMS pursuant to 06-096 C.M.R. chs. 117 and 138. To ensure compliance with the heat input restrictions, Sappi is required to restrict oil firing rates by use of oil supply valves or pneumatic controls such that the oil supplied to each of these boilers never exceeds 10,575 lb/hr of #6 fuel oil (1,327 gal/hr). A mass-flow transmitter shall measure the #6 fuel oil flow rate to each boiler. Sappi shall keep daily fuel use records for each boiler.

Sappi has also accepted a license restriction limiting Boilers #17 and #18 (each) to firing less than 10% of their annual firing capacity in order to be considered "limited use boilers" for purposes of 40 C.F.R. Part 63, Subpart DDDDD. Therefore, the fuel use for each boiler is restricted to less than 1,162,160 gal/year, equivalent to 10% of the annual capacity factor for each boiler.

2. Startup and Shutdown

For Boilers #17 and #18, "startup" is defined as the period of time beginning when fuel oil is first introduced into the boiler and ending when the boiler has picked up the mill's full steam load and that load has been stabilized. For purposes of the visible emissions standards, this period of time shall not exceed 8 hours in cases of a warm startup and 12 hours in cases of a cold startup.

A "warm" startup is defined as the situation when Boiler #21, #22, or #23 are on-line and the mill steam piping system is hot.

A "cold" startup is defined as the situation when Boilers #21, #22, and #23 are all off-line and the mill steam piping system is cold.

For Boilers #17 and #18, "shutdown" is defined as the period of time beginning when steam is no longer being supplied to the process by the boiler and ending when all fuel has stopped being introduced to the boiler. For purposes of the visible emissions standards, this period of time shall not exceed 2 hours.

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3. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

Boilers #17 and #18 are subject to 06-096 C.M.R. ch. 101. These boilers are each restricted to an annual capacity limit of 10% or less.

- a. When only one boiler (i.e., either Boiler #17 or Boiler #18) is operating, visible emissions from the main stack shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, malfunction, and approved maintenance, Sappi may elect to comply with the work practice standards listed below in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(E)(1)]
- b. When both Boilers #17 and #18 are operating, visible emissions from the main stack shall not exceed an opacity of 40% on a 6-minute block average basis, except that for periods of startup, shutdown, malfunction, and approved maintenance, Sappi may elect to comply with the work practice standards listed below in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(E)(2)]

c. Approved Maintenance

Soot blowing is a routine maintenance activity for older boilers where steam is used to remove slag and soot build-up on the furnace tubes. The frequency of soot blowing depends on operational factors, but Sappi follows standard industry guidelines where soot blowing typically occurs once every eight hours and lasts for less than one hour.

If not performed, soot deposits create an insulating barrier which reduces the efficiency of heat transfer. Failure to perform this maintenance will increase fuel consumption, elevate flue gas temperatures, and increase the risk of furnace fire.

Therefore, periods of soot blowing shall be considered approved maintenance activities subject to the work practice standards listed below in lieu of the numerical visible emission limits.

d. Work Practice Standards

During periods of startup, shutdown, malfunction, and approved maintenance, Sappi may comply with the following work practice standards in lieu of the numerical visible emissions standard.

(1) Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, malfunctions, and approved maintenance for each boiler.

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- (2) Develop and implement a written startup and shutdown plan for each boiler.
- (3) Do not exceed one hour per occurrence for malfunctions and approved maintenance. The duration of startups and shutdowns shall be as defined in this license.
- (4) At all times, operate each boiler 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 Department 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 unit.

4. NO_x Control Program, 06-096 C.M.R. ch. 145

Boilers #17 and #18 are not subject to NO_x Control Program, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located in counties not covered by a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act. These boilers are each restricted to a maximum heat input of 199.0 MMBtu/hr.

5. New Source Performance Standards

Due to their age, Boilers #17 and #18 are not subject to the NSPS titled *Standards of Performance for Fossil-Fuel-Fired Steam Engines*, 40 C.F.R. Part 60, Subpart D. These standards apply to fossil-fuel and wood-residue-fired steam generating units capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hr and constructed after August 17, 1971.

Similarly, Boilers #17 and #18 are not subject to the NSPS titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. These standards apply to steam generating units greater than 100 MMBtu/hr constructed after June 19, 1984.

6. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Boilers #17 and #18 are located at a major source of HAP and therefore are not subject to *NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers*, 40 C.F.R. Part 63, Subpart JJJJJJ.

Boilers #17 and #18 are 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. Boilers #17 and #18 are each limited to an annual capacity factor of 10% or less. Therefore, they are considered

existing boilers in the "limited-use boilers and process heaters" subcategory. See Section II(L) below for Subpart DDDDD requirements for limited-use boilers.

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7. Emission Limits and Streamlining

For Boilers #17 and #18 (each), a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, limits are for each boiler individually, are on a 1-hour block average basis, and apply at all operating times.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(A)(1)	0.20 lb/MMBtu
PM	39.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	39.8 lb/hr
PM_{10}	39.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	39.8 lb/hr
SO_2	104.5 lb/hr (based on firing 0.5% sulfur fuel)	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	104.5 lb/hr
	0.30 lb/MMBtu	06-096 C.M.R. ch. 138, § 3(B)(1)	0.30 lb/MMBtu
NO _x	59.7 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	59.7 lb/hr
СО	6.6 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	6.6 lb/hr
VOC	1.7 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	1.7 lb/hr
Visible Emissions	Pursuant to 06-096 C.M.R. ch. 101, § 3(E) as described earlier in this license		

8. Annual Emission Limits

Boilers #21, #17 and #18 are subject to combined annual emission limits. See Section II(I).

9. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boilers #17 & #18 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

10. Compliance Assurance Monitoring

CAM is not applicable to either Boiler #17 or Boiler #18.

11. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Boilers #17 and #18 (each).

- a. Hours Boilers #17 and #18 (each) were active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- b. Fuel use records for Boilers #17 and #18 (each) for each day the boiler was operating. [40 C.F.R. § 63.7525(k)]
- c. Records from the mass-flow transmitters used to demonstrate that each boiler does not exceed a fuel firing rate of 10,575 lb/hr of #6 fuel oil (1,327 gal/hr). [06-096 C.M.R. ch. 138, (A-29-71-Y-A, 6/13/1996)]
- d. Records of annual fuel use for each boiler used to demonstrate compliance with the annual capacity factor limit. [40 C.F.R. § 70.6(c)(1)]
- e. Sulfur content (% by weight) of all liquid fuels fired. [06-096 C.M.R. ch. 137]
- f. Records of annual emissions from Boilers #17 and #18 on a 12-month rolling total basis used to demonstrate compliance with the combined annual emission limits for Boilers #21, #17, and #18. [06-096 C.M.R. ch. 115 (A-29-71-AG-M, 6/5/2002)] **Enforceable by State only**

12. Parameter Monitors

There are no parameter monitors required for Boilers #17 or #18.

13. CEMS and COMS

There are no CEMS or COMS required for Boilers #17 or #18.

I. Annual Emission Limits for Boilers #21, #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. Since that license, new applicable requirements have further limited emissions of PM, PM₁₀, and VOC from this equipment such that the annual emissions caps on these pollutants are obsolete and redundant and have not been carried forward in this license.

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Pursuant to A-29-71-AG-M, Boilers #21, #17, and #18 combined shall not exceed the following limits on a 12-month rolling total basis:

Pollutant	Tons/year
SO_2	3,763.5
NO_x	1,787.6

These emission limitations were taken voluntarily and not established through a Best Available Control Technology (BACT) analysis. Therefore, these limits are **Enforceable by State-only**.

Additionally, pursuant to NO_x RACT, if Boiler #21 emits more than 100.0 tons of NO_x in any consecutive 12-month period, Sappi shall install and begin utilizing SNCR or an equivalent control strategy for control of NO_x to a level not to exceed 0.20 lb/MMBtu on a 24-hour block average basis from this boiler within 24 months. This requirement takes effect as of the issuance of this license, i.e., the first 12-month period begins the month this license is issued.

Compliance shall be demonstrated by monthly calculations of annual (12-month rolling total) emissions. CEMS data shall be used whenever available. For emissions from Boilers #17 and #18 and 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.

J. Waste Oil Firing

Sappi is licensed to fire a combined total of 10,000 gallons per year of specification and off-specification waste oil (combined) in Boilers #17, #18, and #21 (combined) on a 12-month rolling total basis. Waste oil is introduced into the system by being added to the #6 Fuel Oil Storage Tank. 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.

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Sappi shall maintain monthly records which include the following:

- 1. The amount of waste oil added to the #6 Fuel Oil Storage Tank and the date it was added; and
- 2. Documentation that the waste oil meets the definition of either specification or offspecification waste oil through analysis of a representative sample (collected at least once per year) of waste oil added to the #6 Fuel Oil Storage Tank.

[06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] Enforceable by State-only

K. Technology Center Boiler

Sappi operates the Technology Center Boiler for facility heating and steam use needs. The boiler is rated at 8.4 MMBtu/hr and fires natural gas. It was installed in 1969 and exhausts through its own stack.

1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

The Technology Center Boiler is subject to 06-096 C.M.R. ch. 101. This boiler is restricted to an annual capacity limit of 10% or less making it subject to the following visible emission standard:

Visible emissions from the Technology Center Boiler shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch, 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(E)(1)]

However, the Technology Center Boiler is also subject to the following visible emission limit established under Best Practical Treatment (BPT):

Visible emissions from the Technology Center Boiler shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] Enforceable by State-only

The Department has determined that the BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally-enforceable limit in 06-096 C.M.R. ch. 101 makes the BPT limit Federallyenforceable.

2. New Source Performance Standards

Due to its size, the Technology Center Boiler is not 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 manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

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3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The Technology Center Boiler is located at a major source of HAP and therefore is not subject to *NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers*, 40 C.F.R. Part 63, Subpart JJJJJJ.

The Technology Center Boiler 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. This boiler is limited to an annual capacity factor of 10% or less. Therefore, it is considered an existing boiler in the "limited-use boilers and process heaters" subcategory. See Section II(L) below for Subpart DDDDD requirements for limited-use boilers.

4. Emission Limits and Streamlining

For the Technology Center Boiler, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, limits are on a 1-hour block average basis and apply at all operating times.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103 § 2(B)(1)(a)	0.12 lb/MMBtu
PM	0.1 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.1 lb/hr
PM_{10}	0.1 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.1 lb/hr
SO_2	0.005 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.005 lb/hr
NO _x	0.8 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.8 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
СО	0.7 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.7 lb/hr
VOC	0.04	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.04 lb/hr
Visible Emissions	As described earlier in	this license	

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5. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Technology Center Boiler shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring

CAM is not applicable to the Technology Center Boiler.

7. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Technology Center Boiler.

- a. Hours the Technology Center Boiler was active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- b. Fuel use records for the days the Technology Center Boiler was operating. [40 C.F.R. § 63.7525(k)] Fuel usage for the Technology Center Boiler and #35 Research Coater Dryer is measured through use of a common meter.
- c. Records of annual fuel use used to demonstrate compliance with the annual capacity factor limit. [40 C.F.R. § 70.6(c)(1)]

8. Parameter Monitors

There are no parameter monitors required for the Technology Center Boiler.

9. CEMS and COMS

There are no CEMS or COMS required for the Technology Center Boiler.

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L. 40 C.F.R. Part 63, Subpart DDDDD Requirements for Limited Use Boilers

Boilers #17 and #18 and the Technology Center Boiler are 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. Each of these boilers is limited to an annual capacity factor of 10% or less. Therefore, they are considered existing boilers in the "limited-use boilers and process heaters" subcategory.

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1. Work Practice Standards and Continuous Compliance

- a. Sappi shall perform tune-ups on Boilers #17, #18, and the Technology Center Boiler (each) as specified in §§ 63.7540(a)(10)(i) through (vi) every 5 years. Delay of the burner inspection until the next scheduled or unscheduled shutdown is permitted for up to 72 months from the previous inspection. [40 C.F.R. §§ 63.7500(c) & 63.7540(a)(12)]
- b. If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]
- c. At all times, Sappi must operate and maintain Boilers #17, #18, and the Technology Center Boiler (each), 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)]

2. Recordkeeping

- a. 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 6 years pursuant to Standard Condition (6)]
- b. 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)]
- c. Sappi shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:
 - (1) Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
 - (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]

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(3) Fuel use records for the days Boilers #17, #18, and the Technology Center Boiler (each) were operating. [40 C.F.R. § 63.7525(k)]

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3. 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 five years for Boilers #17, #18, and the Technology Center Boiler (each) which contains the information contained in § 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]
- b. Compliance reports shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, Sappi shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

M. Boilers #22 and #23

In 2020 Sappi installed two new, natural gas-fired, package boilers (Boilers #22 and #23). Boilers #22 and #23 have maximum heat inputs of 99.9 MMBtu/hr and 42.0 MMBtu/hr, respectively.

When originally licensed in NSR A-29-77-5-A (8/21/2020), the exact sizes of the boilers was uncertain since it was dependent on vendor availability at the time the purchase order was placed. Therefore, that licensing action was based on each boiler having a maximum heat input of less than 100 MMBtu/hr and the two boilers having a maximum combined heat input of less than 150 MMBtu/hr, and the BACT analysis addressed rate-based limits (i.e., lb/MMBtu). Since the boilers' capacities are now known, this license also addresses emission limits in units of lb/hr. Also, the NSR License conditions constraining the sizes of these boilers (Specific Conditions (1)(B)(1) and (2) of NSR license A-29-77-5-A) are now considered obsolete and not included in this license.

Boilers #22 and #23 are leased units which may be temporary. In the next two to three years, Sappi will determine whether to purchase Boilers #22 and #23 or to replace them with other, similar units. However, these boilers do not meet the definition of "temporary" units in either State or Federal regulations and are therefore treated as permanent installations for applicability purposes.

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

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1. Transitional Periods

The East-Side Boilers (Boilers #22 and #23) shall not operate concurrently with the West-Side Boilers with the exception of Transitional Periods (as that term is defined in this license). Sappi shall keep records of the date and time each West-Side and East-Side boiler begins producing useful thermal energy and the date and time fuel firing ends in order to demonstrate compliance with this requirement.

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2. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

Boilers #22 and #23 are each are subject to 06-096 C.M.R. ch. 101. Visible emissions from Boilers #22 and #23 shall each not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards

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. Notification

Sappi was required to submit notification to EPA and the Department of the date of construction and actual start-up. This notification shall include the design heat input capacity of each boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)] This notification has been made. Boilers #22 and #23 started up on 1/13/2021.

b. Standards

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

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c. 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)]

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4. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

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 will fire natural gas and will be 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. Compliance Date

Boilers #22 and #23 must comply with applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD upon startup. [40 C.F.R. § 63.7495(a)]

- b. 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 13, 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 with this subpart 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)]
- c. 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)]

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- (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)]

d. 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 6 years pursuant to Standard Condition (6)]
- (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)]

e. 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) An Initial Notification for Boilers #22 and #23 was submitted on 2/3/2021. [40 C.F.R. § 63.7545(c)]

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- (2) 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;
 - (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)]

- (3) 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)]
- (4) 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)]

5. Emission Limits and Streamlining

For Boilers #22 and #23, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, limits are on a 1-hour block average basis and apply at all operating times.

