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

DEPARTMENT ORDER

Sappi North America, Inc. **Somerset County** **Skowhegan, Maine** **A-19-70-E-R/A**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Renewal and Amendment**

FINDINGS OF FACT

After review of the Part 70 License renewal and Minor License Modifications application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (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. – Somerset Operations
LICENSE TYPE	Part 70 License Renewal and Part 70 Minor License Modification
NAICS CODES	322121
NATURE OF BUSINESS	Pulp and Paper Mill
FACILITY LOCATION	Skowhegan, Maine

Sappi North America, Inc. – Somerset Operation is an integrated pulp and paper manufacturing facility located in Skowhegan, Maine. Established in 1976, this facility uses the kraft pulping process and produces various pulp and paper products. The facility is located at 1329 Waterville Road, U.S. Route 201, Skowhegan, Maine.

Sappi North America, Inc. – Somerset Operation (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); 50 TPY of volatile organic compounds (VOC); and 100,000 TPY of carbon dioxide equivalent (CO_2e); therefore, the source is a major source for criteria pollutants. Sappi has the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP, therefore, the source is a major source for HAP.

B. Units of Measurement

The following units of measurement are used in this license:

ADT/day	air dried tons per day
Btu/ft^3	British thermal unit per cubic foot
Btu/gallon	British thermal unit per gallon
CEMS	Continuous Emissions Monitoring System
CMS	Continuous Monitoring System
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
g/kW-hr	grams per kilowatt-hour
gr/dscf	grains per dry standard cubic foot
lb/ADT	pounds per air dried tons
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
lb/ton BLS	pound per ton of black liquor solids
Mg/d	million gallons per day
mmHg	millimeter of mercury
MMBtu/hr	million British thermal units per hour
MM lbs of BLS/day	million pounds of black liquor solids per day
MW	megawatt
ODP	oven dried pulp
Ppm	parts per million
Ppmdv	parts per million dry volume
Ppmvw	parts per million wet volume
% S	percent sulfur
TPD, tons/day, or tpd	tons per day
TPH, tons / hour, or tph	tons per hour
TPY, tons/year, or tpy	tons per year

C. Definitions

Biomass means any biomass based solid fuel that is not a solid waste. This includes purchased or mill generated biomass including bark, woodroom rejects, wood chips, fines, sawdust, knots, screenings, rocks, sand, and the following materials generated on site: chipped up wood and wood pallets, knots, bark and pulp chips, virgin oil absorbed with sawdust, de-watered pulp and paper wastewater treatment plant sludge residuals, etc.

Biomass is also defined by 40 C.F.R. Part 63, Subpart DDDDD and 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. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. Sappi should consult with the Department before adding any new biomass type to its fuel mix.

Continuously - means the collection of CEM, COMS, or parameter monitoring data pursuant to the requirements of the regulation identified by the "Origin & Authority" listed or pursuant to Special Condition (40) and (41), as applicable.

Distillate Fuel means the following:

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

kraft condensates – includes Steam Stripper condensed products, HVLC and LVHC condensate drains, turpentine decanter products, digester and evaporator system pulping condensates, liquors, and water.

NPDES - National Pollutant Discharge Elimination System. A permit program for the control of water pollution by regulation of point sources that discharge into the waters of the U.S.

PM or particulate matter – See definition in 06-096 C.M.R. ch. 100. PM does not include condensable matter. Note (1)

PM_{10} – See definition in 06-096 C.M.R. ch. 100. Unless specifically noted otherwise, PM_{10} limits in this license include both filterable and condensable matter. Note (1)

$PM_{2.5}$ – See definition in 06-096 C.M.R. ch. 100. Unless specifically noted otherwise, $PM_{2.5}$ limits in this license include both filterable and condensable matter. Note (1)

residual fuel – is fuel oil that complies with the specifications for fuel oil numbers 5 or 6, as defined by the American Society for Testing and Materials in ASTM D396 and D975.

sludge – includes onsite generated de-watered pulp and paper combined waste water treatment plant (including landfill leachate from Norridgewock landfill) sludge residuals (i.e., primary and secondary sludge, Precipitated Calcium Carbonate (PCC) plant sludge).

solid oily waste – includes oil absorbent pads, rags, booms, etc. and oil absorbed by biomass or speedi-dry and the plastic bags they were collected in. Solid oil waste also includes oil contaminated soil. Solid oily waste also includes grease product residuals and the plastic bags they were contained in and oil samples and the plastic bottles they were collected in.

TRS – Refer to definition in 06-096 C.M.R. ch. 124. "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, as defined as hydrogen sulfide (H_2S).

used oil – is used oil which as a mixture meets the specifications outlined in 40 C.F.R. Part 279.11. The used oil can be a mixture of both specification and off-specification oil, as defined by 06-096 C.M.R. 860. Used oil can be generated onsite and/or purchased from a supplier. Used oil which does not meet the specifications outlined in 40 C.F.R. Part 279.11 is considered a non-hazardous secondary material that is a solid waste.

waste paper – includes office paper, cardboard, paper cores.

Note (1) : Under the 06-096 C.M.R. ch. 100 definition, PM_{10} and $PM_{2.5}$ limits do not include condensable if such were established before the change in definitions promulgated on December 1, 2012. To ensure clarity, PM_{10} and $PM_{2.5}$ limits which do not include condensables pursuant to the definition shall be noted in this license as such.

D. Emission Equipment

Firing rates for fuel burning emission sources in this license are based on the following:

- Natural gas firing rates are based on a heat content of 1,020 Btu/ft^3.
- Propane firing rates are based on a heat content of 90,500 Btu/gallon.
- Distillate or Diesel fuel firing rates are based on a heat content of 140,000 Btu/gallon.
- Residual fuel firing rates are based on a heat content of 150,000 Btu/gallon.

The following emission units are addressed by this Part 70 License. The tables are presented for summary purposes only and represent typical maximum rates. For specific limitations on operating requirements, see Section II. of this license.

Emission Units

Equipment	Maximum Capacity	Fuel Type	Install. Date Note (1)	Stack ID
Boilers				
Package Boiler	70.6 MMBtu/hr	distillate fuel, used oil, propane, kerosene	1989	Stub Stack or Main Stack
Power Boiler #1	848 MMBtu/hr	residual fuel, distillate fuel, used oil, tire derived fuel (TDF), biomass, wood pellets, waste paper, sludge, LVHC gases, HVLC gases, solid oily waste, and kraft condensates.	1977	Main Stack
Power Boiler #2	1,300 MMBtu/hr	residual fuel, distillate fuel, natural gas, used oil, TDF, biomass, waste paper, sludge, LVHC gases, HVLC gases, solid oily waste, and kraft condensates	1989	Power Boiler #2 Stack
Process Equipment				
Recovery Boiler (RB)	5.5 MMlbs BLS/day	black liquor, residual fuel, distillate fuel, used oil, LVHC gases, and HVLC gases	1976	Main Stack
Smelt Dissolving Tanks #1 & #2	N/A	N/A	1976	Main Stack
Lime Kiln (LK)	125 MMBtu/hr	residual fuel, distillate fuel, natural gas, used oil, propane, LVHC gases, and kraft condensates	1976	Main Stack
PCC Plant	120,000 dry ton/day	N/A	1998	Main Stack
Lime Slaker #1	N/A	N/A	1976	Slaker Stack #1
Lime Slaker #2	N/A	N/A	1982	Slaker Stack #2

Equipment	Maximum Capacity	Fuel Type	Install. Date Note (1)	Stack ID
Bleaching System	N/A	N/A	1976	Central Scrubber or Back-Up Scrubber stack
Digester System	N/A	N/A	1976	Note (2)
Evaporator System	N/A	N/A	1976	Note (2)
Condensate Collection System	N/A	N/A	1976	Note (2)
Pulp Washing System	N/A	N/A	1976	Note (2)
LVHC & HVLC System	N/A	N/A	1976	Note (2)
Paper Machine #1 & on-machine coater	N/A	N/A	1981	multiple stacks
Paper Machine #2 & on-machine coater	N/A	N/A	1985	multiple stacks
Paper Machine #3 & on-machine coater	N/A	N/A	1989	multiple stacks
Bulk Handling Systems	N/A	N/A	varies	Fugitive
Waste Water Treatment Plant (clarifiers, wet wells, aeration basins, polishing pond, sanitary plant)	N/A	N/A	1976	Fugitive
Organic Liquid Storage Tanks				
Turpentine/ Methanol Tank	19,675 gallons	N/A	2001	Note (2)
Turpentine Decantor	13,969 gallons	N/A	2016	Note (2)
Methanol Bulk Storage Tank	38,850 gallons	N/A	1997	Fugitive
Gasoline Storage Tank	4,000 gallons	N/A	2015	Fugitive
Woodyard Diesel Fuel Storage Tank	10,000 gallons	N/A	1985	Fugitive

Equipment	Maximum Capacity	Fuel Type	Install. Date Note (1)	Stack ID
No. 2 Fuel Oil Storage Tank	40,000 gallons	N/A	1990	Fugitive
No.6 Fuel Oil Storage Tank	2,307,900 gallons	N/A	1976	Fugitive
Diesel Fired Units				
Emergency Diesel #1 (Paper Mill Fire Pump)	2.63 MMBtu/hr 376 HP	distillate fuel, 0.0015% S	1982	Diesel #1 stack
Emergency Diesel #2 (Pulp Mill Fire Pump)	2.32 MMBtu/hr 330 HP	distillate fuel, 0.0015% S	1976	Diesel #2 stack
Emergency Diesel #3 (River Pump House)	2.98 MMBtu/hr 425 HP	distillate fuel, 0.0015% S	1976	Diesel #3 stack
Lime Kiln Diesel	0.15 MMBtu/hr 40 HP	distillate fuel, 0.0015% S	1976	Kiln diesel stack
No. 2 Power Boiler Scrubber Diesel Engine	3.40 MMBtu/hr 755 HP	distillate fuel, 0.0015% S	2008	Power Boiler#2 Diesel Stack

Note (1): Dates provided are only meant to indicate approximate year of original installation. Please see Section II. for a description of subsequent system upgrades as applicable.

Note (2): Systems identified are as defined by 06-096 C.M.R. ch. 124 or 40 C.F.R. Part 63, Subpart S. Applicable emissions from the systems are collected by the LVHC and/or HVLC system and sent for treatment in the Lime Kiln, Recovery Boiler, Power Boiler #1 and/or Power Boiler #2.

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

Pollution Control Equipment

Unit	Pollution Control Equipment	Pollutants Controlled
Package Boiler	Low-NO_x burner	NO_x
Lime Slaker #1	Wet scrubber	PM, PM_{10}
Lime Slaker #2	Wet scrubber	PM, PM_{10}
Power Boiler #1	Primary Cyclones, ESP, Staged Combustion System (burner out of service), Low NO_x burners	PM, PM_{10}, NO_x

Unit	Pollution Control Equipment	Pollutants Controlled
Power Boiler #2	Multi-cyclones, ESP, Selective Non-Catalytic Reduction (SNCR), Wet scrubber	PM, PM_{10}, SO_2, NO_x
Recovery Boiler	ESP, Staged Combustion System	PM, PM_{10}, SO_2, NO_x
Smelt Dissolving Tanks #1 & #2	Wet scrubber	PM, PM_{10}, TRS
Bleaching System	Central and Back-up scrubbers	VOC, Cl_2, ClO_2
Lime Kiln	Venturi Scrubber, Staged Combustion System	PM, PM_{10}, SO_2, NO_x, TRS
LVHC System	Lime Kiln, Power Boiler #1, Power Boiler #2, Recovery Boiler	TRS
HVLC System	Power Boiler #1, Power Boiler #2, Recovery Boiler	TRS
Evaporator System	LVHC System, HVLC System, Condensate Collection System	TRS
Digester System	LVHC System, HVLC System, Condensate Collection System	TRS
Condensate Collection System	Brownstock Washer	VOC, TRS
Bulk Handling Systems	Baghouse, wetted baffles	PM
PCC Plant	Two-stage demisters with water spray cleaning	PM