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Boiler #22			
	Applicable Emission		Licensed Emission
Pollutant	Standards	Origin and Authority	Limits
	0.08 lb/MMBtu	06-096 C.M.R. ch. 103,	
	0.00 10/1VIIVIDtu	§ 2(B)(1)(b)	0.005 lb/MMBtu *
PM	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.003 10/141141Btu
1 171	0.003 10/11/11/11/11	(A-29-77-5-A, 8/21/2020)	
	0.50 lb/hr	06-096 C.M.R. ch. 140, BPT	0.50 lb/hr
	0.5 0 10/III	Enforceable by State-only	0.3 0 10/III
	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.005 lb/MMBtu
PM_{10}	0.003 10/1 VIIVID ta	(A-29-77-5-A, 8/21/2020)	0.003 10/1 VIIVIB tu
1 14110	0.50 lb/hr	06-096 C.M.R. ch. 140, BPT	0.50 lb/hr
	0.50 10/1H	Enforceable by State-only	0.50 10/ III
	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.005 lb/MMBtu
PM _{2.5}	0.003 10/1 VIIVID ta	(A-29-77-5-A, 8/21/2020)	0.003 10/1 VIIVID tu
1 1412.5	0.50 lb/hr	06-096 C.M.R. ch. 140, BPT	0.50 lb/hr
		Enforceable by State-only	0.3 0 10/III
	0.001 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.001 lb/MMBtu
SO_2		(A-29-77-5-A, 8/21/2020)	0.001 10/1 VIIVIB tu
502	0.10 lb/hr	06-096 C.M.R. ch. 140, BPT	0.10 lb/hr
		Enforceable by State-only	0.10 10/III
	0.036 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.036 lb/MMBtu
NO_x	0.030 10/11/11/11/11	(A-29-77-5-A, 8/21/2020)	0.030 10/1 VIIVIB tu
1,0χ	3.60 lb/hr	06-096 C.M.R. ch. 140, BPT	3.60 lb/hr
	3.00 TO/III	Enforceable by State-only	2.00 TO/III
	0.038 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.038 lb/MMBtu
CO	0.036 10/1VIIVIDtu	(A-29-77-5-A, 8/21/2020)	0.030 10/1411411314
	3.80 lb/hr	06-096 C.M.R. ch. 140, BPT	3.80 lb/hr
	3.00 TO/III	Enforceable by State-only	2.00 TO/III
VOC	0.004 lb/MMBtu	06-096 C.M.R. ch. 115, BACT	0.004 lb/MMBtu
	0.00110/1111111111111111111111111111111	(A-29-77-5-A, 8/21/2020)	0.00 i 10/14114115tu
	0.40 lb/hr	06-096 C.M.R. ch. 140, BPT	0.40 lb/hr
	0.10 10/1H	Enforceable by State-only	0.10 10/III
Visible Emissions	As described earlier in	this license	

Boiler #23			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.005 lb/MMBtu *
	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.003 10/MMBtu
	0.21 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.21 lb/hr
DM.	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.005 lb/MMBtu
PM_{10}	0.21 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.21 lb/hr
DM.	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.005 lb/MMBtu
PM _{2.5}	0.21 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.21 lb/hr
	0.001 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.001 lb/MMBtu
SO_2	0.04 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.04 lb/hr
NO	0.036 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.036 lb/MMBtu
NO _x 1.51 lb/hr	1.51 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	1.51 lb/hr
СО	0.038 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.038 lb/MMBtu
CO	1.60 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	1.60 lb/hr
VOC	0.004 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)	0.004 lb/MMBtu
	0.17 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.17 lb/hr
Visible Emissions	As described earlier in	this license	

6. Emission Limit Compliance Methods

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.

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.

Compliance with all other emission limits associated with Boilers #22 and #23 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

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7. Compliance Assurance Monitoring

CAM is not applicable to either Boiler #22 or #23.

8. Periodic Monitoring

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

- a. Hours Boilers #22 and #23 (each) was active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- b. Amount of natural gas fired in Boilers #22 and #23 (each) on a calendar month basis; [40 C.F.R. § 60.48c(g)(2)]
- c. The current tariff sheet showing the maximum total sulfur content of the natural gas fired; and [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]
- d. Date and time each West-Side Boiler and East-Side boiler begins producing useful thermal energy (used to document transitional periods); and [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]
- e. Date and time each West-Side Boiler and East-Side boiler stops introducing fuel into the boiler (used to document transitional periods). [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]

9. Parameter Monitors

There are no parameter monitors required for Boilers #22 and #23.

10. CEMS and COMS

There are no CEMS or COMS required for Boilers #22 and #23.

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N. MAU #1

Sappi installed make-up air unit (MAU #1) in 2020 to provide building heat and to make up for the combustion air drawn out of the building by Boilers #22 and #23. MAU #1 is rated at 2.75 MMBtu/hr and fires natural gas.

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1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

MAU #1 is subject to 06-096 C.M.R. ch. 101. This unit is not a boiler, making it subject to the following visible emission standard:

Visible emissions from MAU #1 shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch. 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

However, MAU #1 is also subject to the following visible emission limit established under BACT:

Visible emissions from MAU #1 shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)]

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 has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the air emission license.

2. New Source Performance Standards

Due to its size and not being a "steam generating unit," MAU #1 is not 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 manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

MAU #1 does not meet the definition of either boiler or process heater in 40 C.F.R. § 63.7575. Therefore, MAU #1 is not 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.

4. Emission Limits and Streamlining

For MAU #1, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Unless otherwise stated, limits are on a 1-hour block average basis and apply at all operating times.

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Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.14 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)	0.14 lb/hr
PM ₁₀	0.14 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)	0.14 lb/hr
NO _x	0.27 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)	0.27 lb/hr
СО	0.22 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)	0.22 lb/hr
VOC	0.01 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)	0.01 lb/hr
Visible Emissions	As described earlier in	this license	

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with MAU #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring

CAM is not applicable to MAU #1.

7. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for MAU #1:

- a. Hours MAU #1 was active or operating on a monthly and calendar year basis.
- b. Amount of natural gas fired in MAU #1 on a calendar year basis. [06-096 C.M.R. ch. 137]

8. Parameter Monitors

There are no parameter monitors required for MAU #1.

9. CEMS and COMS

There are no CEMS or COMS required for MAU #1.

O. Emergency Engines

Sappi operates five emergency engines. Engines #1, #2, and #5 are generator sets, with each gen set consisting of an engine and an electrical generator. Engine #3 is a fire pump, and Engine #4 is an emergency back-up feedwater pump. Engines #1 – #4 fire distillate fuel. Engine #5 fires propane and is a 4-stroke, rich-burn engine. Below is a listing of the engine sizes and ages.

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Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Manufacture Date
Engine #1 (Treatment Plant)	2.81	1998
Engine #2 (Rotary Room)	1.91	1975
Engine #3 (MacIntosh)	0.67	1972
Engine #4 (Feedwater)	0.49	1987
Engine #5 (IT)	2.09	2004

1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

Engines #1 - #5 are each are subject to 06-096 C.M.R. ch. 101.

a. Visible emissions from each engine shall not exceed an opacity of 20% on a 6-minute block average basis, except that for periods of startup during which time Sappi may comply with the following work practice standards in lieu of the numerical visible emissions standard.

b. Work Practice Standard

(1) Maintain a log (written or electronic) of the date, time, and duration of all generator startups.

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(2) Operate the engines in accordance with the manufacturer's emission-related operating instructions.

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- (3) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- (4) Operate the engines, including any associated air pollution control equipment, at all times 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 Department 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 unit.

2. New Source Performance Standards (NSPS)

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is not applicable to Engines #1 – #4 since these units were manufactured prior to April 1, 2006.

Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is not applicable to Engine #5 since it was manufactured prior to January 1, 2009.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Engines #1 – #5. The engines are considered existing, emergency stationary reciprocating internal combustion engines (RICE) at a major HAP source and are not subject to NSPS regulations. EPA's August 9, 2010 memo (Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE) specifically does not exempt these units from the federal requirements.

a. Emergency Engine Designation and Operating Criteria

Under Subpart ZZZZ, a stationary reciprocating internal combustion engine is considered an **emergency** stationary RICE (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 Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(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:

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- 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 or equipment failure;
- 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 RICE 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.

Engines #1 – #5 shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

emergency engines.

(1) Operation and Maintenance Requirements [40 C.F.R. § 63.6602 and Table 2(c)]

	Operating Limitations
Compression ignition (distillate fuel) units:	- Change oil and filter every 500 hours of operation or annually, whichever comes first;
Engines #1 – #4	- Inspect the air cleaner every 1000 hours of operation
	or annually, whichever comes first, and replace as necessary; and
	- Inspect all hoses and belts every 500 hours of
	operation or annually, whichever comes first, and replace as necessary.
Spark ignition (natural gas, propane) units:	- Change oil and filter every 500 hours of operation or annually, whichever comes first;
Engine #5	- Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as
	necessary; and
	- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and
	replace as necessary.

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

(2) Optional Oil Analysis Program

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 each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R.§ 63.6625(i)]

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

(4) Startup Idle and Startup Time Minimization Requirements
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) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, the units 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). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping
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(f)]

4. Emission Limits and Streamlining

For Engines #1 - #5, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

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Engine #1 (Treatment Plant)			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.34 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.34 lb/hr
PM_{10}	0.34 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.34 lb/hr
NO _x	7.43 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	7.43 lb/hr
СО	0.63 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.63 lb/hr
VOC	0.98 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.98 lb/hr
Visible Emissions	As described earlier in	this license	

Engine #2 (Rotary Room)			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.23 lb/hr
PM_{10}	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.23 lb/hr
NO _x	8.42 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	8.42 lb/hr
СО	1.81 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	1.81 lb/hr
VOC	0.67 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.67 lb/hr
Visible Emissions	As described earlier in	this license	

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Engine #3 (MacIntosh)			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.08 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.08 lb/hr
PM_{10}	0.08 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.08 lb/hr
NO _x	2.95 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	2.95 lb/hr
СО	0.64 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.64 lb/hr
VOC	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.23 lb/hr
Visible Emissions	As described earlier in	this license	

Engine #4 (Feedwater)			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.06 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.06 lb/hr
PM_{10}	0.06 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.06 lb/hr
NO _x	2.16 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	2.16 lb/hr
СО	0.47 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.47 lb/hr
VOC	0.17 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003) Enforceable by State-only	0.17 lb/hr
Visible Emissions	As described earlier in	this license	

Engine #5 (IT)			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.25 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.25 lb/hr
PM_{10}	0.25 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.25 lb/hr
NO _x	4.77 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	4.77 lb/hr
СО	7.81 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	7.81 lb/hr
VOC	0.06 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.06 lb/hr
Visible	As described earlier in	this license	

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5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Engines #1 - #5 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Compliance Assurance Monitoring

CAM is not applicable to Engines #1 - #5.

7. Periodic Monitoring

Emissions

Sappi shall record data and maintain records for the following periodic monitoring values for Engines #1 - #5:

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

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8. Parameter Monitors

There are no Parameter Monitors required for Engines #1 - #5.

9. CEMS and COMS

There are no CEMS or COMS required for Engines #1 - #5.

P. Portable Engines

Sappi may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

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Any engine which cannot meet the definition of "portable engine" as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

Q. #35 Research Coater and Dryer

Sappi operates a small coater, designated #35 Research Coater, in their Technology Center to test different coating grades. It is used for running coatings experimentally and therefore runs a variety of coatings for short periods of time. The coatings are not run on #35 Research Coater for production purposes.

Sappi operates a dryer associated with #35 Research Coater used to provide heat for convection drying of paper coatings during coating trials. The Dryer has a maximum design heat input of 7.0 MMBtu/hr and fires natural gas. It was manufactured by W.R. Grace in 1985.

The #35 Research Coater and Dryer was first included in Air Emission License A-29-70-A-I (12/31/2003). The size of the burner was erroneously listed in this license as 13.0 MMBtu/hr. In Air Emission License A-29-70-I-R (A7/18/2014), the burner was listed as 7.7 MMBtu/hr which was also incorrect as it included the 0.7 MMBtu/hr burner which is considered an insignificant activity.

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1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

The #35 Research Coater Dryer is subject to 06-096 C.M.R. ch. 101. This equipment is considered fuel burning equipment not specifically listed elsewhere in the regulation and subject to the following visible emission standard:

Visible emissions from the #35 Research Coater Dryer shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch, 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

However, as of this license, the #35 Research Coater Dryer is also subject to the following visible emission limit established under Best Practical Treatment (BPT):

Visible emissions from the #35 Research Coater Dryer shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

The Department has determined that the BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally-enforceable limit makes the BPT limit Federally-enforceable.

2. 06-096 C.M.R. ch. 123

The #35 Research Coater is an off-machine coater and only uses coatings with a VOC content less than 2.9 lbs VOC per gallon. As such, #35 Research Coater is exempt from *Control of Volatile Organic Compounds from Paper, Film and Foil Coating Operations*, 06-096 C.M.R. ch. 123. [06-096 C.M.R. ch. 123, § 1(C)(2)]

Sappi shall maintain records of all coatings run on #35 Research Coater to demonstrate all coatings used contain less than 2.9 lb VOC per gallon.

3. National Emission Standards for Hazardous Air Pollutants (NESHAP)

The #35 Research Coater is not subject to *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*, 40 C.F.R. Part 63, Subpart JJJJ because this coater is considered research or laboratory equipment. [40 C.F.R. §63.330(g)]

4. Emission Limits and Streamlining

For the #35 Research Coater and its associated dryer, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

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Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103 § 2(B)(1)(a)	
PM	0.05 lb/MMBtu	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.05 lb/MMBtu *
	0.35 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.35 lb/hr
PM_{10}	0.35 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.35 lb/hr
NO _x	0.68 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.68 lb/hr
СО	0.57 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.57 lb/hr
VOC (fuel burning only)	0.04 lb/hr	06-096 C.M.R. ch. 140, BPT Enforceable by State-only	0.04 lb/hr
VOC (from coatings)	2.9 lb/gal of coating applied	06-096 C.M.R. ch. 123	2.9 lb/gal of coating applied
Visible Emissions	As described earlier in this license		

5. Emission Limit Compliance Methods

Compliance with the VOC emission limits associated with the #35 Research Coater shall be demonstrated by recordkeeping of the VOC content and amount of the coatings applied.

Compliance with the emission limits for all other pollutants associated with the #35 Research Coater and its associated dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

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6. Compliance Assurance Monitoring

CAM is not applicable to the #35 Research Coater.

7. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #35 Research Coater:

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- a. Hours the #35 Research Coater was active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- b. Fuel use for the #35 Research Coater Dryers on a monthly and calendar year basis. [06-096 C.M.R. ch. 137] Fuel usage for the Technology Center Boiler and #35 Research Coater Dryer is measured through use of a common meter.
- Records of the VOC content of all coatings run on #35 Research Coater. (Used to demonstrate all coatings contain less than 2.9 lb VOC per gallon.)
 [06-096 C.M.R. ch. 123]
- d. Calculations of the VOC/HAP emitted from #35 Research Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]

8. Parameter Monitors

There are no Parameter Monitors required for the #35 Research Coater.

9. CEMS and COMS

There are no CEMS or COMS required for the #35 Research Coater.

R. #2 Coater and 4th Zone Dryer

The #2 Coater was originally installed in 1963 and was capable of operating with either solvent-based or aqueous-based coatings. The #2 Coater makes use of a natural gas-fired dryer (4th Zone Dryer) with a maximum design heat input of 6.0 MMBtu/hr.

1. New Source Review History and VOC Limits

The #2 Coater was shut down in the fall of 2001. Authorization to operate this equipment and any associated applicable requirements were nullified in Air Emission License A-29-71-AG-M issued 6/5/2002.

In February 2003, a New Source Review (NSR) license was issued to reactivate #2 Coater (A-29-71-AH-A, 2/20/2003). In order to process this amendment as a minor modification, the project was limited to annual emissions of 39.9 tpy of VOC (39.7 tpy from coatings and 0.2 tpy from the 4th Zone Dryer fuel combustion). This NSR license

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also limited #2 Coater to utilizing only aqueous-based coatings, i.e., coatings which contain no more than 2.9 lb of VOC per gallon of coating as described in 06-096 C.M.R. ch. 123.