The following equipment was licensed but not installed and has not been incorporated into this renewal:

- LNG Vaporizer (A-19-77-6-A)
- After Dryer #1, After Dryer #2 (A-19-71-AG-A, A-19-71-A-I)
- IR Heater #1, IR Heater #2 (A-19-71-AG-A, A-19-71-A-I)

E. Application Classification

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 06-096 Code of Maine Rules (C.M.R.) ch. 140, Sappi has also requested incorporation into the Part 70 Air Emission License the relevant terms and conditions of the 06-096 C.M.R. ch. 115 New Source Review (NSR) licenses as follows:

License	Type	Purpose/Description	Date of Issuance
A-19-77-1-A	BART Determination	Initial BART Determination	11/20/2008
A-19-77-5-M	BART Determination	BART Determination revision	11/2/2010
A-19-77-6-A	Chapter 115 Minor Modification	Natural gas to Power Boiler #2	6/1/2012
A-19-77-7-A	Chapter 115 Minor Modification	Natural gas to Lime Kiln	6/8/2013
A-19-77-8-M	Chapter 115 Minor Revision	Address Operation of Power Boiler #2 ESP while firing Natural gas	5/7/2014
A-19-77-9-M	Chapter 115 Minor Revision	10% Annual Capacity Limit on Package Boiler for Boiler MACT	7/19/2016
A-19-77-10-A	Chapter 115 Minor Modification	Woodyard Debarker Upgrade	11/10/2016
A-19-77-11-A	Chapter 115 Minor Modification	No. 1 Paper Machine Upgrade to Higher Basis Weight Products	4/20/2017
A-19-77-12-M	Chapter 115 Minor Revision	Clarify to allow the firing of HVLC gases in Power Boiler #2 without ESP	10/2/2019
A-19-77-13-M	Chapter 115 Minor Revision	SO_2 emission limit from No. 2 Power Boiler and changed Cl_2 and ClO_2 to concentration-based limit	2/24/2020

Therefore, this license is considered to be a Part 70 License renewal and a Part 70 Minor Modification for the incorporation of NSR requirements.

F. Facility Description

Sappi is an integrated bleach kraft pulp and paper mill. Whole logs, chips, and biomass are delivered to the mill by truck and/or train. The logs are sawn, debarked, chipped and stored in the mill's woodyard. The biomass is stored in piles and then conveyed to the boilers. The pulp chips are stored in piles and then conveyed to the chip bin, chip steaming vessel, and then the digester. Sappi operates one Kamyr continuous digester to produce pulp (hardwood, softwood, or any combination thereof), one recovery boiler and one lime kiln in the recaust process for reclamation of the pulping chemicals. There are two multi-fuel boilers and an oil-fired package boiler which, along with the Recovery Boiler, supply the mill with steam. Sappi has three paper machines which produce paper. There are also

two pulp machines. One pulp machine has a steam operated dryer, and both machines produce bailed pulp.

In the digester, wood is "cooked" in white liquor, a chemical solution of sodium hydroxide and sodium sulfide, to dissolve lignin from around wood fibers. Pulp from the digester, called brown stock, is washed in the pressure diffusion washer, the two-stage atmospheric diffusion washer and the brown stock rewasher to remove residual spent cooking liquor from the pulp. After the pulp is washed, it is bleached to a desired brightness and then bailed or sent to the paper production area as slush pulp.

The spent cooking liquor exiting the digester, called black liquor, contains dissolved and suspended inorganic and organic compounds. The black liquor is then sent into the multiple effect evaporation system to evaporate water and bring the solids in the liquor to a higher concentration. Upon exiting the multiple effect evaporation system, the concentrated black liquor is burned in the recovery boiler for chemical recovery and the production of steam.

Pulping chemicals left over after combustion of black liquor in the recovery boiler, primarily sodium carbonate and sulfur compounds, are collected in the bottom of the recovery boiler as molten "smelt". The smelt flows out of the bottom of the recovery boiler to one or both of the two smelt dissolving tanks, where the hot smelt mixes with weak wash to form green liquor.

Green liquor from the smelt dissolving tank flows to the causticizing/lime kiln area, where chemicals reclaimed from the recovery boiler and smelt dissolving tanks are further processed into the white liquor used in the digester system. Lime (CaO) is used in the causticizing process to convert the recovered sodium carbonate into sodium hydroxide. Hydrated lime from the lime slakers reacts with the green liquor, and calcium carbonate ($CaCO_3$) is precipitated out as mud.

The lime mud is then washed, filtered, and sent to the lime kiln where the $CaCO_3$ is reclaimed (carbon dioxide, CO_2, is driven off), and the recovered lime (CaO) is recycled back into the process. Lime mud enters the upper end of the kiln and is passed through successive stages of water evaporation, mud preheating, and lime calcination.

Some of the exhaust from the kiln may be used in the Precipitated Calcium Carbonate (PCC) plant as a source of CO_2. The PCC plant reacts the flue gas CO_2 with calcium hydroxide to form precipitated calcium carbonate. The processed flue gas is returned to the lime kiln duct, and the calcium carbonate product is used by the paper mill as a filler and coating or sold to other consumers.

Lime produced in the lime kiln is sent to the hot lime silo which feeds the slakers along with any fresh lime makeup. In the slakers, lime is mixed with water in the green liquor to convert the lime into hydrated lime ($Ca(OH)_2$). The hydrated lime, produced in the lime

slakers, is then discharged into the causticizing system. The causticizing system converts the green liquor into white liquor, which is then recycled back to the digester system, as described above.

The mill also operates support facilities, including the woodyard, wastewater treatment plant, sanitary treatment plant, water treatment plant, wastewater treatment plant sludge presses, cooling towers, maintenance shops, chip lab, wet lap pulp machine, dry lap pulp machine, paper broke repulpers, chip/biomass truck dumpers, wood portal crane, pulp and paper production labs, environmental lab, roll wrapping, shipping and receiving operations and a multi-cell landfill.