In November 2006, a Part 70 Significant Modification was issued to allow intra-facility emissions trading of annual VOC emissions between #2 Coater and #20 Coater (A-29-70-E-A, 11/1/2006). Sappi accepted a VOC emissions cap of 139.7 tpy for both coaters combined. This change was requested to provide increased operational flexibility on #20 Coater. However, the annual emission limit applicable to #2 Coater (39.7 tpy from coatings) remained in place.

2. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

The 4th Zone Dryer is subject to 06-096 C.M.R. ch. 101. This equipment is considered fuel burning equipment not specifically listed elsewhere in the regulation and subject to the following visible emission standard:

Visible emissions from the 4th Zone Dryer shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch, 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

However, as of this license, the 4th Zone Dryer is also subject to the following visible emission limit established under Best Practical Treatment (BPT):

Visible emissions from the 4th Zone Dryer shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

The Department has determined that the BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally-enforceable limit makes the BPT limit Federally-enforceable.

3. 06-096 C.M.R. ch. 123

The #2 Coater is an off-machine coater and only uses coatings with a VOC content less than 2.9 lbs VOC per gallon. As such, #2 Coater is exempt from *Control of Volatile Organic Compounds from Paper, Film and Foil Coating Operations*, 06-096 C.M.R. ch. 123. [06-096 C.M.R. ch. 123, § 1(C)(2)]

Sappi shall maintain records of all coatings run on #2 Coater to demonstrate all coatings used contain less than 2.9 lb VOC per gallon.

4. National Emission Standards for Hazardous Air Pollutants (NESHAP)

The #2 Coater is subject to National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating, 40 C.F.R. Part 63, Subpart JJJJ. [40 C.F.R. §63.330] It is considered an existing "never-controlled work station" because there is no control device associated with this equipment. See Section II(T) below for Subpart JJJJ requirements for #2 Coater.

5. Emission Limits and Streamlining

For the #2 Coater and 4th Zone Dryer, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
DM	0.12 lb/MMBtu	06-096 C.M.R. ch. 103 § 2(B)(1)(a)	0.12 lb/MMBtu
PM	0.2 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	0.2 lb/hr
PM_{10}	0.2 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	0.2 lb/hr
SO_2	0.02 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	0.02 lb/hr
	2.5 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	
NO_x	0.58 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.58 lb/hr *
	1.1 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	
СО	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.49 lb/hr *

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC (fuel burning only)	0.2 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	
	0.03 lb/hr	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014) Enforceable by State-only	0.03 lb/hr *
VOC (from coatings)	2.9 lb/gal of coating applied	06-096 C.M.R. ch. 123	2.9 lb/gal of coating applied
	39.7 tpy	06-096 C.M.R. ch. 115, BACT (A-29-71-AH-A, 2/20/2003)	39.7 tpy
	139.7 tpy (#2 Coater and #20 Coater combined)	06-096 C.M.R. ch. 140, BPT (A-29-70-E-A, 11/1/2006)	139.7 tpy (#2 Coater and #20 Coater combined)
Organic HAP	20% of the mass of facility-wide coating solids applied for each month	40 C.F.R. § 63.3320(b)(3)	20% of the mass of facility-wide coating solids applied for each month
Visible Emissions	As described earlier in	this license	

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6. Emission Limit Compliance Methods

- a. Compliance with the VOC emission limits associated with the #2 Coater shall be demonstrated by recordkeeping of the VOC content and amount of the coatings applied in accordance with 06-096 C.M.R. ch. 123, § 6(D).
- b. Compliance with the organic HAP emission limit shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e., 20%) for all coating material applied at the affected source (i.e., total of #2 Coater, #20 Coater, and Ultracast Coaters combined). [40 C.F.R. §§ 63.3370(c)(4) and (5)]
- c. Compliance with the emission limits for all other pollutants associated with the #2 Coater and 4th Zone Dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

7. Compliance Assurance Monitoring

CAM is not applicable to the #2 Coater and 4th Zone Dryer.

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8. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #2 Coater and 4th Zone Dryer:

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- a. Hours the #2 Coater and 4th Zone Dryer were active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- b. Fuel use for the 4th Zone Dryer on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- c. Records of the VOC content of all coatings run on #2 Coater. (Used to demonstrate all coatings contain less than 2.9 lb VOC per gallon.) [06-096 C.M.R. ch. 123]
- d. Calculations of the VOC/HAP emitted from #2 Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]
- e. Organic HAP content for each coating used. [40 C.F.R. § 63.3410(a)(1)(iii)]
- f. Material usage on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.3410(a)(1)(vi)]
- g. Coating solids usage on a monthly basis. [40 C.F.R. §63.3410(a)(1)(vi)]

9. Parameter Monitors

There are no Parameter Monitors required for the #2 Coater and 4th Zone Dryer.

10. CEMS and COMS

There are no CEMS or COMS required for the #2 Coater and 4th Zone Dryer.

S. #20 Coater and Dryers

The #20 Coater is an off-machine coater.

In April 2010, an NSR license was issued to replace the burner in the #20 Coater 7th Zone Dryer with a natural gas-fired burner with a heat input rating of 4.0 MMBtu/hr (A-29-77-2-M, 4/16/2010).

In 2013, #20 Coater underwent an improvement project (A-29-77-4-A, 3/6/2013). This project included the replacement of the previous rod/blade coating process with an air knife system and converting the Floatation Dryer from steam heat to two (2) 4.0 MMBtu/hr natural gas-fired burners.

The #20 Coater has two air knives, one installed in 2013 and one pre-existing. Each air knife is equipped with its own wet scrubber system.

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1. Control Equipment

Both air knives are equipped with a two-stage wet scrubber. The respective wet scrubber is used when any coating grade is applied by an air knife applicator.

The #20 Coater utilizes a Catalytic Incinerator to control VOC emissions from an air knife applicator when running grades of coating containing greater than 2.9 pounds of VOC per gallon in that air knife. The Catalytic Incinerator was manufactured by ARI International in 1990 and has an auxiliary fuel het input capacity of 5.0 MMBtu/hr firing natural gas.

The exhaust stream from each air knife scrubber is also vented to the Catalytic Incinerator whenever coatings containing greater than 2.9 pounds of VOC per gallon are used on the air knife.

Sappi is not required to operate the Catalytic Incinerator when #20 Coater is applying coatings containing less than 2.9 pounds of VOC per gallon.

Catalyst attrition (catalyst wearing) leads to higher emissions of particulate matter from the Catalytic Incinerator than would otherwise be expected from the combustion of natural gas and process gases. Therefore, emission limits for particulate matter from the Catalytic Incinerator are based on previous stack test results.

2. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

There are multiple emission points for #20 Coater along the building roof. Emissions from the roof vents include water vapor and VOC driven out of the paper as well as products of combustion from the 7th Zone Dryer and Floatation Dryers. Additionally, when coatings containing greater than 2.9 pounds of VOC per gallon are used, there are emissions from the Catalytic Incinerator. Visible Emissions for these locations are addressed separately below.

a. Roof Vents

Exhausts from the 7th Zone Dryer and Floatation Dryers are subject to 06-096 C.M.R. ch. 101. This equipment is considered fuel burning equipment not specifically listed elsewhere in the regulation and subject to the following visible emission standard:

Visible emissions shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch, 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

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The 7th Zone Dryer is also subject to the following visible emission limit established under Best Available Control Technology (BACT):

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Visible emissions shall not exceed an opacity of 10% on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)]

As a general process source, the roof vents are subject to the following visible emission limit:

Visible emissions shall not exceed an opacity of 20% on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

As of this license, the roof vents are also subject to the following visible emission limit established under Best Practical Treatment (BPT):

Visible emissions shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

The Department has determined that the BPT visible emission limit is the most stringent. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally-enforceable limits makes the BPT limit Federally-enforceable.

b. Catalytic Incinerator

Exhaust from the Catalytic Incinerator is subject to 06-096 C.M.R. ch. 101. This equipment is considered fuel burning equipment not specifically listed elsewhere in the regulation and subject to the following visible emission standard:

Visible emissions shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, and malfunction Sappi may elect to comply with the work practice standards listed in 06-096 C.M.R. ch, 101, § 4(A). [06-096 C.M.R. ch. 101, § 3(A)(6)]

The Catalytic Incinerator was subject to the following visible emission limit established under BPT:

Visible emissions shall not exceed an opacity of 20% on a 6-minute block average basis during periods when #20 Coater is running ETL coating. Visible emissions shall not exceed an opacity of 10% on a 6-minute block average basis when the #20 Coater is running any other coating. [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] **Enforceable by State-only**

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With this license, the BPT visible emission limit above is being replaced with the following:

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Visible emissions shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

The Department has determined that the updated BPT visible emission limit is most stringent. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limit with the Federally-enforceable limits makes the BPT limit Federally-enforceable.

3. 06-096 C.M.R. ch. 123

The #20 Coater is an off-machine coater which may use coatings with a VOC content greater than 2.9 lbs VOC per gallon. As such, #20 Coater is subject to *Control of Volatile Organic Compounds from Paper*, Film and Foil Coating Operations, 06-096 C.M.R. ch. 123.

a. Standards

Sappi shall operate the Catalytic Incinerator at all times #20 Coater is operating using coatings containing greater than 2.9 lbs VOC per gallon of solids, such that the overall efficiency of the abatement equipment (i.e., the efficiency of the capture system multiplied by the efficiency of the control device) reduces VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC emitted per gallon of solids applied.

Sappi is not required to operate the Catalytic Incinerator when applying low solvent content coatings, i.e., coatings containing less than or equal to 2.9 lb VOC/gallon (excluding water and negligibly reactive VOC as defined in the definition of VOC in *Definitions Regulation*, 06-096 C.M.R. ch. 100). [06-096 C.M.R. ch. 123, § 3(A)]

b. Work Practices

Sappi shall use the following work practices for #20 Coater:

(1) New and used coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon, including a coating mixed on the premises, shall be stored in nonabsorbent, non-leaking containers. Such containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.

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- (2) Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be immediately absorbed and removed or disposed of.
- (3) Absorbent applicators, such as cloth and paper, which are moistened with coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling.
- (4) Coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon shall be conveyed from one location to another in a closed container or pipe.
- (5) Cleaning shall be performed to minimize associated VOC emissions.

[06-096 C.M.R. ch. 123, § 4]

c. Monitoring

When operating the Catalytic Incinerator, Sappi shall continuously monitor and record the exhaust gas temperature (°F) and the temperature rise across the catalyst bed (°F). [06-096 C.M.R. ch. 123, § 7(B)]

d. Recordkeeping

For #20 Coater, Sappi shall maintain records as required by 06-096 C.M.R. ch. 123. These records are outlined in more detail in the Periodic Monitoring section.

4. National Emission Standards for Hazardous Air Pollutants (NESHAP)

The #20 Coater is subject to *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*, 40 C.F.R. Part 63, Subpart JJJJ. [40 C.F.R. §63.330] Although #20 Coater has associated control equipment, this control equipment is not taken into account or used to demonstrate compliance with Subpart JJJJ. Therefore, it is considered an existing "never-controlled work station." See Section II(T) below for Subpart JJJJ requirements for #20 Coater.

5. Emission Limits and Streamlining

For the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

#20 Coater			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC (when using low solvent coatings)	2.9 lb/gal of coating applied	06-096 C.M.R. ch. 123, § 3(A)	2.9 lb/gal of coating applied
VOC (when not using low solvent coatings)	95% reduction OR 4.8 lb VOC/gallon of solids applied	06-096 C.M.R. ch. 123 § 3(B)	95% reduction OR 4.8 lb VOC/gallon of solids applied
VOC	139.7 tpy (#2 Coater and #20 Coater combined)	06-096 C.M.R. ch. 140, BPT (A-29-70-E-A, 11/1/2006)	139.7 tpy (#2 Coater and #20 Coater combined)
Organic HAP	20% of the mass of facility-wide coating solids applied for each month	40 C.F.R. § 63.3320(b)(3)	20% of the mass of facility-wide coating solids applied for each month

7 th Zone Dryer			
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	
PM	0.05 lb/MMBtu	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	0.05 lb/MMBtu *
	0.03 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.03 lb/hr
PM ₁₀	0.03 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.03 lb/hr
SO_2	0.003 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.003 lb/hr
NO _x	0.40 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.40 lb/hr
СО	0.3 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.3 lb/hr
VOC	0.02 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-2-M, 4/16/2010)	0.02 lb/hr
Visible Emissions	As described earlier in	this license	

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	#20 Coater Floatation Dryers				
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits		
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)			
PM	0.05 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)	0.05 lb/MMBtu *		
	0.40 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)	0.40 lb/hr		
PM ₁₀	0.40 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)	0.40 lb/hr		
NO _x	0.78 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)	0.78 lb/hr		
СО	0.65 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)	0.65 lb/hr		
Visible Emissions	As described earlier in	this license			

Catalytic Incinerator				
Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits	
	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.12 lb/MMBtu	
PM	4.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006)	4.0 lb/hr	
	3.99 tpy (calendar year basis)	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006)	3.99 tpy (calendar year basis)	
PM ₁₀	4.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006)	4.0 lb/hr	
SO_2	0.006 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	0.006 lb/hr	
NO _x	1.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	1.0 lb/hr	
СО	1.8 lb/hr	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	1.8 lb/hr	
Visible Emissions	As described earlier in	this license		

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6. Emission Limit Compliance Methods

- a. Compliance with the PM lb/MMBtu emission limits shall be demonstrated by firing only natural gas in the #20 Coater 7th Zone Dryer, #20 Coater Floatation Dryers, and Catalytic Incinerator. [06-096 C.M.R. ch. 140, BPT]
- b. Compliance with the annual PM emission limit for the Catalytic Incinerator shall be based on the amount of catalyst attrition in that time period determined using a mass balance approach. [06-096 C.M.R. ch. 115, BPT (A-29-77-1-M, 12/8/2006)]
- c. Compliance with the VOC emission limit for #20 Coater when using low solvent coatings shall be demonstrated through the recordkeeping required by 06-096 C.M.R. ch. 123.
- d. Compliance with the VOC emission limits for #20 Coater when not using low solvent coatings shall be demonstrated through performance testing conducted every other calendar year. The next performance test is due no later than 12/31/2022. Performance testing shall be conducted while in accordance with the requirements of 06-096 C.M.R. ch. 123 and 06-096 C.M.R. ch. 126. [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)]
- e. Compliance with the organic HAP emission limit shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e., 20%) for all coating material applied at the affected source (i.e., total of #2 Coater, #20 Coater, and Ultracast Coaters combined). [40 C.F.R. §§ 63.3370(c)(4) and (5)]
- f. Compliance with the emission limits for all other pollutants associated with the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

7. Compliance Assurance Monitoring

CAM is not applicable to the #20 Coater and its associated dryers.

8. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator:

a. Hours the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator were active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]

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- b. Fuel use for the #20 Coater, the dryers, and Catalytic Incinerator (combined) on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- c. Calculations of the VOC/HAP emitted from #20 Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]
- d. Records of any maintenance activities performed (planned or unplanned) on the Catalytic Incinerator and wet scrubbers. [40 C.F.R. § 70.6(c)(1)]
- e. Flow to the wet scrubbers monitored continuously and recorded at least once per shift. [40 C.F.R. § 70.6(c)(1)]
- f. Dates of catalyst bed changes and the amount of catalyst removed and added. [40 C.F.R. § 70.6(c)(1)]
- g. Organic HAP content for each coating used. [40 C.F.R. § 63.3410(a)(1)(iii)]
- h. Material usage on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.3410(a)(1)(vi)]
- i. Coating solids usage on a monthly basis. [40 C.F.R. §63.3410(a)(1)(vi)]
- j. When operating the Catalytic Incinerator:
 - (1) Exhaust gas temperature (°F) monitored and recorded continuously
 - (2) Temperature rise across the catalyst bed (°F) monitored and recorded continuously

[06-096 C.M.R. ch. 123, § 7(B)]

k. Dates the catalyst bed was changed in the Catalytic Incinerator.