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. 118	Gasoline Dispensing Facilities Vapor Control
06-096 C.M.R. ch. 124	Total Reduced Sulfur Control from Kraft Pulp Mills
06-096 C.M.R. ch. 130	Solvent Cleaners
06-096 C.M.R. ch. 134	Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 138	Reasonably Available Control Technology for Facilities that 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 (NESHAP)
40 C.F.R. Part 51	Best Available Retrofit Technology (BART)
40 C.F.R. Part 60, Subpart A	Standards of Performance for New Stationary Sources: General Provisions
40 C.F.R. Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

CITATION	REQUIREMENT TITLE
40 C.F.R. Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
40 C.F.R. Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
40 C.F.R. Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Compression Ignition Internal Compression Engines
40 C.F.R. Part 61, Subpart M	National Emission Standards for Hazardous Air Pollution for Asbestos
40 C.F.R. Part 63 Subpart A	National Emission Standards for Hazardous Air Pollutants: General Provisions
40 C.F.R. Part 63, Subpart S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry
40 C.F.R. Part 63, Subpart MM	National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mill
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 70	State Operating Permit Programs
40 C.F.R. Part 82 Subpart F	Protection of Stratospheric Ozone Recycling and Emissions Reduction
40 C.F.R. Part 98 Subpart A	Mandatory Greenhouse Gas Reporting, General Provisions
40 C.F.R. Part 98 Subpart C	Mandatory Greenhouse Gas Reporting, General Stationary Fuel Combustion Sources
40 C.F.R. Part 98 Subpart AA	Mandatory Greenhouse Gas Reporting, Pulp and Paper Manufacturing
40 C.F.R. Part 98 Subpart TT	Mandatory Greenhouse Gas Reporting, Industrial Waste Landfills

Note: C.M.R. = Code of Maine Regulations
C.F.R. = Code of Federal Regulations

II. SPECIFIC APPLICABLE REGULATIONS

A. Best Practical Treatment (BPT)

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 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.

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.

Pursuant to 06-096 C.M.R. ch. 140 § 3(D)(3), BPT for existing sources is demonstrated by use of controls less than 15 years old or by controlling emissions in a manner consistent with emissions controls commonly used in sources of similar age and design in similar industries.

B. NO_X RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 C.M.R. ch. 138 is applicable to sources that have the potential to emit quantities of NO_X equal to or greater than 100 tons/year.

Amendment A-19-71-U-A, issued to the facility on June 7, 1995, addressed NO_x RACT requirements. These requirements are summarized below and incorporated in this renewal.

Equipment	Summary of NOx RACT Requirements
Power Boiler #1	Equipped with staged combustion control (burner out of service) and a Low NO_x burner system and NO_x CEMS
Power Boiler #2	SNCR NO_x control system and NO_x CEMS
Package Boiler	Low NO_x burner
Lime Kiln	NO_x emission limit of 120 ppmvw at 10% O_2
Recovery Boiler	NO_x emission limit of 196 ppmdv at 8% O_2, on a 24-hour block average basis when firing only black liquor, and NO_x CEMS

Pursuant to 06-096 C.M.R. ch. 138, § 1(B), NO_x emitting equipment that has the potential to emit less than 10 tons/year and emergency standby engines operating less than 500 hours per 12-month period are exempt. Therefore, this regulation does not apply to Emergency Diesel #1, #2, and #3.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year. Amendment A-19-71-W-M, issued October 4, 1995, and Amendment A-19-71-Y-M, issued January 9, 1996, addressed VOC RACT requirements. These requirements are summarized below and incorporated in this renewal.

Equipment	Summary of VOC RACT Requirements
Bleaching System	Bleach Plant Scrubber System, use of sodium hypochlorite as a primary bleaching agent not permitted without a permit revision
Waste Water Treatment Plant	Operation as required by effluent discharge license restrictions issued pursuant to its MEPDES permit
Pulp Stock Washer Systems and Pulp Liquor Storage Tanks	Compliance with 06-096 C.M.R ch. 124; the required gases from the pulp stock washer systems are collected and combusted in the Recovery Boiler and/or Power Boiler #1
Digester System and Multiple Effect Evaporator System	Compliance with 06-096 C.M.R. ch. 124; the required gases are collected and combusted in the Lime Kiln, the Recovery Boiler and/or Power Boiler #1
Condensate Stripper systems	Gases generated by the air stripper and the steam stripper used to strip VOCs and HAPs from condensate are collected and combusted in the Lime Kiln, the Recovery Boiler and/or the Power Boiler #1
Smelt Dissolving Tanks #1 & #2	Wet scrubber system to meet compliance with 06--096 C.M.R. ch. 124; TRS emission limit of 0.033 lb/ton BLS
Lime Kiln	Compliance with 06-096 C.M.R. ch. 124; TRS emission limit of 20 ppmdv at 10% O_2

Pursuant to 06-096 C.M.R. ch. 134, Section 1(C), VOCs emitted from the following are exempt:

1) the incomplete combustion of any material (i.e. Power Boiler #1, Power Boiler #2, Package Boiler, diesel engines, etc.),
2) recovery boilers,
3) wood yards, and
4) paper machine area emissions.

D. Best Available Retrofit Technology (BART)

Sappi was issued a BART determination on November 20, 2008, license A-19-77-1-A. It covered four units: Power Boiler #1, Recovery Boiler, the Smelt Dissolving Tanks #1 & #2, and the Lime Kiln. A second BART determination, A-19-77-5-M, was issued November 2, 2010, replacing the previous BART determination. The eligible BART sources as defined in 40 C.F.R. Part 51, Subpart P, *Protection of Visibility* are required to meet BART per 38 M.R.S. § 582 (5)(C) and § 603-A (8). The following summarize the second BART determination findings.

Recovery Boiler:

PM: BART for PM for the Recovery Boiler is the use of the ESP at the currently established license limits.

SO_2: BART for SO_2 for the Recovery Boiler is the use of a staged combustion system with SO_2 emissions limited to 100 ppmdv at 8% O_2 on a 30-day rolling average basis when firing black liquor.

NO_x: BART for NO_x for the Recovery Boiler is the use of a staged combustion system and the currently established license limits.

Smelt Dissolving Tanks #1 & #2:

PM: BART for PM for the Smelt Dissolving Tanks #1 & #2 is the use of wet scrubbers at the currently established license limits.

SO_2 and NO_x: Since no combustion takes place within the Smelt Dissolving Tanks, SO_2 is not generated within the emission unit, and the operation of the Smelt Dissolving Tanks themselves do not generate NO_x emissions. The Department determined that there are no applicable additional requirements due to the BART analysis for the Smelt Dissolving Tanks #1 & #2.

Lime Kiln:

PM: BART for PM for the Lime Kiln is the use of the venturi scrubber and the currently established license limits.

SO_2: that BART for SO_2 for the Lime Kiln is the use of the current operating practices in conjunction with the venturi wet scrubber with a federally enforceable license limit of 100 tons/year of SO_2 on a 12-month rolling total basis.

NO_x: BART for NO_x is the use of staged combustion and currently established license limits.

Power Boiler #1:

Subsequent to the first BART determination, the Department determined that Power Boiler #1 was not a BART eligible unit since the boiler is not integral to the Somerset Kraft Pulp Mill source category and fossil fuel firing is physically limited to less than 250 MMBtu/hr. Pursuant to the July 6, 2005 Federal Register page 39110, boilers that meet this criterion are not BART eligible sources. In addition, a statement that Power

Boiler #1 was not BART eligible is specified in the April 24, 2012 Federal Register page 24388.

Power Boiler #2:
Power Boiler #2 was built after August 7, 1977 and is therefore not BART eligible.

E. CO_2 Budget Source

Sappi is not subject to 06-096 C.M.R. ch. 156, Maine's *CO_2 Budget Trading Program.*

F. NSR/PSD/BACT Review

An air emission license permitting construction of the facility was first issued by the Department on November 14, 1973 (License #237). Construction of the pulp mill began shortly thereafter, and pulping operations began in December 1976. In the May 24, 1978 Air License #1332, the Department restricted the fossil fuel firing rate of Power Boiler #1 to less than 250 MMBtu/hr and found that the boiler would not be subject to New Source Performance Standards (NSPS). The license renewal (License #2152) issued January 26, 1983, licensed the installation of Paper Machine #1.

On July 9, 1986, Air Emission License Amendment #1 (A-19-71-A-A) was issued which licensed the installation of Paper Machine #2 and installation of a wood pellet system on Power Boiler #1. The 1986 air license permitted an increase in the biomass firing rate of Power Boiler #1 and addition of a third chamber on the ESP. The 1986 air license maintained the existing 250 MMBtu/hr limit for fossil fuel firing, so there was no increase in SO_2 from fossil fuel. Amendment #1 included a Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT) review and an ambient air quality impact analysis for Power Boiler #1 pursuant to 06-096 C.M.R. ch. 108. Installation of the wood pellet system on Power Boiler #1, improvements to the ESP, and the Low NO_x burners allowed the boiler to achieve its maximum production capacity without increasing PM or NO_x emissions. The ambient air dispersion modeling analyses demonstrated that potential emissions from the Recovery Boiler, Smelt Dissolving Tanks #1 & #2, Lime Kiln, Power Boiler #1, and Package Boiler would meet State and Federal Ambient Air Quality Standards and increments.

On August 23, 1989, the Department issued Air Emission License Amendment #4 (A-19-71-F-A) permitting the installation of Paper Machine #3 and Power Boiler #2. Power Boiler #2 was licensed for a heat increase in Air Emission License Amendment #9 (A-19-71-K-A) on March 25, 1994. Both Amendments #4 and #9 were issued pursuant to federal PSD requirements and the Department's air licensing requirements for major modifications. For each amendment, a BACT analysis on Power Boiler #2 and an ambient air dispersion modeling analysis were performed. Both modeling analyses demonstrated that potential emissions from the Recovery Boiler, Smelt

Dissolving Tanks #1 &#2, Lime Kiln, Power Boiler #1, Power Boiler #2, and Package Boiler meet State and Federal Ambient Air Quality Standards and increments.

On June 2, 2008, the Department issued NSR #2 and Part 70 License Amendment #2 (A-19-77-2-A and A-19-70-F-A) licensing an upgrade to the Recovery Boiler and supporting equipment. The amendment was issued pursuant to federal PSD requirements and the Department's air licensing requirements for major modifications. A BACT analysis and ambient air dispersion modeling analyses were performed. The modeling analyses demonstrated that potential NO_x emissions from the Recovery Boiler, Smelt Dissolving Tanks #1 & #2, Lime Kiln, Power Boiler #1, Power Boiler #2, and Package Boiler meet State and Federal Ambient Air Quality Standards and increments.

A listing of the NSR licensing actions since the issuance of the initial Part 70 license on December 4, 2004 is below.

NSR License	Purpose/Description	Date of Issuance
A-19-77-1-A	Initial BART Determination	11/20/2008
A-19-77-2-A	Recovery Boiler upgrade	6/2/2008
A-19-77-3-A	Power Boiler #2 Scrubber Emergency Diesel	7/16/2008
A-19-77-4-M	Stack test frequency change	10/10/2009
A-19-77-5-M	BART Determination revision	11/2/2010
A-19-77-6-A	Natural gas to Power Boiler #2	6/1/2012
A-19-77-7-A	Natural gas to Lime Kiln	6/8/2013
A-19-77-8-M	Address Operation of Power Boiler #2 ESP while firing natural gas	5/7/2014
A-19-77-9-M	10% Annual Capacity Limit on Package Boiler for Boiler MACT	7/19/2016
A-19-77-10-A	Woodyard Debarker Upgrade	11/10/2016
A-19-77-11-A	No. 1 Paper Machine Upgrade to Higher Basis Weight Products	4/20/2017
A-19-77-12-M	Clarify to allow the firing of HVLC gases in Power Boiler #2 without ESP	10/2/2019
A-19-77-13-M	SO_2 emission limit from No. 2 Power Boiler and changed Cl_2 and ClO_2 to concentration-based limit	2/24/2020

G. Compliance Assurance Monitoring (CAM)

Federal regulation 40 C.F.R. Part 64, *Compliance Assurance Monitoring,* is applicable to units at major sources if the unit has federally enforceable emission limits, uses a control device as defined to meet the limits, and pre-control emissions are greater than 100 tons/year for the controlled pollutant. This regulation, 40 C.F.R. § 64.2(b)(1)(vi), exempts from CAM requirements emission units 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) exempts from CAM requirements emission units subject to emission limitations or standards in a NSPS or NESHAP regulation proposed by the Administrator after November 15, 1990.