[06-096 C.M.R. ch. 123, § 7(C)]

- 1. For each coating:
 - (1) Supplier name
 - (2) Name of coating
 - (3) Identification number of coating
 - (4) Coating density (lb/gal)
 - (5) Total VOC content as supplied (wt %)
 - (6) Water content of coating as supplied (wt %)
 - (7) Exempt VOC content (described in the rule) of coating as supplied (wt %)
 - (8) Solids content of coating as supplied (vol %)
 - (9) Diluent ratio (gal diluent/gal coating)

[06-096 C.M.R. ch. 123, § 6(B)]

- m. For each diluent:
 - (1) Name of diluent
 - (2) Identification number of diluent
 - (3) Diluent density (lb/gal)

[06-096 C.M.R. ch. 123 § 6(B)]

- n. The following records on a daily basis:
 - (1) Coating line number

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- (2) Time period
- (3) Coating identification number
- (4) Amount of coating used
- (5) Diluent identification number
- (6) Amount of diluent used

[06-096 C.M.R. ch. 123, § 6(C)]

9. Parameter Monitors

There are no Parameter Monitors required for the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator.

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10. CEMS and COMS

There are no CEMS or COMS required for the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator.

T. 40 C.F.R. Part 63, Subpart JJJJ Requirements for #2 Coater and #20 Coater

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating, 40 C.F.R. Part 63, Subpart JJJJ, is applicable to the web coating lines at Sappi. Pursuant to 40 C.F.R. § 63.3300, the affected source is "the collection of all web coating lines" at the facility. This includes #2 Coater, #20 Coater, and the Ultracast Coaters. The Ultracast Coaters are considered insignificant activities for licensing purposes since the coatings used on these coaters do not contain VOC or HAP. However, since they are included in the affected source, the material used on these machines is included with the total sum for the facility.

Although #20 Coater has associated control equipment, this control equipment is not taken into account or used to demonstrate compliance with Subpart JJJJ.

The #20 Coater improvement project undertaken in 2013 was determined not to reach the threshold to be considered a reconstruction. The #20 Coater was determined to still be classified as an existing source (A-29-77-4-A, 3/6/2013).

Therefore, all the web coating lines at Sappi are considered existing "never-controlled work stations."

1. Standards

Subpart JJJJ offers several options for emission standards. Sappi has elected to comply with 40 C.F.R. § 63.3320(b)(3) which limits the organic HAP emissions to no more than 20% of the mass of coating solids applied for each month on a facility-wide basis.

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2. Continuous Compliance

Sappi has elected to demonstrate compliance with the emission standard by using "as-applied" compliant coating materials in accordance with the compliance demonstration option listed in 40 C.F.R. § 63.3370(a)(2)(iv).

Compliance shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e., 20%) for all coating material applied at the affected source (i.e., total of #2 Coater, #20 Coater, and Ultracast Coaters combined). [40 C.F.R. §§ 63.3370(c)(4) and (5)]

3. Recordkeeping

Sappi shall maintain records for #2 Coater, #20 Coater, and the Ultracast Coaters in accordance with 40 C.F.R. Part 63, Subpart JJJJ including, but not limited to, the following:

- a. Organic HAP content for each coating used;
- b. Material usage on a monthly basis;
- c. Coating solids usage on a monthly basis. [40 C.F.R. §§ 63.3410(a)(1)(iii) and (vi)]

4. Reports

Sappi shall prepare and submit to the Department and EPA a compliance report every six months which contains the information contained in § 63.3400(c)(2) as applicable. [40 C.F.R. § 63.3400(c)]

U. #9 Paper Machine and On-Line Coater

As addressed in NSR License A-29-77-5-A (8/21/2020), the #9 Paper Machine was permanently shut down prior to March 30, 2021. This emissions unit and associated units (e.g., starch & clay conveyors) have been removed from the license.

V. Ultracast Roll Cleaning

Ultracast rolls use pressure to impart a texture to certain grades of paper. They must be cleaned occasionally to remove buildup.

To clean them, ultracast rolls are mounted in a box. The mount is equipped with a motor to rotate the roll as it sits in the box. Solvent, comprised primarily of methylene chloride, is applied to the roll manually using a paint brush. After the solvent is applied, the lid is closed, and the roll sits in the box for approximately 30-45 minutes. Fumes from the box

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are ventilated outside the building. The box is then opened, and the roll is transferred to a second enclosed system where the roll is pressure-washed with water. The rinse water is sent to the mill's sewer via a drain in the bottom of the box. If stained, the roll may be wiped with bleach. Finally, the roll is wiped with methanol and allowed to air dry.

1. Solvent Cleaners, 06-096 C.M.R. ch. 130

The Ultracast Roll Cleaning process is not subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130. The solvent is applied manually by paint brush which is considered a form of wipe cleaning, an exempt activity. [06-096 C.M.R. ch. 130, § 1(B)(2)]

2. Industrial Cleaning Solvents, 06-096 C.M.R. ch. 166

The Ultracast Roll Cleaning process is not subject to *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166 because it is an exempt activity under 06-096 C.M.R. ch. 130, § 1(B). [06-096 C.M.R. ch. 166, § 3(B)]

However, Sappi is required to maintain records sufficient to verify this exemption. [06-096 C.M.R. ch. 166, §§ 3 and 5(C)]

3. National Emission Standards for Hazardous Air Pollutants (NESHAP)

The Ultracast Roll Cleaning process is not subject to *National Emission Standards for Halogenated Solvent Cleaning*, 40 C.F.R. Part 63, Subpart T. The solvent is applied manually by paint brush which is considered a form of wipe cleaning, an exempt activity. [40 C.F.R. § 63.460(a)]

4. Emission Limits and Streamlining

For the Ultracast Roll Cleaning process, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC	2.0 tpy	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	2.0 tpy
		Enforceable by State-only	

5. Emission Limit Compliance Methods

Compliance with the VOC emission limits associated with the Ultracast Roll Cleaning process shall be demonstrated by recordkeeping of the VOC content and amount of the solvent used.

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6. Compliance Assurance Monitoring

CAM is not applicable to the Ultracast Roll Cleaning process.

7. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Ultracast Roll Cleaning process:

- a. Hours the Ultracast Roll Cleaning process was active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- b. Records of the VOC content of all solvent used in the Ultracast Roll Cleaning process. [06-096 C.M.R. ch. 137]
- c. Calculations of the VOC/HAP emitted from the Ultracast Roll Cleaning process on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]

8. Parameter Monitors

There are no Parameter Monitors required for the Ultracast Roll Cleaning process.

9. CEMS and COMS

There are no CEMS or COMS required for the Ultracast Roll Cleaning process.

W. Parts Washers

Sappi operates several parts washers (degreaser units) as part of their maintenance activities. Currently, all parts washers at the facility are aqueous-based. However, the facility wishes to maintain the option to use solvent-based parts washers without a license amendment. Depending on the solvent used, they may be subject to *Solvent Degreasers*, 06-096 C.M.R. ch. 130.

This equipment is exempt from *Industrial Cleaning Solvents*, 06-096 C.M.R. ch. 166, pursuant to Section 3(B).

Periodic monitoring for the solvent-based parts washers shall consist of recordkeeping including records of solvent added.

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X. Fly Ash Loading System

Sappi utilizes an ash loading system to handle fly ash generated from the operation of Boiler #21. The system was manufactured in 1982 and loads an average of approximately 100 tons/day of fly ash from the silo into trucks when Boiler #21 is in operation.

The Fly Ash Loading System stores the ash in a silo until it is transferred to either the conditioned fly or dry fly ash loading areas where it is loaded onto trucks for removal from the facility. Small amounts of conditioned fly ash may be placed in the Blending Building for operational purposes.

Trucks pull into a loading bay in the Boiler #21 building for conditioned fly ash loading. The conditioned fly ash system wets the ash before loading to control fugitive particulate matter.

The dry fly ash system utilizes a loading station outside of the Boiler #21 building. Particulate matter emissions from this system are controlled by a pulse-jet baghouse.

Sappi shall maintain an inspection and maintenance plan for the Fly Ash Loading System. The plan shall provide for monthly inspections of the system.

1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101

Visible emissions from the dry fly ash system baghouse shall not exceed 10% opacity on a 6-minute block average basis. Sappi shall take corrective action if visible emissions from the baghouse exceed 5% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(3)]

Visible emissions from the conditioned fly ash system shall not exceed 20% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

2. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Fly Ash Loading System:

- a. Records of monthly inspections of the Fly Ash Loading System and inspection results. [40 C.F.R. § 70.6(c)(1)]
- b. Records of any maintenance activities performed (planned or unplanned) on the Fly Ash Loading System. [40 C.F.R. § 70.6(c)(1)]
- c. Pressure drop for the dry fly ash system baghouse monitored continuously and recorded once per shift (when the equipment is in operation). [40 C.F.R. § 70.6(c)(1)]

Y. Petroleum Storage Tanks

Sappi utilizes the following tanks to store petroleum products used at the facility:

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Tank ID	Tank Size	Installation Date
#2 Fuel Oil Storage Tank (Boilers #17 & #18)	100,000 gal	1988
#6 Fuel Oil Storage Tank (Boilers #17-#21)	500,000 gal	1973
Split Gasoline/Diesel Storage Tank (Gasoline storage only)	1,500 gal (gasoline)	2014

The #6 Fuel Oil Storage Tank is heated by steam provided by the facility's boilers. The other tanks are unheated.

Sappi has several smaller storage tanks for distillate fuel and liquified propane gas that are considered insignificant activities.

1. Gasoline Dispensing Facilities Vapor Control, 06-096 C.M.R. ch. 118

The Split Gasoline/Diesel Storage Tank has never exceeded a monthly throughput of 10,000 gallons of gasoline. Therefore, this tank is not subject to *Gasoline Dispensing Facilities Vapor Control*, 06-096 C.M.R. ch. 118, except for §§ 4(A) and 10(B). [06-096 C.M.R. ch. 118, § 1(B)(1)]

The sections referenced require the fill pipe to extend to within 6 inches of the bottom of the gasoline storage tank and that Sappi maintain records of the monthly and annual throughput of gasoline.

2. New Source Performance Standards (NSPS)

None of the Petroleum Storage Tanks at Sappi are subject to Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978, 40 C.F.R. Part 60, Subpart K. This regulation applies to storage vessels for petroleum liquids with capacities greater than 40,000 gallons. The definition of "petroleum liquids" in the regulation specifically excludes distillate fuel and #6 fuel oil, and the Split Gasoline/Diesel Storage Tank is below the capacity threshold.

None of the Petroleum Storage Tanks at Sappi are subject to Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After

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July 23, 1984, 40 C.F.R. Part 60, Subpart Kb. This regulation only applies to storage vessels greater than 20,000 gallons. [40 C.F.R. § 60.110b(a)] This regulation does not apply to storage vessels with a capacity greater than 40,000 gallons which store a liquid with a maximum true vapor pressure less than 3.5 kilopascals. [40 C.F.R. § 60.110b(b)] Distillate fuel and #6 fuel oil both have vapor pressures less than 3.5 kilopascals, and the Split Gasoline/Diesel Storage Tank is below the capacity threshold.

3. Emissions Calculation Methodology

Emissions from the Petroleum Storage Tanks shall be included in the facility's annual emissions inventory report filed in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Emissions from each storage tank shall be calculated in accordance with the most current version of *EPA's Compilation of Air Emissions Factors* (AP-42) or other method as approved by the Department.

4. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Petroleum Storage Tanks:

- a. Records of the monthly and annual throughput of gasoline for the Split Gasoline/Diesel Storage Tank. [06-096 C.M.R. ch. 118, § 10(B)]
- b. Records necessary to calculate annual emissions of VOC and HAP from the Petroleum Storage Tanks. [06-096 C.M.R. ch. 137]
- c. Calculations of the VOC/HAP emitted from Petroleum Storage Tanks on a calendar year total basis. [06-096 C.M.R. ch. 137]

Z. Waste Water Treatment Plant

Sappi operates a Waste Water Treatment Plant to treat all process waste water generated from mill drains and processes. Industrial waste water is specifically not exempted from *VOC RACT*, 06-096 C.M.R. ch. 134 pursuant to § 1(A)(4).

Sappi is required by the federal Clean Water Act to comply with their Maine Pollution Discharge Elimination System (MPDES) permit. By maintaining a valid MPDES permit, Sappi's waste water treatment facility meets the requirements of VOC RACT. [06-096 C.M.R. ch. 134, § 3(A)(4)(b)]

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AA. Emission Statements

Sappi is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Sappi shall maintain the following records in order to comply with this rule:

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- 1. Hours each emission unit was active or operating on a monthly and calendar year basis.
- 2. The amount of each type of fuel fired in each emission unit.
- 3. The sulfur content of the fuel oil fired in each emission unit.
- 4. Calculations of the VOC/HAP emitted from each of the #35 Research Coater, #2 Coater, #20 Coater, Ultracast Roll Cleaning process, and Petroleum Storage Tanks on a monthly and calendar year total basis.

In reporting year 2020 and every third year thereafter, Sappi shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Sappi shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

BB. 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Operation of Boiler #21 at 100% for 8,760 hrs/yr plus operation of Boilers #17 and #18 at 10% capacity (based on fuel usage) for PM/PM₁₀, CO, and VOC;
- The combined permitted "not to exceed" limits for SO₂ and NO_x for Boilers #21, #17, and #18, as these are lower than the calculation method stated above;
- Boilers #22 and #23 not operating simultaneously with Boilers #17, #18, or #21 except for transitional periods;
- Unlimited operation of MAU #1;
- A 10% capacity factor for the Technology Center Boiler;
- Operating each generator for 100 hrs/yr;
- Maximum operation (100% load for 8,760 hrs/yr) of the fuel burning equipment associated with the coaters; and
- Maximum licensed VOC emissions for the coaters and Ultracast Roll Cleaning process.

Please note, this information provides the basis for fee calculation <u>only</u> and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers #17, #18, #21, #22, & #23 (combined)	208.9	208.9	3,763.5	1,787.6	2,169.7	180.2
Technology Center Boiler	0.1	0.1	-	0.4	0.3	1
MAU #1	0.6	0.6	-	1.2	1.0	0.1
Engine #1	_	_	-	0.4	-	0.1
Engine #2	_	_	_	0.4	0.1	_
Engine #3	_	_	_	0.2	_	_
Engine #4	_	_	_	0.1	_	_
Engine #5	_	_	_	0.2	0.4	_
#35 Coater Dryer	1.5	1.5	_	3.0	2.5	0.2
#2 Coater 4 th Zone Dryer	0.9	0.9	_	2.6	2.1	0.2
#20 Coater 7th Zone Dryer	0.9	0.9	_	1.7	1.4	0.1
#20 Coater Floatation Dryers	1.8	1.8	_	3.4	2.9	0.2
Catalytic Incinerator	4.0	4.0	_	4.4	7.8	_
#2 & #20 Coaters (combined, non-combustion)	_	_	_	_	_	139.7
Ultracast Roll Cleaning	_	_	_	_	_	2.0
Total TPY	218.7	218.7	3,763.5	1,805.6	2,188.2	322.8

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 National Ambient Air Quality Standards (NAAQS) or increment standards (see license A-29-71-AB-M, issued 7/17/1997).

The West-Side Boilers have significantly higher licensed emissions than the East-Side Boilers, and these two boiler groups cannot operate simultaneously except for transitional periods. Therefore, it is expected that the 2020 Restructuring Project (addressed in NSR License A-29-77-5-A, 8/21/2020) will have a net positive effect on ambient air quality.

Since Boilers #22 and #23 may be replaced by different permanent units within the next three years, the Department has agreed to postpone requiring a new ambient air quality dispersion modeling analysis until these boilers are made permanent or are replaced. Therefore, by

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May 1, 2023, Sappi shall either submit an ambient air quality impact analysis for the facility as licensed or submit an application (including an ambient air quality impact analysis) to replace Boilers #22 and/or #23 or other license changes necessary to demonstrate compliance with all NAAQS and increment standards.