The following table lists emission units with pre-control potential emissions greater than 100 tons per year of the specified pollutant(s) and the Department's determination of the applicability of CAM requirements for each unit.

40 C.F.R. Part 64 Applicability Table				
Units	**Eligible Pollutant**	**CAM Required**	**Reason CAM Is or Is Not Required**	**Regulatory Authority**
Power Boiler #1	PM/PM_{10}	No	Subject to emission limits in NESHAP 40 C.F.R. 63, Subpart DDDDD proposed after November 15, 1990. Pollutant monitored by COMS.	40 C.F.R. § 64.2(b)(1)(i), 40 C.F.R. § 64.2(b)(1)(vi)
	SO_2	No	No SO_2 specific control device. Pollutant monitored by CEMS.	40 C.F.R. § 64.2(a), 40 C.F.R. § 64.2(b)(1)(vi)
	NO_x	No	No NO_x specific control device. Pollutant monitored by CEMS.	40 C.F.R. § 64.2(a), 40 C.F.R. § 64.2(b)(1)(vi)
Power Boiler #2	PM/PM_{10}	No	Subject to emission limits in NESHAP 40 C.F.R. 63, Subpart DDDDD proposed after November 15, 1990.	40 C.F.R. § 64.2(b)(1)(i)
	SO_2	No	Pollutant monitored by CEMS.	40 C.F.R. § 64.2(b)(1)(vi)
	NO_x	No	Pollutant monitored by CEMS.	40 C.F.R. § 64.2(b)(1)(vi)
Recovery Boiler	PM/PM_{10}	No	Subject to emission limits in NESHAP 40 C.F.R. 63, Subpart MM proposed after November 15, 1990. Pollutant monitored by COMS.	40 C.F.R. § 64.2(b)(1)(i), 40 C.F.R. § 64.2(b)(1)(vi)
	SO_2	No	No SO_2 specific control device. Pollutant monitored by CEMS.	40 C.F.R. § 64.2(a), 40 C.F.R. § 64.2(b)(1)(vi)
	NO_x	No	No NO_x specific control device. Pollutant monitored by CEMS.	40 C.F.R. § 64.2(a), 40 C.F.R. § 64.2(b)(1)(vi)

40 C.F.R. Part 64 Applicability Table				
Units	**Eligible Pollutant**	**CAM Required**	**Reason CAM Is or Is Not Required**	**Regulatory Authority**
Lime Kiln	PM/PM_{10}	No	Subject to emission limits in NESHAP 40 C.F.R. Part 63, Subpart MM proposed after November 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
	SO_2	No	No SO_2 specific control device	40 C.F.R. § 64.2(a)
	NO_x	No	No NO_x specific control device	40 C.F.R. § 64.2(a)

H. NESHAP for Pulp Mills

Previous licenses and amendments issued to the Sappi Somerset Mill have cited MACT I and MACT II requirements and the steps Sappi has taken to attain compliance with applicable requirements within allowed timeframes. These MACT phases are specifically identified by the EPA as follows:

MACT I: Controlling HAP emissions from the pulp and paper **production** areas of mills using the **kraft, sulfite, semi-chemical, and soda pulping processes;**

MACT II: Controlling HAP emissions from the pulping **chemical recovery combustion** areas of mills; and

MACT III: Controlling HAP emissions from pulp and paper **production** areas of mills using **mechanical, secondary fiber, and non-wood pulping, and papermaking systems** at all mills.

Standards originally established for both MACT I and III are integrated into one NESHAP subpart, 40 C.F.R. Part 63, Subpart S. MACT II standards are in a separate NESHAP subpart, 40 C.F.R. Part 63, Subpart MM. Specific requirements applicable to Sappi are identified in this License by the Subpart in which they are specified.

1. 40 C.F.R. Part 63, Subpart S

Sappi is subject to the requirements of the federal regulation 40 C.F.R. Part 63, Subpart S, *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry,* which contains emissions standards; test methods and procedures; and monitoring, recordkeeping, and reporting requirements for emissions of HAP from a kraft process such as that utilized by Sappi's pulp production process. Affected sources include the pulping system, evaporator systems, and bleaching systems at the facility. Emissions from specified units are required to be collected and combusted, either as part of a system collecting HVLC gases or a system collecting LVHC gases. At Sappi, the LVHC gases are collected and can be combusted in the Lime Kiln, Power Boiler #1, Power Boiler #2, or Recovery Boiler for destruction; the HVLC gases are collected and can be combusted in the Power Boiler #1, Power Boiler #2, or Recovery Boiler for destruction. Pulping process condensates collected from applicable sources

are recycled to the Brown Stock Washer System which is enclosed and collected by the HVLC System.

Specific requirements of Subpart S applicable to units at Sappi are included in this license.

2. 40 C.F.R. Part 63, Subpart MM

Sappi is subject to the requirements of 40 C.F.R. Part 63, Subpart MM – *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*. Subpart MM includes requirements for the kraft process recovery boilers, lime kilns, and smelt dissolving tanks.

Specific requirements of Subpart MM applicable to units at Sappi are included in this license.

I. NESHAP 40 C.F.R. Part 63, Subpart DDDDD: Boiler MACT

The federal regulation 40 C.F.R. Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*, establishes emissions limitations and work practice standards governing HAP emissions from units at major sources of HAP and applies to each unit in the subcategories listed under 40 C.F.R. § 63.7499.