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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.

The Department hereby grants the Part 70 License A-29-70-J-R/A pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Sappi pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 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 standard and 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 or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period

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upon a satisfactory showing that an extension is justified but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 140]

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- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.

 [06-096 C.M.R. ch. 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
 - B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in their application.

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Permit Shield Table

Source	Citation	Description	Basis for Determination
Ultracast	06-096 C.M.R.	Solvent Cleaners	Process is an exempt activity
Roll	ch. 130		pursuant to 06-096 C.M.R.
Cleaning			ch. 130, § 1(B).
Facility	06-096 C.M.R.	Graphic Arts-Rotogravure and	No applicable sources at the
	ch. 132	Flexography	facility
All Coaters	06-096 C.M.R. ch. 134	VOC RACT	The Coaters are exempt pursuant to 06-096 C.M.R. ch. 134, § 1(C)(3)
Catalytic Incinerator	06-096 C.M.R. ch. 134	VOC RACT	Unit is exempt pursuant to 06-096 C.M.R. ch. 134, §§ 1(C)(3) & (4)
Tech. Center Boiler, Boiler #23, all coater dryers, & emergency engines	06-096 C.M.R. ch. 138	NO _x RACT	Potential NO _x emissions <10 tpy.
Boilers	06-096 C.M.R.	NO _x Control Program	Maximum heat input for each
#17, #18,	ch. 145		boiler less than
#22, & #23			250 MMBtu/hr
Boiler #21	06-096 C.M.R. ch. 145	NO _x Control Program	<50% of the annual heat input for Boiler #21 comes from fossil fuels
Facility	06-096 C.M.R. ch. 161	Graphic Arts-Offset Lithography and Letterpress Printing	No applicable sources at the facility
Ultracast	06-096 C.M.R.	Industrial Cleaning Solvents	Process is an exempt activity
Roll Cleaning	ch. 166		under 06-096 C.M.R. ch. 166, § 3(B).
Parts Washers	06-096 C.M.R. ch. 166	Industrial Cleaning Solvents	Process is an exempt activity pursuant to 06-096 C.M.R. ch. 166, § 3(B).
Boilers	40 C.F.R. Part 60,	NSPS for Fossil-Fuel-Fired	Constructed prior to
#17 & #18	Subpart D	Steam Generating Units	applicability date
Boiler #21	40 C.F.R. Part 60,	NSPS for Industrial-	Constructed prior to
	Subpart Db	Commercial-Institutional Steam	applicability date
	2207220	Generating Units	-FF meaning and
Tech. Center	40 C.F.R. Part 60,	NSPS for Small Industrial-	Maximum heat input
Boiler	Subpart Dc	Commercial-Institutional Steam Generating Units	<10 MMBtu/hr
Facility	40 C.F.R. Part 60,	NSPS for Storage Vessels for	Distillate fuel and #6 fuel oil
	Subpart K	Petroleum Liquids	specifically excluded. The
			Split Gasoline/Diesel Storage

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Source	Citation	Description	Basis for Determination
			Tank is below the capacity threshold.
Facility	40 C.F.R. Part 60, Subpart Kb	NSPS for Storage Vessels for Petroleum Liquids	Distillate fuel and #6 fuel oil have vapor pressures less than 3.5 kilopascals. The Split Gasoline/Diesel Storage Tank is below the capacity threshold.
Facility	40 C.F.R. Part 60, Subpart RR	Pressure Sensitive Tape and Labeling Surface Coating	No applicable sources at this facility
All Boilers	40 C.F.R. Part 60, Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	The boilers do not burn solid waste.
#20 Coater Catalytic Incinerator	40 C.F.R. Part 60, Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
All Boilers	40 C.F.R. Part 60, Subpart DDDD	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	The boilers do not burn solid waste.
#20 Coater Catalytic Incinerator	40 C.F.R. Part 60, Subpart DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
Emergency Engines #1 - #4	40 C.F.R. Part 60, Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines	Engines #1 - #4 were all constructed prior to the applicability date.
Emergency Engine #5	40 C.F.R. Part 60, Subpart JJJJ	NSPS for Spark Ignition Internal Combustion Engines	Engine #5 was constructed prior to the applicability date.
Facility	40 C.F.R. Part 63, Subpart T	NESHAP for Halogenated Solvent Cleaning	No applicable sources at this facility
#35 Research Coater	40 C.F.R. 63, Subpart JJJJ	National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating	Exempt as research and laboratory coater.
Building 86, Building 151, & Building 4 heating systems	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Systems are exempt hot water heaters and space heaters.
All Coater Dryers and Catalytic Incinerator	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Units do not meet the definition of process heaters.
All Boilers	40 C.F.R. Part 63, Subpart JJJJJJ	NESHAP for Area Sources: Industrial/Commercial/ Institutional Boilers	Facility is a major source of HAP.

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Source	Citation	Description	Basis for Determination
Facility	40 C.F.R. Part 64	Compliance Assurance	No applicable sources at this
		Monitoring	facility
Facility	40 C.F.R. 98,	Mandatory Greenhouse Gas	Facility does not meet the
	Subpart D	Reporting – Electricity	definition of the source
		Generation	category.
Facility	40 C.F.R. 98,	Mandatory Greenhouse Gas	Facility does not meet the
	Subpart U	Reporting – Miscellaneous Uses	definition of the source
		of Carbonates	category.
Facility	40 C.F.R. 98,	Mandatory Greenhouse Gas	Facility does not meet the
	Subpart AA	Reporting – Pulp and Paper	definition of the source
		Manufacturing	category.
Facility	40 C.F.R. 98,	Mandatory Greenhouse Gas	Facility does not meet the
	Subpart DD	Reporting – Electrical	definition of the source
		Transmission and Distribution	category.
		Equipment Use	
Facility	40 C.F.R. Part 98,	GHG Reporting for Industrial	Wastewater facility is not an
	Subpart II	Wastewater Treatment	anaerobic system

[06-096 C.M.R. ch. 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
 - A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of three or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 C.M.R. ch. 140;
 - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
 - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
 - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 C.M.R. ch. 140]

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(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 C.M.R. ch. 140]

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 140. [06-096 C.M.R. ch. 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 140] **Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 140] **Enforceable by State-only**
- (6) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. In addition, the licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 C.M.R. ch. 140]

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(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 C.M.R. ch. 140]

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- (8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
 - A. Perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 - 2. To demonstrate compliance with the applicable emission standards; or
 - 3. Pursuant to any other requirement of this license to perform stack testing.
 - B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 140] Enforceable by State-only

- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
 - A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

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C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 140] Enforceable by State-only

- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.
 - A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
 - B. The licensee shall submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design, or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 140]

(11) Upon the written request of the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 140]

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- (12) The licensee shall submit semiannual reports of any required periodic monitoring by January 31 and July 31 of each year, or on an equivalent schedule specified in the license. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 C.M.R. ch. 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA annually by January 31 of each year, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
 - A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - B. The compliance status;
 - C. Whether compliance was continuous or intermittent;
 - D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - E. Such other facts as the Department may require to determine the compliance status of the source.

[06-096 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) Fuel Sulfur Content (Facility-wide)

A. Residual Fuel

Sappi shall not purchase or otherwise obtain residual fuel (#6 fuel oil) with a maximum sulfur content that exceeds 0.5% by weight. [38 M.R.S. §§ 603-A(2)(A)(1) and (2)]

B. Distillate Fuel

Sappi shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [38 M.R.S. § 603-A(2)(A)(3)(a)]

C. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 140, BPT]

(15) **Boiler #21**

A. Allowable Fuels

Boiler #21 is licensed to fire biomass (as defined in this license), coal, #6 fuel oil, distillate fuel, and specification and off-specification waste oil. CDD is defined by, and shall be used in accordance with, 06-096 C.M.R. ch. 418.
 [06-096 C.M.R. ch. 140, BPT (A-29-70-G-A, 1/10/2007)]
 Enforceable by State-only

- 2. Boiler #21 is also licensed to fire oily secondary material. Oily secondary material includes oily rags and oil-soaked absorbent materials that have been generated on-site from maintenance and spill cleanup activities.

 [06-096 C.M.R. ch. 115, BPT (A-29-77-3-M, 5/26/2010)]
- 3. The oily secondary material fired in Boiler #21 shall not exceed the constituent/property allowable levels for off-specification waste oil contained in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860. Compliance with this requirement shall be demonstrated through sampling and analysis of a representative sample of waste oil typically contained in the oily secondary material on an annual basis. [06-096 C.M.R. ch. 115, BPT (A-29-77-3-M, 5/26/2010)]

B. Control Equipment

- Sappi shall control particulate matter emissions from Boiler #21 by use of a multiclone followed by an ESP.
 [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)]
- 2. During normal operation, Sappi shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent performance test for PM. During periods of ESP malfunction or maintenance, Sappi shall operate, at a minimum, five fields or the number of ESP chambers and number of fields per chamber that operated during the most recent performance test for PM (whichever is less).

Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Performance Testing Guidance*, Sappi may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall Sappi be relieved of its obligation to meet its licensed emission limits.

[06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] **Enforceable by State-only**

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.)

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

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

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

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.037 See Note 3	40 C.F.R. Part 63, Subpart DDDDD,	Federally Enforceable
PM ₁₀	0.08	Table 2, Row 7(b) 06-096 C.M.R. ch. 115, BACT (A-29-71-C-A/R, 6/23/1988)	Federally Enforceable
SO ₂ (firing oil w/o coal) See Notes 1 & 4	0.80 (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.43(a)(1)	Federally 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 and fuel(s)	0.8	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 (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.44(a)(2)	Federally Enforceable
NO _x (firing coal) See Notes 2 & 5	0.70 (3-hr rolling avg.)	40 C.F.R. Part 60, Subpart D, § 60.44(a)(3)	Federally 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 See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(a)	Federally Enforceable
Hg	5.7 x 10 ⁻⁶ See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(b)	Federally Enforceable

Note 1: For periods when oil is fired alone or in conjunction with other licensed fuels except for coal.

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- 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).
- 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}	39.7	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
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
СО	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

D. Visible Emissions

- 1. Visible emissions from Boiler #21 shall not exceed 20% opacity on a 6-minute block average basis except for one (1) 6-minute period per hour of not more than 27% opacity. [40 C.F.R. § 60.42(A)(2)]
- 2. Visible emissions from Boiler #21 shall not exceed 10% opacity on a daily block average or the highest hourly average opacity reading measured during the last performance test conducted pursuant to 40 C.F.R. Part 63, Subpart DDDDD. [40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 4(a)]

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E. Compliance Methods

Compliance with the emission limits associated with Boiler #21 shall be demonstrated in accordance with the methods and frequencies indicated below or other methods or frequencies as approved by the Department.

- 1. Sappi shall demonstrate compliance with the PM lb/MMBtu emission limit through performance testing conducted pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- 2. Sappi shall demonstrate compliance with the PM lb/hr emission limit through performance testing conducted at least once every five calendar years. The next compliance test is due no later than 12/31/2022. The performance testing for PM lb/MMBtu required under 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**
- 3. Sappi shall demonstrate compliance with the SO₂ lb/MMBtu emission limits through the use of a SO₂ CEMS. [40 C.F.R. § 60.45(a)]
- 4. Sappi shall demonstrate compliance with the NO_x lb/MMBtu emission limits through use of a NO_x CEMS. [06-096 C.M.R. ch. 117 § 1(B)(2) and 40 C.F.R. § 60.45(a)]
- 5. Sappi shall demonstrate compliance with the CO ppmdv emission limits through performance testing conducted pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- 6. Sappi shall demonstrate compliance with the visible emission limits through the use of a COMS. [40 C.F.R. § 60.45(a) and 40 C.F.R. § 63.7525(c)]
- 7. Sappi shall demonstrate compliance with the HCl and Hg emission limits pursuant to the schedule contained in 40 C.F.R. § 63.7515. [40 C.F.R. § 63.7515(a)]
- 8. Upon request by the Department, Sappi shall conduct performance testing to demonstrate compliance with the PM₁₀ lb/MMBtu emission limit and the PM₁₀, SO₂, NO_x, CO, and VOC lb/hr emission limits using test methods approved by the Department. [40 C.F.R. § 70.6(c)(1)]

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F. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Boiler #21 and its associated air pollution control equipment.

- 1. Hours Boiler #21 was active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- 2. Types and amounts of each fuel fired on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. 63.7555(d)(1)]
- 3. Sulfur content (% by weight) of all liquid fuels fired. [06-096 C.M.R. ch. 137]
- 4. Certification records of the coal fuel analysis provided by the supplier. [06-096 C.M.R. ch. 106, § 4(A)]
- 5. Records to demonstrate that fossil fuel comprises less than 51% of the annual heat input on a calendar year basis for Boiler #21. [06-096 C.M.R. ch. 145]
- 6. Records of annual emissions from Boiler #21 on a 12-month rolling total basis used to demonstrate compliance with the combined annual emission limits for Boilers #21, #17, and #18. [06-096 C.M.R. ch. 115 (A-29-71-AG-M, 6/5/2002)] **Enforceable by State-only**
- 7. For the COMS, the records described in 40 C.F.R. §§ 63.7555(b)(1) through (5);
- 8. Records required by 40 C.F.R. Part 63, Subpart DDDDD, Table 8 including records of all monitoring data and calculated averages for applicable operating limits (including opacity and operating load) to show continuous compliance with each emission limit; [40 C.F.R. § 63.7555(c)]
- 9. Records of the occurrence and duration of each malfunction of Boiler #21 or of the associated air pollution control and monitoring equipment; [40 C.F.R. § 63.7555(d)(6)]
- 10. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.7555(d)(7)]
- 11. Records of the calendar date, time, occurrence, and duration of each startup and shutdown; [40 C.F.R. § 63.7555(d)(9)]
- 12. Records of the type(s) and amount(s) of fuel used during each startup and shutdown. [40 C.F.R. § 63.7555(d)(10)]
- 13. Pressure drop across the multiclone monitored continuously and recorded at least once per shift. [40 C.F.R. § 70.6(c)(1)]
- 14. Records of any maintenance activities performed (planned or unplanned) on the multiclone and ESP. [40 C.F.R. § 70.6(c)(1)]

G. Parameter Monitors

During all operating times, Sappi shall continuously operate, record data, and maintain records from the following parameter monitor for Boiler #21:

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Parameter	Averaging Period	Origin and Authority
Operating Load		40 C.F.R. § 63.7525(d)
	30-day rolling average	40 C.F.R. § 60.45(a) and
O ₂ Analyzer		40 C.F.R. § 63.7525(a)
		& Table 8

H. CEMS and COMS

Sappi shall operate and maintain the following continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for Boiler #21 whenever the unit is operating:

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO _x CEMS	lb/MMBtu	24-hr block avg. and 3-hr rolling avg.	06-096 C.M.R. ch. 117 and 40 C.F.R. § 60.45(a)
SO ₂ CEMS	lb/MMBtu	3-hr rolling avg.	40 C.F.R. § 60.45(a)
COMS	%	6-minute block average 24-hr block average	06-096 C.M.R. ch. 117, 40 C.F.R. § 60.45(a), and 40 C.F.R. § 63.7525(c) & Table 8

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

Following are applicable requirements of 40 C.F.R. Part 60, Subpart D for Boiler #21 not addressed elsewhere in this Order:

Sappi shall submit excess emission and monitoring system performance reports to the Department and EPA semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and monitoring system performance report shall include the information required by 40 C.F.R. § 60.7(c). [40 C.F.R. § 60.45(g)]

Periods of excess emissions and monitoring system downtime that shall be reported are defined in the regulation and the Findings of Fact section of this license.