Specific requirements of Subpart DDDDD applicable to the units at Sappi are included in this license.

Energy Assessment

Subpart DDDDD requires the facility to complete a one-time energy assessment no later than January 31, 2016, or according to any amended requirements of the rule pertaining to the energy assessment. Sappi conducted the one-time energy assessment on June 10-11, 2015. [40 C.F.R. § 63.7500(e)]

III. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

This section describes the licensed emissions units and applicable requirements. For each unit, Sappi accepts streamlining where noted for standards for which there are more than one applicable requirement. Applicable emission standards, the origin and authority of each standard, and the applicable emission limits and associated averaging periods after streamlining, as appropriate, are presented in the "Emission Limits and Streamlining" table for each unit. Unless otherwise specified, the averaging times for the emission limits in the table are based on the specified averaging time of the applicable test method for each pollutant.

A. Main Stack Limitations

The Power Boiler #1, the Recovery Boiler, the Smelt Dissolving Tanks #1 & #2, the Lime Kiln, and the Package Boiler[Note (1)] exhaust to the combined source 275-foot Main Stack. The following are the requirements for the common Main Stack:

1. Sappi shall not exceed a SO_2 emission limit of 2,871 lb/hr from the Main Stack on a 24-hour block average basis (midnight to midnight). [A-19-71-K-A (3/25/94)]

2. Compliance with the SO_2 lb/hr emission limit shall be demonstrated by the sum of the SO_2 lb/hr 24-hour block emissions from the Power Boiler #1, Recovery Boiler, Smelt Dissolving Tanks #1 & #2, Lime Kiln, and Package Boiler (when the Package Boiler is venting through the Main Stack). In order to calculate the total SO_2 lb/hr 24-hour block emissions, Sappi may utilize the SO_2 license limits for the Lime Kiln, Smelt Dissolving Tanks #1 & #2, and Package Boiler or may calculate SO_2 emissions from the average firing rate and the sulfur content of the fuel fired during the 24-hour block period (midnight to midnight).
   [A-19-70-A-I (12/2/04)]

The combined Main Stack is not subject to 06-096 C.M.R. ch. 101, *Visible Emissions Regulation*, because all units which vent to the stack are exempt per 06-096 C.M.R. ch. 101, § 1(C).

Note (1): The Package Boiler can vent either to the Main Stack or through the Stub Stack, see Section III.B.

B. Package Boiler

The Package Boiler was manufactured by Babcock & Wilcox and has a maximum design heat input capacity of 70.6 MMBtu/hr. The boiler is licensed to fire distillate fuel, used oil, propane, or kerosene.

Sappi was issued Air Emission License Amendment #3 (A-19-71-E-A) on January 20, 1989, which licensed the installation of the Package Boiler, as a replacement for two existing, smaller package boilers. The low sulfur oil limit (<0.7% sulfur) set forth in amendment A-19-71-E-A was determined to meet BACT and therefore federally enforceable per minor modification NSR. Emission limits were established in Air Emission License Amendment #4 (A-19-71-F-A).

Maximum and average emissions from the Package Boiler were modeled as part of two PSD/NSR licenses (Amendments #4 and #9) which were issued in 1989 (A-19-71-F-A) and 1994 (A-19-71-K-A). Modeling included in Amendment #9 demonstrated compliance while venting emissions through the Main Stack. The modeling also determined that use of the 82.35 feet high 3.5 ft. diameter stub stack by Sappi requires fuel fired in the Package Boiler not exceed a maximum sulfur content of 0.15% by weight.

However, 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 in this unit shall not exceed 0.0015% sulfur by weight (15 ppm) per 38 M.R.S. § 603-A(2)(A)(3).

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. The SO_2 emission limit for this boiler was based on fuel testing conducted in November 2019 of the fuel currently in the storage tank. Based on the testing of the fuel and the requirements for 06-096 C.M.R. ch. 106, it was determined that 1.4 lb/hr was a more appropriate limit. [06-096 C.M.R. ch. 140, BPT]

1. New Source Performance Standards (NSPS)

   The Package Boiler is not subject to 40 C.F.R. Part 60, Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. Pursuant to 40 C.F.R. Part 60.40c(a), this standard applies to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989. The Package Boiler was installed in the spring of 1989 prior to the NSPS applicability date.

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

   The Package Boiler is subject to 40 C.F.R. Part 63, Subpart DDDDD. Under Subpart DDDDD, the Package Boiler has been designated as a Limited Use Boiler to meet the requirements of this Subpart. Sappi shall keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the Package Boiler was operating.
   [40 C.F.R. § 63.7555(a)(3)]

   The Package Boiler shall undergo a tune-up every five years as specified in 40 C.F.R. § 63.7540, as applicable if the boiler operates. As a Limited Use Boiler, the unit is not subject to specific emission limits, the annual tune-up requirement, or the energy assessment requirements in Table 3 of Subpart DDDDD or the operating limits in Table 4 of Subpart DDDDD. [§ 63.7500(c)] There are no applicable emission limits under this Subpart and thus no corresponding performance test requirements.

3. Annual Capacity Factor Limit

   As part of NSR License A-19-77-9-M (7/19/16), the use of the Package Boiler was limited to a 10% annual capacity factor, equivalent to a heat input limit of 61,845 MMBtu/year. Records documenting compliance with the annual capacity factor limit shall be kept on a calendar year basis.
   [A-19-77-9-M (7/19/16) & 40 C.F.R. § 63.7525(k)]

4. Control Equipment

The Package Boiler is equipped with a Low NOx burner. While operating the Package Boiler, Sappi shall operate the Low NO_x Burner for control of NO_x emissions. [A-19-71-U-A (6/7/95) & 06-096 C.M.R. ch. 138]