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

Following are applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD for Boiler #21 not addressed elsewhere in this Order:

- 1. The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]
- 2. The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]

3. Work Practice Standards

- a. Sappi shall perform annual tune-ups on Boiler #21 as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 13 months after the previous tune-up. Sappi shall conduct the tune-up while burning the type of fuels that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
 - [40 C.F.R. §§ 63.7515(d), 63.7540(a)(10), and Table 3, Row 3]
- b. If Boiler #21 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

 [40 C.F.R. § 63.7540(a)(13)]
- c. Sappi shall operate all CMS during startup and shutdown. [40 C.F.R. § 63.7500(a)(1) and Table 3]
- d. Startup begins when fuel is fired in Boiler #21 and ends when steam or heat is supplied for any purpose. Boiler #21 shall comply with to the following work practice standards during startup:
 - (1) Sappi shall operate all continuous monitoring systems (CMS) during startup.
 - (2) Sappi shall use only clean fuels during startup. (See Definitions section.)
 - (3) Once Boiler #21 starts firing fuels that are not clean fuels, Sappi shall engage all applicable control devices so as to comply with the emission limits.
 - [40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 5]
- e. Shutdown begins when Boiler #21 no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler (whichever is

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earlier) and ends when Boiler #21 is no longer supplying useful thermal energy and no fuel is being combusted in the boiler. Sappi shall comply with the following work practice standards during shutdown:

- (1) Sappi shall operate all CMS during shutdown.
- (2) When firing fuels that are not clean fuels during shutdown, Sappi shall operate all PM controls.

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 6]

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4. Performance Tests

- a. Except as provided for in the next paragraph, Sappi shall conduct performance stack tests for PM, CO, HCl, and mercury annually. Annual performance tests shall be completed no more than 13 months after the previous performance test. [40 C.F.R. § 63.7515(a)]
- b. If the performance tests for a given pollutant for at least 2 consecutive years show that emissions are at or below 75% of the emission limit for that pollutant, and there are no changes in the operation of Boiler #21 or its associated air pollution control equipment that could increase emissions, Sappi may elect to conduct performance tests for that pollutant every third year. The subsequent performance tests shall be conducted no more than 37 months after the previous performance test. If a performance stack test shows emissions exceed 75% of the emission limit for a pollutant, Sappi shall resume conducting annual performance stack testing for that pollutant until all performance stack tests for that pollutant over a 2-year period are at or below 75% of the pollutant's emission limit. [40 C.F.R. §§ 63.7515(b) and (c)]
- c. Sappi shall conduct performance tests for PM, CO, HCl, and mercury in accordance with Table 5. [40 C.F.R. § 63.7520(b)]

d. Sappi shall:

- (1) Conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury (more than one performance test may be required);
- (2) Demonstrate compliance and establish operating limits based on these performance tests; and
- (3) Comply with the operating limit for operating load conditions specified in Table 4 following each performance test and until the next performance test. [40 C.F.R. § 63.7520(c)]
- e. Sappi shall conduct a minimum of three separate test runs for each performance test required. [40 C.F.R. § 63.7520(d)]

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f. Sappi shall use the methodology in § 63.7520(e) to convert measured concentrations to lb/MMBtu emission rates for compliance purposes. If the measured concentration is below the detection level of the method used, Sappi shall use the method detection level as the measured emissions level for the

pollutant in calculating compliance. [40 C.F.R. §§ 63.7520(e) and (f)]

5. Continuous Compliance and Monitoring Requirements

- a. At all times, Sappi shall operate and maintain Boiler #21, 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)]
- b. Sappi shall operate and maintain an oxygen analyzer system on Boiler #21, as defined in § 63.7575. The oxygen analyzer system is considered a CMS. [40 C.F.R. § 63.7525(a)]
- c. Sappi shall operate and maintain a COMS on Boiler #21 according to the procedures in §§ 63.7525(c)(1) (7). The COMS is considered a CMS. [40 C.F.R. § 63.7525(c)]
- d. Sappi shall install, operate, and maintain a CMS in order to demonstrate compliance with the operating load limit in accordance with §§ 63.7525(d)(1) through (5). [40 C.F.R § 63.7525(d)]
- e. For each CMS, Sappi shall develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.8(d) and 63.7505(d)(1)(i) through (iii). Sappi is not required to develop or submit a site-specific monitoring plan for existing COMS operated according to the performance specifications of 40 C.F.R. Part 60, Appendix B and which meet the requirements of § 63.7525. [40 C.F.R. § 63.7505(d)(1)]
- f. Sappi shall monitor and collect CMS data according to 40 C.F.R. § 63.7535. [40 C.F.R. § 63.7535(a)]
 - (1) Sappi shall operate the monitoring systems and collect data at all required intervals at all times that Boiler #21 is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control

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periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the facility's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Sappi shall complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [40 C.F.R. § 63.7535(b)]

- (2) Sappi shall not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. Sappi shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. Sappi shall use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. [40 C.F.R. § 63.7535(c)]
- (3) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, no data shall be used that was collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. Sappi shall calculate monitoring results using all other monitoring data collected while the process is operating. Sappi shall report all periods when the monitoring system is out of control in the semi-annual report. [40 C.F.R. § 63.7535(d)]
- (4) Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 except during performance tests conducted to determine compliance with the emission limits or to establish new

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operating limits. Operating limits shall be confirmed or reestablished during performance tests. [40 C.F.R. § 63.7540(a)(1)]

6. Recordkeeping

In addition to the records listed in the Periodic Monitoring section above, Sappi shall maintain the following records:

- a. Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
- b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]
- c. Copies of all calculations and supporting documentation of maximum chlorine fuel input that were done to demonstrate continuous compliance with the HCl emission limit. [40 C.F.R. § 63.7555(d)(3)]
- d. Copies of all calculations and supporting documentation of maximum mercury fuel input that were done to demonstrate continuous compliance with the mercury emission limit. [40 C.F.R. § 63.7555(d)(4)]
- e. If Sappi elects to stack test less frequently than annually, records that document that the emissions in the previous stack test(s) were less than 75% of the applicable emission limit and documentation that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year; [40 C.F.R. § 63.7555(d)(5)]

7. Notifications and Reports

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

- a. Sappi shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
 [40 C.F.R. § 63.7545(d)]
- b. Within 30 days after the date of completing each performance test, Sappi shall submit the results of the performance test. The performance stack test report must verify that the operating limits for Boiler #21 have not changed or provide documentation of the revised operating limits established.

 [40 C.F.R. §§ 63.7515(f) & 63.7550(h)(1) and 40 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(c)]
- c. Sappi shall prepare and submit to the Department and EPA a compliance report every six months which contains the information contained in §§ 63.7540(b) and 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]

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d. Semi-annual compliance reports, results of compliance tests, and results of CEMS performance evaluations shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, Sappi shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

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(16) **Boilers #17 & #18**

A. Allowable Fuels and Fuel Limits

Boilers #17 & #18 are licensed to fire #6 fuel oil, distillate fuel (for startup purposes only), and specification and off-specification waste oil.
 [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)]
 Enforceable by State-only

2. Boilers #17 & #18 are each limited to firing no more than 1,162,160 gallons per calendar year of fuel oil, which limits each boiler to an annual capacity factor of 10% on a calendar year basis.

[06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)]

3. Sappi shall limit the firing capacity of Boilers #17 & #18 to 199 MMBtu/hr each. To demonstrate compliance, Sappi shall restrict oil firing rates by use of oil supply valves or pneumatic controls such that the oil supplied to each of these boilers never exceeds 10,575 lb/hr of #6 fuel oil (1,327 gal/hr). A mass-flow transmitter shall measure the #6 fuel oil flow rate to each boiler.

[06-096 C.M.R. ch. 138, (A-29-71-Y-A, 6/12/1996)]

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from Boilers #17 & #18 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	06-096 C.M.R. ch. 103, § 2(A)(1)	Federally Enforceable
NO _x	0.30	06-096 C.M.R. ch. 138, § 3(B)(1)	Federally Enforceable

2. Emissions from Boilers #17 & #18 shall each not exceed the following limits:

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Pollutant	lb/hr	Origin and Authority	Enforceability	
PM	39.8	06-096 C.M.R. ch. 140, BPT	Enforceable by	
T IVI	39.6	(A-29-70-A-I, 12/31/2003)	State-only	
PM_{10}	39.8	06-096 C.M.R. ch. 140, BPT	Enforceable by	
F 1VI10		(A-29-70-A-I, 12/31/2003)	State-only	
SO	104.5	1045 06 006 C M P at 140 DDT	Enforceable by	
SO_2	104.5	104.5 06-096 C.M.R. ch. 140, BPT	00-090 C.M.R. ch. 140, BP1	State-only
NO _x 59.	50.7	06-096 C.M.R. ch. 140, BPT	Enforceable by	
	39.7	(A-29-70-I-R, 7/18/2014)	State-only	
CO 6.6	6.6	06-096 C.M.R. ch. 140, BPT	Enforceable by	
	(A-29-70-A-I, 12/31/2003)	State-only		
VOC	1.7	06-096 C.M.R. ch. 140, BPT	Enforceable by	
VOC	1.7	(A-29-70-A-I, 12/31/2003)	State-only	

C. Visible Emissions

- 1. When only one boiler (i.e., either Boiler #17 or Boiler #18) is operating, visible emissions from the main stack shall not exceed an opacity of 30% on a 6-minute block average basis, except that for periods of startup, shutdown, malfunction, and approved maintenance, Sappi may comply with the work practice standards listed below in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(E)(1)]
- 2. When both Boilers #17 and #18 are operating, visible emissions from the main stack shall not exceed an opacity of 40% on a 6-minute block average basis, except that for periods of startup, shutdown, malfunction, and approved maintenance, Sappi may comply with the work practice standards listed below in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(E)(2)]

Note: Periods of soot blowing shall be considered approved maintenance activities subject to the work practice standards listed below in lieu of the numerical visible emission limits.

3. Work Practice Standards

- a. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, malfunctions, and approved maintenance for each boiler.
- b. Develop and implement a written startup and shutdown plan for each boiler.

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- c. The duration of malfunctions and approved maintenance shall each not exceed one hour per occurrence. The duration of startups and shutdowns shall be as defined in this license.
- d. Operate each boiler at all times 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 Department 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 unit.

[06-096 C.M.R. ch. 101, § 4]

D. Compliance Methods

Compliance with the emission limits associated with Boilers #17 & #18 shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [40 C.F.R. § 70.6(c)(1)]

E. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Boilers #17 and #18 (each).

- 1. Hours Boilers #17 and #18 (each) were active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- 2. Fuel use records for Boilers #17 and #18 (each) for each day the boiler was operating. [40 C.F.R. § 63.7525(k)]
- 3. Records from the mass-flow transmitters used to demonstrate that each boiler does not exceed a fuel firing rate of 10,575 lb/hr of #6 fuel oil (1,327 gal/hr). [06-096 C.M.R. ch. 138, (A-29-71-Y-A, 6/13/1996)]
- 4. Records of annual fuel use for each boiler used to demonstrate compliance with the annual capacity factor limit. [40 C.F.R. § 70.6(c)(1)]
- 5. Sulfur content (% by weight) of all liquid fuels fired. [06-096 C.M.R. ch. 137]
- 6. Records of annual emissions from Boilers #17 and #18 on a 12-month rolling total basis used to demonstrate compliance with the combined annual emission limits for Boilers #21, #17, and #18. [06-096 C.M.R. ch. 115 (A-29-71-AG-M, 6/5/2002)] **Enforceable by State only**

(17) Annual Emission Limits for Boilers #21, #17, and #18

A. Emissions from Boilers #21, #17, and #18 combined shall not exceed the following limits on a 12-month rolling total basis:

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Pollutant	Tons/year
SO_2	3,763.5
NO_x	1,787.6

[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. CEMS data shall be used whenever available. For emissions from Boilers #17 and #18 and periods when CEMS data is not available for Boiler #21, Sappi shall calculate emissions using an emission factor based 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

- C. If Boiler #21 emits more than 100.0 tons of NO_x in any consecutive 12-month period, Sappi shall notify the Department within 30 days and shall either.
 - 1. Install SNCR to control NO_x to a level not to exceed 0.20 lb/MMBtu on a 24-hour block average basis; or
 - 2. submit an updated NO_x RACT proposal to the Department for a different control strategy which meets an equivalent emission rate of 0.20 lb/MMBtu on a 24-hour block average basis.

Sappi shall begin operating to the new NO_x RACT standard (0.20 lb/MMBtu) within 24 months of Boiler #21 exceeding 100.0 tpy (12-month rolling total). This requirement takes effect as of the issuance of this license, i.e., the first 12-month period begins the month this license is issued. [CAA § 182(f)]

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(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 (combined) in Boilers #17, #18, and #21 (combined) 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.

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[06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] Enforceable by State-only

- B. Sappi shall maintain monthly records which include the following:
 - 1. The amount of waste oil added to the #6 Fuel Oil Storage Tank and the date it was added; and
 - 2. Documentation that the waste oil meets the definition of either specification or off-specification waste oil through analysis of a representative sample (collected at least once per year) of waste oil added to the #6 Fuel Oil Storage Tank.

[06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] Enforceable by State-only

(19) **Technology Center Boiler**

- A. Allowable Fuels and Fuel Limits
 - 1. The Technology Center Boiler is licensed to fire natural gas. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] **Enforceable by State-only**
 - 2. The Technology Center Boiler is limited to firing no more than 7.2 MMscf of natural gas per calendar year, which limits this boiler to an annual capacity factor of 10% on a calendar year basis. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)]

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from the Technology Center Boiler shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	Federally Enforceable

2. Emissions from the Technology Center Boiler shall not exceed the following limits:

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Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.1	06-096 C.M.R. ch. 140, BPT	Enforceable by
T IVI	0.1	(A-29-70-A-I, 12/31/2003)	State-only
PM_{10}	0.1	06-096 C.M.R. ch. 140, BPT	Enforceable by
F1V110	0.1	(A-29-70-A-I, 12/31/2003)	State-only
SO	0.005	06-096 C.M.R. ch. 140, BPT	Enforceable by
SO_2	0.003	(A-29-70-I-R, 7/18/2014)	State-only
NO _x	0.8	06-096 C.M.R. ch. 140, BPT	Enforceable by
NO _x	0.8	(A-29-70-I-R, 7/18/2014)	State-only
СО	0.7	06-096 C.M.R. ch. 140, BPT	Enforceable by
CO	0.7	(A-29-70-I-R, 7/18/2014)	State-only
VOC	0.04	06-096 C.M.R. ch. 140, BPT	Enforceable by
VOC		(A-29-70-A-I, 12/31/2003)	State-only

C. Visible Emissions

Visible emissions from the Technology Center Boiler shall not exceed an opacity of 10% on a 6-minute block average basis.

[06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)]

D. Compliance Methods

Compliance with the emission limits associated with the Technology Center Boiler shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [40 C.F.R. § 70.6(c)(1)]

E. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Technology Center Boiler.

- 1. Hours the Technology Center Boiler was active or operating on a monthly and calendar year basis. [06-096 C.M.R ch. 137]
- 2. Fuel use records for the days the Technology Center Boiler was operating. [40 C.F.R. § 63.7525(k)] Fuel usage for the Technology Center Boiler and #35 Research Coater Dryer is measured through use of a common meter.
- 3. Records of annual fuel use used to demonstrate compliance with the annual capacity factor limit. [40 C.F.R. § 70.6(c)(1)]

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(20) 40 C.F.R. Part 63, Subpart DDDDD Requirements for Limited Use Boilers

Following are applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD for Boilers #17, #18, and the Technology Center Boiler not addressed elsewhere in this Order:

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A. Work Practice Standards and Continuous Compliance

- 1. Sappi shall perform tune-ups on Boilers #17, #18, and the Technology Center Boiler (each) as specified in §§ 63.7540(a)(10)(i) through (vi) every 5 years. Delay of the burner inspection until the next scheduled or unscheduled shutdown is permitted for up to 72 months from the previous inspection.

 [40 C.F.R. §§ 63.7500(c) & 63.7540(a)(12)]
- 2. If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]
- 3. At all times, Sappi shall operate and maintain Boilers #17, #18, and the Technology Center Boiler (each), 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)]

B. 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 6 years pursuant to Standard Condition (6)]
- 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, the following:
 - a. Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]

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C. 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:

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- 1. Sappi shall prepare and submit a compliance report every five years for Boilers #17, #18, and the Technology Center Boiler (each) which contains the information contained in § 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]
- 2. Compliance reports shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, Sappi shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

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

A. Boilers #22 and #23 shall fire only natural gas. [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]

B. Transitional Periods

The East-Side Boilers shall not operate concurrently with the West-Side Boilers with the exception of Transitional Periods (as that term is defined in this license). Compliance shall be demonstrated through the Periodic Monitoring requirements of this license. [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]

C. Control Equipment

- 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-29-77-5-A, 8/21/2020)]
- 2. Sappi shall operate and maintain FGR on Boilers #22 and #23 for control of NO_x during all times the boiler is operating except during periods of startup and shutdown. [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]
- Sappi shall operate and maintain an oxygen trim system on Boilers #22 and #23 for control of CO and VOC during all times the boiler is operating. [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]

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- D. Emission Limits
 Emission limits are on a 1-hour block average basis unless otherwise stated.
 - 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
PIVI	0.003	(A-29-77-5-A, 8/21/2020)	Enforceable
PM ₁₀	0.005	06-096 C.M.R. ch. 115, BACT	Federally
PIVI ₁₀	0.003	(A-29-77-5-A, 8/21/2020)	Enforceable
DM	0.005	06-096 C.M.R. ch. 115, BACT	Federally
$PM_{2.5}$	0.003	(A-29-77-5-A, 8/21/2020)	Enforceable
SO_2	0.001	06-096 C.M.R. ch. 115, BACT	Federally
SO_2	0.001	(A-29-77-5-A, 8/21/2020)	Enforceable
NO	0.036	06-096 C.M.R. ch. 115, BACT	Federally
NO_x	0.030	(A-29-77-5-A, 8/21/2020)	Enforceable
CO	0.029	06-096 C.M.R. ch. 115, BACT	Federally
СО	0.038	(A-29-77-5-A, 8/21/2020)	Enforceable
WOC	0.004	06-096 C.M.R. ch. 115, BACT	Federally
VOC	0.004	(A-29-77-5-A, 8/21/2020)	Enforceable

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. 140, BPT	Enforceable by State-only
PM_{10}	0.50	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
PM _{2.5}	0.50	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
SO ₂	0.10	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
NO _x	3.60	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
СО	3.80	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC	0.40	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only

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

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Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.21	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
PM_{10}	0.21	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
PM _{2.5}	0.21	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
SO ₂	0.04	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
NO _x	1.51	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
СО	1.60	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC	0.17	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only

E. Visible Emissions

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)]

F. Compliance Methods

- 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-29-77-5-A, 8/21/2020)]
- 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-29-77-5-A, 8/21/2020)]
- 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-29-77-5-A, 8/21/2020)]

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G. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Technology Center Boiler.

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- 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)]
- 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-29-77-5-A, 8/21/2020)]
- 4. Date and time each West-Side Boiler and East-Side boiler begins producing useful thermal energy (used to document transitional periods); and [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]
- Date and time each West-Side Boiler and East-Side boiler stops introducing fuel into the boiler (used to document transitional periods). [06-096 C.M.R. ch. 115, BACT (A-29-77-5-A, 8/21/2020)]

H. 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 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)]

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- 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)]

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)]

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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)]

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(22) Ambient Air Quality Dispersion Modeling

No later than May 1, 2023, Sappi shall either submit an ambient air quality impact analysis for the facility as licensed or submit an application (including an ambient air quality analysis) to replace Boilers #22 and/or #23 or other necessary license changes necessary to demonstrate compliance with all NAAQS and increment standards.

[06-096 C.M.R. ch. 115, BPT (A-29-77-5-A, 8/21/2020)]

(23) MAU #1

- A. MAU #1 shall only fire natural gas. [06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)]:

	PM	PM ₁₀	NOx	CO	VOC
Emission Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
MAU #1	0.14	0.14	0.27	0.22	0.01

- C. Visible emissions from MAU #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT (A-29-77-6-A, 11/30/2020)]
- D. Sappi shall record data and maintain records for the following periodic monitoring values for MAU #1:
 - a. Hours MAU #1 was active or operating on a monthly and calendar year basis; and
 b. Amount of natural gas fired in MAU #1 on a calendar year basis.
 [06-096 C.M.R ch. 137]

(24) Emergency Engines

A. Allowable Fuels

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

B. Emission Limits

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

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	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		

	Engine #2				
Pollutant	lb/hr	Origin and Authority	Enforceability		
PM	0.23	06-096 C.M.R. ch. 140, BPT	Enforceable by		
PIVI	0.23	(A-29-70-I-R, 7/18/2014)	State-only		
DM	0.23	06-096 C.M.R. ch. 140, BPT	Enforceable by		
PM_{10}		(A-29-70-I-R, 7/18/2014)	State-only		
NO	8.42	06-096 C.M.R. ch. 140, BPT	Enforceable by		
NO_x		(A-29-70-A-I, 12/31/2003)	State-only		
CO	1.81	06-096 C.M.R. ch. 140, BPT	Enforceable by		
CO		(A-29-70-A-I, 12/31/2003)	State-only		
VOC	0.67	06-096 C.M.R. ch. 140, BPT	Enforceable by		
	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		
СО	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		

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Engine #4			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.06	06-096 C.M.R. ch. 140, BPT	Enforceable by
FIVI	0.00	(A-29-70-I-R, 7/18/2014)	State-only
PM_{10}	0.06	06-096 C.M.R. ch. 140, BPT	Enforceable by
PIVI ₁₀		(A-29-70-I-R, 7/18/2014)	State-only
NO_x	2.16	06-096 C.M.R. ch. 140, BPT	Enforceable by
NO_X		(A-29-70-A-I, 12/31/2003)	State-only
СО	0.47	06-096 C.M.R. ch. 140, BPT	Enforceable by
CO		(A-29-70-A-I, 12/31/2003)	State-only
VOC	0.17	06-096 C.M.R. ch. 140, BPT	Enforceable by
	0.17	(A-29-70-A-I, 12/31/2003)	State-only

Engine #5				
Pollutant	lb/hr	Origin and Authority	Enforceability	
PM	0.25	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only	
PM_{10}	0.25	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only	
NO _x	4.77	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only	
СО	7.81	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only	
VOC	0.06	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Enforceable by State-only	

C. Visible Emissions

Visible emissions from each engine shall not exceed an opacity of 20% on a 6-minute block average basis, except that for periods of startup during which time Sappi may comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)]

- 1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- 2. Operate the engines in accordance with the manufacturer's emission-related operating instructions.
- 3. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.

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4. Operate the engines, including any associated air pollution control equipment, at all times 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 Department 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 unit.

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D. Compliance Methods

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

E. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for Engines #1 - #5.

- 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 only) [06-096 C.M.R. ch. 140, BPT]

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

Following are applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ for Engines #1 - #5 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;
 - 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]

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2. Sappi shall meet the following operational limitations for the spark ignition emergency engine (Engine #5):

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- a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect the spark plugs 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 or 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]

3. 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)]

4. Non-Resettable Hour Meter

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

- 5. 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)]

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

7. 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]

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(25) #35 Research Coater and Dryer

- A. The #35 Research Coater is licensed to fire natural gas. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] Enforceable by State-only
- B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

- 1. VOC content of the coatings used on #35 Research Coater shall not exceed 2.9 pounds of VOC per gallon of coating applied. [06-096 C.M.R. ch. 123]
- 2. Emissions from #35 Research Coater and its associated Dryer shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 C.M.R. ch. 140, BPT	Federally
LIM	0.05	(A-29-70-I-R, 7/18/2014)	Enforceable

3. Emissions from #35 Research Coater and its associated Dryer shall each not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.35	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
PM_{10}	0.35	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
NO _x	0.68	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
СО	0.57	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only
VOC (fuel burning only)	0.04	06-096 C.M.R. ch. 140, BPT	Enforceable by State-only

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C. Visible emissions from the #35 Research Coater Dryer shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

D. Compliance Methods

- 1. Compliance with the VOC emission limits associated with the #35 Research Coater shall be demonstrated by recordkeeping of the VOC content and amount of the coatings applied. [40 C.F.R. § 70.6(c)(1)]
- 2. Compliance with the emission limits for all other pollutants associated with the #35 Research Coater and its associated dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [40 C.F.R. § 70.6(c)(1)]

E. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #35 Research Coater:

- 1. Hours the #35 Research Coater was active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 2. Fuel use for the #35 Research Coater Dryers on a monthly and calendar year basis. [06-096 C.M.R. ch. 137] Fuel usage for the Technology Center Boiler and #35 Research Coater Dryer is measured through use of a common meter.
- 3. Records of the VOC content of all coatings run on #35 Research Coater (used to demonstrate all coatings contain less than 2.9 lb VOC per gallon). [06-096 C.M.R. ch. 123]
- 4. Calculations of the VOC/HAP emitted from #35 Research Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]

(26) #2 Coater and 4th Zone Dryer

A. The #2 Coater 4th Zone Dryer is licensed to fire natural gas. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] Enforceable by State-only

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

- 1. VOC content of the coatings used on #2 Coater shall not exceed 2.9 pounds of VOC per gallon of coating applied. [06-096 C.M.R. ch. 123]
- 2. Emissions of organic HAP from #2 Coater shall not exceed 20% of the mass of facility-wide coating solids applied for each month. [40 C.F.R. § 63.3320(b)(3)]

3. Emissions from #2 Coater and 4th Zone Dryer shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
DM	0.12	06-096 C.M.R. ch. 103	Federally
PM	0.12	§ 2(B)(1)(a)	Enforceable

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4. Emissions from #2 Coater and 4th Zone Dryer shall each not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.2	06-096 C.M.R. ch. 115, BACT	Federally
LIM	0.2	(A-29-71-AH-A, 2/20/2003)	Enforceable
PM_{10}	0.2	06-096 C.M.R. ch. 115, BACT	Federally
F 1VI10	0.2	(A-29-71-AH-A, 2/20/2003)	Enforceable
SO	0.02	06-096 C.M.R. ch. 115, BACT	Federally
SO_2	0.02	(A-29-71-AH-A, 2/20/2003)	Enforceable
NO	0.50	06-096 C.M.R. ch. 140, BPT	Federally
NO_x	0.58	(A-29-70-I-R, 7/18/2014)	Enforceable
CO	0.40	06-096 C.M.R. ch. 140, BPT	Federally
CO	0.49	(A-29-70-I-R, 7/18/2014)	Enforceable
VOC		06-096 C.M.R. ch. 140, BPT	Federally
(fuel burning	0.03	(A-29-70-I-R, 7/18/2014)	Enforceable
only)		(A-29-70-1-IX, 7/10/2014)	Enforceable

5. Emissions from #2 Coater shall each not exceed the following limits:

Pollutant	tpy	Origin and Authority	Enforceability
Mod	39.7	06-096 C.M.R. ch. 140, BPT	Federally
VOC		(A-29-70-E-A, 11/1/2006)	Enforceable
(from coatings)	139.7 (#2 Coater and #20 Coater combined)	06-096 C.M.R. ch. 140, BPT (A-29-70-E-A, 11/1/2006)	Federally Enforceable

C. Visible emissions from the 4th Zone Dryer shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT]

D. Compliance Methods

1. Compliance with the VOC emission limits associated with the #2 Coater shall be demonstrated by recordkeeping of the VOC content and amount of the coatings applied in accordance with 06-096 C.M.R. ch. 123, § 6(D).

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2. Compliance with the organic HAP emission limit shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e. 20%) for all coating material applied at the affected source (i.e. total of #2 Coater,

#20 Coater, and Ultracast Coaters combined). [40 C.F.R. §§ 63.3370(c)(4) and (5)]

3. Compliance with the emission limits for all other pollutants associated with the #2 Coater and 4th Zone Dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

E. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #2 Coater and 4th Zone Dryer:

- 1. Hours the #2 Coater and 4th Zone Dryer were active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 2. Fuel use for the 4th Zone Dryer on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 3. Records of the VOC content of all coatings run on #2 Coater. (Used to demonstrate all coatings contain less than 2.9 lb VOC per gallon.) [06-096 C.M.R. ch. 123]
- 4. Calculations of the VOC/HAP emitted from #2 Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]
- 5. Organic HAP content for each coating used. [40 C.F.R. § 63.3410(a)(1)(iii)]
- 6. Material usage on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.3410(a)(1)(vi)]
- 7. Coating solids usage on a monthly basis. [40 C.F.R. §63.3410(a)(1)(vi)]

(27) #20 Coater and Dryers

A. The #20 Coater, 7th Zone Dryer, Floatation Dryers, and the Catalytic Incinerator are licensed to fire natural gas. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] **Enforceable by State-only**

B. Control Equipment

1. If #20 Coater is to be operated with a coating containing greater than 2.9 pounds of VOC per gallon of coating applied, emissions of VOC from #20 Coater shall be controlled by the operation and maintenance of a Catalytic Incinerator. Sappi may operate #20 Coater without the Catalytic Incinerator when running coatings with a VOC content less than or equal to 2.9 pounds of VOC per gallon of coating applied. [06-096 C.M.R. ch. 123, § 3]

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2. Sappi shall maintain the Catalytic Incinerator inlet temperature at or above the average inlet temperature measured during the most recent performance test which demonstrated compliance with the VOC capture and control efficiency or VOC emission rate requirements.

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[06-096 C.M.R. ch. 140, BPT (A-29-70-H-A, 10/11/2007)]

- 3. Sappi shall purchase and utilize either AOK-75-71 catalyst from Matros Technologies or a catalyst with similar or greater attrition resistance for use in the Catalytic Incinerator. [06-096 C.M.R. ch. 140, BPT (A-29-70-C-A, 9/21/2005)] **Enforceable by State-only**
- 4. The respective wet scrubber shall be operated whenever any coating grade is applied by an air knife applicator. [06-096 C.M.R. ch. 115, BACT (A-29-77-4-A, 3/6/2013)]

C. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

- 1. When applying coatings containing greater than 2.9 pounds of VOC per gallon of coating applied, VOC emissions from #20 Coater shall comply with one of the following standards:
 - a. VOC emissions shall be reduced by 95%; or
 - b. VOC emissions shall not exceed 4.8 pounds of VOC per gallon of solids applied.

[06-096 C.M.R. ch. 123, § 3(B)]

- 2. Emissions of organic HAP from #20 Coater shall not exceed 20% of the mass of facility-wide coating solids applied for each month. [40 C.F.R. § 63.3320(b)(3)]
- 3. Emissions shall each not exceed the following limits:

7 th Zone Dryer			
Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Federally Enforceable

Floatation Dryers			
Pollutant lb/MMBtu Origin and Authority Enforceabilit			
PM	0.05	06-096 C.M.R. ch. 115, BACT	Federally
		(A-29-77-4-A, 3/6/2013)	Enforceable

	Catalytic Incinerator				
Pollutant	lb/MMBtu	Origin and Authority	Enforceability		
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	Federally Enforceable		

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4. Emissions shall each not exceed the following limits:

	7 th Zone Dryer			
Pollutant	lb/hr	Origin and Authority	Enforceability	
PM	0.03	06-096 C.M.R. ch. 115, BACT	Federally	
I IVI	0.03	(A-29-77-2-M, 4/16/2010)	Enforceable	
PM_{10}	0.03	06-096 C.M.R. ch. 115, BACT	Federally	
F1V110	0.03	(A-29-77-2-M, 4/16/2010)	Enforceable	
SO ₂	0.003	06-096 C.M.R. ch. 115, BACT	Federally	
SO_2		(A-29-77-2-M, 4/16/2010)	Enforceable	
NO _x	0.40	06-096 C.M.R. ch. 115, BACT	Federally	
NO_X	0.40	(A-29-77-2-M, 4/16/2010)	Enforceable	
CO	0.3	06-096 C.M.R. ch. 115, BACT	Federally	
CO	0.3	(A-29-77-2-M, 4/16/2010)	Enforceable	
VOC	0.02	06-096 C.M.R. ch. 115, BACT	Federally	
VOC	0.02	(A-29-77-2-M, 4/16/2010)	Enforceable	

Floatation Dryers			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.40	06-096 C.M.R. ch. 115, BACT	Federally
PIVI	0.40	(A-29-77-4-A, 3/6/2013)	Enforceable
D) (0.40	06-096 C.M.R. ch. 115, BACT	Federally
PM_{10}		(A-29-77-4-A, 3/6/2013)	Enforceable
NO	0.79	06-096 C.M.R. ch. 115, BACT	Federally
NO_x	0.78	(A-29-77-4-A, 3/6/2013)	Enforceable
СО	0.65	06-096 C.M.R. ch. 115, BACT	Federally
		(A-29-77-4-A, 3/6/2013)	Enforceable

Catalytic Incinerator			
Pollutant	lb/hr	Origin and Authority	Enforceability
PM	4.0	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006)	Federally Enforceable
PM ₁₀	4.0	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006)	Federally Enforceable
SO_2	0.006	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	Federally Enforceable
NO _x	1.0	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	Federally Enforceable
СО	1.8	06-096 C.M.R. ch. 115, BACT (A-29-71-I-A, 6/29/1990)	Federally Enforceable

5. Emissions shall each not exceed the following limits:

Catalytic Incinerator			
Pollutant	tpy	Origin and Authority	Enforceability
PM	3.99 (calendar year basis)	06-096 C.M.R. ch. 115, BACT (A-29-77-1-M, 12/8/2006	Federally Enforceable

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#2 and #20 Coater Combined				
Pollutant	tpy	Origin and Authority	Enforceability	
VOC	139.7 (#2 Coater and #20 Coater combined)	06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)	Federally Enforceable	

D. Visible Emissions

- 1. Visible emissions from the roof vents associated with the 7th Zone Dryer and Floatation Dryers shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT]
- 2. Visible emissions from the Catalytic Incinerator shall not exceed an opacity of 10% on a 6-minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-29-70-J-R/A)]

E. Compliance Methods

- 1. Compliance with the PM lb/MMBtu emission limits shall be demonstrated by firing only natural gas in the #20 Coater 7th Zone Dryer, #20 Coater Floatation Dryers, and Catalytic Incinerator. [06-096 C.M.R. ch. 140, BPT]
- 2. Compliance with the annual PM emission limit for the Catalytic Incinerator shall be based on the amount of catalyst attrition in that time period determined using a mass balance approach. [06-096 C.M.R. ch. 115, BPT (A-29-77-1-M, 12/8/2006)]
- 3. Compliance with the VOC emission limit for #20 Coater when using low solvent coatings shall be demonstrated through the recordkeeping required by 06-096 C.M.R. ch. 123.
- 4. Compliance with the VOC emission limits for #20 Coater when not using low solvent coatings shall be demonstrated through performance testing conducted every other calendar year. The next performance test is due no later than 12/31/2022. Performance testing shall be conducted while in accordance with the requirements of 06-096 C.M.R. ch. 123 and 06-096 C.M.R. ch. 126. [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)]

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- 5. Compliance with the organic HAP emission limit shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e. 20%) for all coating material applied at the affected source (i.e. total of #2 Coater, #20 Coater, and Ultracast Coaters combined). [40 C.F.R. §§ 63.3370(c)(4) and (5)]
- 6. Compliance with the emission limits for all other pollutants associated with the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140, BPT]

F. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator:

- 1. Hours the #20 Coater, 7th Zone Dryer, Floatation Dryers, and Catalytic Incinerator were active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 2. Fuel use for the #20 Coater, the dryers, and Catalytic Incinerator (combined) on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 3. Calculations of the VOC/HAP emitted from #20 Coater on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]
- 4. Records of any maintenance activities performed (planned or unplanned) on the Catalytic Incinerator and wet scrubbers. [40 C.F.R. § 70.6(c)(1)]
- 5. Flow to the wet scrubbers monitored continuously and recorded at least once per shift. [40 C.F.R. § 70.6(c)(1)]
- 6. Dates of catalyst bed changes and the amount of catalyst removed and added. [40 C.F.R. § 70.6(c)(1)]
- 7. Organic HAP content for each coating used. [40 C.F.R. § 63.3410(a)(1)(iii)]
- 8. Material usage on a monthly basis. [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.3410(a)(1)(vi)]
- 9. Coating solids usage on a monthly basis. [40 C.F.R. §63.3410(a)(1)(vi)]
- 10. When operating the Catalytic Incinerator:
 - a. Exhaust gas temperature (°F) monitored and recorded continuously
 - b. Temperature rise across the catalyst bed (°F) monitored and recorded continuously

[06-096 C.M.R. ch. 123, § 7(B)]

11. Dates the catalyst bed was changed in the Catalytic Incinerator. [06-096 C.M.R. ch. 123, § 7(C)]

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12. For each coating:

- a. Supplier name
- b. Name of coating
- c. Identification number of coating
- d. Coating density (lb/gal)
- e. Total VOC content as supplied (wt %)
- f. Water content of coating as supplied (wt %)
- g. Exempt VOC content (described in the rule) of coating as supplied (wt %)
- h. Solids content of coating as supplied (vol %)
- i. Diluent ratio (gal diluent/gal coating)

[06-096 C.M.R. ch. 123, § 6(B)]

13. For each diluent:

- a. Name of diluent
- b. Identification number of diluent
- c. Diluent density (lb/gal) [06-096 C.M.R. ch. 123 § 6(B)]

14. The following records on a daily basis:

- a. Coating line number
- b. Time period
- c. Coating identification number
- d. Amount of coating used
- e. Diluent identification number
- f. Amount of diluent used

[06-096 C.M.R. ch. 123, § 6(C)]

G. 06-096 C.M.R. ch. 123

Following are applicable requirements of *Control of Volatile Organic Compounds from Paper, Film and Foil Coating Operations*, 06-096 C.M.R. ch. 123 for #20 Coater not addressed elsewhere in this Order:

Work Practices: Sappi shall use the following work practices for #20 Coater:

- 1. New and used coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon, including a coating mixed on the premises, shall be stored in nonabsorbent, non-leaking containers. Such containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.
- 2. Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be immediate absorbed and removed or disposed of.

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- 3. Absorbent applicators, such as cloth and paper, which are moistened with coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling.
- 4. Coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon shall be conveyed from one location to another in a closed container or pipe.
- 5. Cleaning shall be performed to minimize associated VOC emissions. [06-096 C.M.R. ch. 123, § 4]

(28) 40 C.F.R. Part 63, Subpart JJJJ Requirements for #2 Coater, #20 Coater, and Ultracast Coaters

Following are applicable requirements of *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*, 40 C.F.R. Part 63, Subpart JJJJ for #2 Coater, #20 Coater, and the Ultracast Coaters not addressed elsewhere in this Order:

A. Continuous Compliance

Compliance shall be demonstrated by recordkeeping which confirms that the monthly average as-applied organic HAP content does not exceed 0.20 kg of organic HAP per kg of coating solids (i.e. 20%) for all coating material applied at the affected source (i.e. total of #2 Coater, #20 Coater, and Ultracast Coaters combined) in accordance with the compliance demonstration option listed in 40 C.F.R. § 63.3370(a)(2)(iv). [40 C.F.R. § 63.3370(c)(4) and (5)]

B. Reports

Sappi shall prepare and submit to the Department and EPA a compliance report every six months which contains the information contained in § 63.3400(c)(2) as applicable. [40 C.F.R. § 63.3400(c)]

(29) Ultracast Roll Cleaning

A. Emission Limits

Total emissions of VOC from the Ultracast Roll Cleaning process shall not exceed 2.0 tpy. [06-096 C.M.R. ch. 140, BPT (A-29-70-I-R, 7/18/2014)] **Enforceable by State-only**

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B. Compliance Methods

Compliance with the VOC emission limits associated with the Ultracast Roll Cleaning process shall be demonstrated by recordkeeping of the VOC content and amount of the solvent used. [40 C.F.R. § 70.6(c)(1)]

C. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Ultracast Roll Cleaning process:

- 1. Hours the Ultracast Roll Cleaning process was active or operating on a monthly and calendar year basis. [06-096 C.M.R. ch. 137]
- 2. Records of the VOC content of all solvent used in the Ultracast Roll Cleaning process. [06-096 C.M.R. ch. 137]
- 3. Calculations of the VOC/HAP emitted from the Ultracast Roll Cleaning process on a monthly and calendar year total basis. [06-096 C.M.R. ch. 137]

(30) Parts Washers

Sappi may operate some parts washers subject to Solvent Cleaners, 06-096 C.M.R. ch. 130.

- A. Sappi shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 140, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
 - 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 - 2. Wipe cleaning; and,
 - 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are subject to 06-096 C.M.R. ch. 130.
 - 1. Sappi shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does

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- not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
- d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
- e. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the parts washer.
- f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
- g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
- h. Work area fans shall not blow across the opening of the washer unit.
- i. The solvent level shall not exceed the fill line.
- 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
- 3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent [06-096 C.M.R. ch. 130]

(31) Fly Ash Loading System

A. Visible Emissions

- 1. Visible emissions from the dry fly ash system baghouse shall not exceed 10% opacity on a 6-minute block average basis. Sappi shall take corrective action if visible emissions from the baghouse exceed 5% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(3)]
- 2. Visible emissions from the wet ash system shall not exceed 20% opacity on a 6-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]
- B. Sappi shall establish an inspection/maintenance plan for the Ash Loading System. The plan shall provide for monthly inspections of the systems and for record keeping of inspection findings and all maintenance performed (planned and unplanned). [06-096 C.M.R. ch. 140, BPT (A-29-70-A-I, 12/31/2003)] **Enforceable by State-only**

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C. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Fly Ash Loading System:

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- 1. Records of monthly inspections of the Fly Ash Loading System and inspection results. [40 C.F.R. § 70.6(c)(1)]
- 2. Records of any maintenance activities performed (planned or unplanned) on the Ash Loading System. [40 C.F.R. § 70.6(c)(1)]
- 3. Pressure drop for the dry ash system baghouse monitored continuously and recorded once per shift (when the equipment is in operation). [40 C.F.R. § 70.6(c)(1)]

(32) Petroleum Storage Tanks

- A. The fill pipe for the gasoline side of the Split Gasoline/Diesel Storage Tank shall extend within six inches of the bottom of the gasoline storage tank. [06-096 C.M.R. ch. 118]
- B. Sappi shall maintain records of the monthly and annual throughput of gasoline for the Split Gasoline/Diesel Storage Tank. [06-096 C.M.R. ch 118]
- C. Emissions from the Petroleum Storage Tanks (#2 Fuel Oil Storage Tank, #6 Fuel Oil Storage Tank, and gasoline portion of the Split Gasoline/Diesel Storage Tank) shall be included in the facility's annual emissions inventory report filed in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Emissions from each storage tank shall be calculated in accordance with the most current version of EPA's Compilation of Air Emissions Factors (AP-42) or other method as approved by the Department. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 140, BPT]

D. Periodic Monitoring

Sappi shall record data and maintain records for the following periodic monitoring values for the Petroleum Storage Tanks:

- 1. Records of the monthly and annual throughput of gasoline for the Split Gasoline/Diesel Storage Tank. [06-096 C.M.R. ch. 118, § 10(B)]
- 2. Records necessary to calculate annual emissions of VOC and HAP from the Petroleum Storage Tanks. [06-096 C.M.R. ch. 137]
- 3. Calculations of the VOC/HAP emitted from Petroleum Storage Tanks on a calendar year total basis. [06-096 C.M.R. ch. 137]

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(33) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis. [06-096 C.M.R. ch. 101, § 3(C)]

(34) General Process Sources

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis. [06-096 C.M.R. ch. 101, § 3(C)]

(35) Parameter Monitor General Requirements

[06-096 C.M.R. ch. 140 and 117]

- A. Parameter monitors required by this license shall be installed, operated, maintained, and calibrated in accordance with manufacturer recommendations or as otherwise required by the Department.
- B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. "Continuously" with respect to the operation of parameter monitors required by this license means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitute a valid hour.
- C. Each parameter monitor must record accurate and reliable data. If any parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action. The Department may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the Department's satisfaction that the failure of the system to record such data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

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(36) **CEMS Recordkeeping**

- A. The licensee shall maintain records documenting that all CEMS and COMS are continuously accurate, reliable, and operated in accordance with 06-096 C.M.R. ch. 117, 40 C.F.R. Part 51, Appendix P, and 40 C.F.R. Part 60, Appendices B and F;
- B. The licensee shall maintain records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 C.F.R. Part 51, Appendix P; and

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C. The licensee shall maintain records of other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.

[06-096 C.M.R. ch. 140] Enforceable by State-only

(37) Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS), and Continuous Opacity Monitoring Systems (COMS) required by this license. The quarterly report shall be considered on-time if the postmark of the submittal is on or before the due date or if the report is received by the Department within seven calendar days of the due date. [06-096 C.M.R. ch. 117]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameter monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, state regulations, or federal regulations, as appropriate. The following information shall be reported for each excess event;
 - 1. Standard exceeded;
 - 2. Date, time, and duration of excess event;
 - 3. Amount of air contaminant emitted in excess of the applicable emission standard, expressed in the units of the standard;
 - 4. A description of what caused the excess event;
 - 5. The strategy employed to minimize the excess event; and
 - 6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

(38) **Semiannual Reporting [06-096 C.M.R. ch. 140]**

Note: This semiannual report is separate from, and in addition to, any semiannual report required by specific NSPS or NESHAP regulations.

A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.

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- B. The semiannual report shall be considered on-time if the postmark of the submittal is on or before the due date or if the report is received by the Department within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(39) Annual Compliance Certification

Sappi shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due **January 31**st of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is on or before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 C.M.R. ch. 140]

(40) Annual Emission Statement

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Sappi shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. Sappi shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. Hours each emission unit was active or operating on a monthly and calendar year basis.
 - 2. The amount of each type of fuel fired in each emission unit.
 - 3. The sulfur content of the fuel oil fired in each emission unit.
 - 4. Calculations of the VOC/HAP emitted from each of the #35 Research Coater, #2 Coater, #20 Coater, Ultracast Roll Cleaning process, and Petroleum Storage Tanks on a monthly and calendar year total basis.

[06-096 C.M.R. ch. 137]

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C. In reporting year 2020 and every third year thereafter, Sappi shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). Sappi shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

(41) General Applicable State Regulations

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	1
06-096 C.M.R. ch. 109	Emergency Episode Regulations	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(42) Units Containing Ozone Depleting Substances

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(43) Asbestos Abatement

When undertaking Asbestos abatement activities, Sappi shall comply with the *Standard for Asbestos Demolition and Renovation*, 40 C.F.R. Part 61, Subpart M.

(44) Expiration of a Part 70 license

- A. Sappi shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.
- B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

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(45) New Source Review

Sappi is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emission License, A-29-70-J-R/A, expires.

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DONE AND DATED IN AUGUSTA, MAINE THIS $3^{ m rd}$ DAY OF ${ m JUNE},2$:021
DEPARTMENT OF ENVIRONMENTAL PROTECTION	

BY: MELANIE LOYZIM, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/16/2019
Date of application acceptance: 1/17/2019

Date filed with the Board of Environmental Protection:

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

FILED

JUN 03, 2021

State of Maine Board of Environmental Protection