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	0.08 lb/MMBtu	06-096 C.M.R. ch. 103, § 2.B(1)(b)	0.08 lb/MMBtu
	1.02 lb/hr	A-19-71-F-A (8/23/89), BPT	1.02 lb/hr
PM_{10} Note (1)	1.02 lb/hr	A-19-71-F-A (8/23/89), BPT	1.02 lb/hr
SO_2 Note (2)	1.4 lb/hr	06-096 C.M.R. ch. 140, BPT	1.4 lb/hr
NO_x	10.2 lb/hr	A-19-71-F-A (8/23/89), BPT	10.2 lb/hr
CO	2.6 lb/hr	A-19-71-F-A (8/23/89), BPT	2.6 lb/hr
VOC	0.1 lb/hr	A-19-70-A-I (12/2/04), BPT	0.1 lb/hr
Visible Emissions	Not to exceed an opacity of 20 % on a six-minute block average basis	06-096 C.M.R. ch. 101, § 3(A)(2)	Not to exceed an opacity of 20 % on a six-minute block average basis

Note (1) - The PM_{10} limits are based on filterable particulate matter only and do not include condensables.
Note (2) – Based on 0.02% sulfur in boiler supply tank tested in November 2019

6. Emission Limit Compliance Methods

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

Package Boiler			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NOx	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	40 C.F.R. Part 60, App. A, Method 9	As requested

7. Compliance Assurance Monitoring (CAM)

For the Package Boiler, CAM requirements are not applicable since it does not use a control device to achieve compliance with an emission limit.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Package Boiler and delivery receipts from the supplier or other records indicating the percent sulfur by weight of the fuel oil, as applicable.

Based on best management practices and the type of fuel for which the Package Boiler was designed, it is unlikely that it will exceed the emission limits for PM, NOx, CO, VOC, and opacity. Therefore, additional periodic monitoring by the source for these pollutants is not required.

9. Parameter Monitors

There are no parameter monitors required for the Package Boiler.

10. CEMS and COMS

There are no continuous emission monitoring systems (CEMS) or COMS required to be operated for the Package Boiler.

C. Power Boiler #1

Power Boiler #1 was manufactured by Babcock & Wilcox and has a maximum heat input capacity of 848 MMBtu/hr from all fuels and a maximum licensed heat input capacity of 250 MMBtu/hr from fossil fuels. The boiler is licensed to fire residual fuel (#6 fuel oil), distillate fuel, used oil, TDF, wood pellets, biomass, wastewater treatment plant sludge, waste paper, LVHC gases, HVLC gases, solid oily waste, and kraft condensates. Since Sappi is licensed to fire residual fuel, it is subject to 38 M.R.S. § 603-A(2)(A)(1) and (2), which stipulates that 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 #6 fuel oil purchased or otherwise obtained for use in this unit shall not exceed 0.5% sulfur by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. [06-096 C.M.R. ch. 140, BPT]

Emissions from this unit exit through the combined Main Stack. Maximum and average emissions from Power Boiler #1 were modeled and compliance with ambient air quality

standards and increments was demonstrated as part of the three PSD/NSR licenses (Amendments #1, #4 and #9) which were issued in 1986 (A-19-71-A-A), 1989 (A-19-71-F-A), and 1994 (A-19-71-K-A).

On March 13, 2002, Sappi was issued Air Emission License Amendment #21 (A-19-71-AE-M) which licensed the replacement of the existing tangential overfire air (OFA) system in Power Boiler #1 with an opposed wall system as a pollution control project pursuant to 06-096 C.M.R. ch. 115, Section 2(T) and (W).

The installation of Power Boiler #1 was originally permitted by License #237 issued on November 13, 1973. In a revision to the license, issued December 20, 1973, Sappi was required to obtain a determination from EPA if the boiler was subject to 40 C.F.R. Part 60, Subpart D - *Standards of Performance for Fossil-Fuel-Fired Steam Generators.* The boiler was built in 1976 with primary and secondary dust collectors. An air emission license was issued on April 9, 1975, which required that Sappi reduce the number of oil burners to less than 250 MMBtu/hr (reduced 9 burners to 4 by bricking up the oil gun ports). Sappi was issued License #1332 on May 24, 1978, which stated Power Boiler #1 was not subject to Subpart D. On January 26, 1983, Sappi was issued License #2152 which licensed the replacement of the secondary cyclones with a two chambered ESP. Air Emission License Amendment A-19-71-A-A was issued on July 9, 1986, which licensed the replacement of the existing oil burners with nine Low NO_x burners that co-fired pulverized wood pellets with No. 6 oil. Two of the top burners do not burn fuel; however, combustion air is added through them as they are part of the staged combustion air system [06-096 C.M.R. ch. 138, Section 3(I)(1)(d)(iv)]. The project also included the installation of a third chamber on the ESP.

On June 8, 2004, and on June 16, 2004 (corrected Order), the EPA issued an Administrative Order, Docket No. AAA-04-0014, addressing NSPS Subpart D and Db applicability of Power Boiler #1. The Power Boiler #1 first full year of operation was 1977. Since 1986, Power Boiler #1 has been limited, by a computer control system, to firing less than 250 MMBtu/hr of fossil fuels. EPA alleged that such a system by itself was not sufficient to derate the boiler for the purposes of avoiding NSPS. Therefore, Sappi agreed to make the following changes which were incorporated in Sappi's license A-19-70-A-I (12/2/04):

- Replace the oil line that supplies oil to both Power Boiler #1 and the Recovery Boiler with a dedicated line for Power Boiler #1.
- Operate a single oil pump drive system which is designed to physically limit oil firing to less than 250 MMBtu/hr and which cannot be changed without shutting down the pump.
- Use the following set points for the oil control system and the pumping system to ensure the 250 MMBtu/hr oil firing rate is not exceeded: Flow control system $\leq$ 13,400 lb/hr; Power Boiler #1 oil pump $\leq$ 27.6 gal/min.

On July 22, 2011, Sappi was issued a 502(b)(10) change (A-19-70-D-A) to their license to reduce the residual fuel firing rate in Power Boiler #1 and subsequent equipment changes and replacements to allow this lower firing rate.

1. New Source Performance Standards (NSPS)

   Power Boiler #1 is physically limited to the firing rate at a lower rate than the Subpart D applicability rate of 250 MMBtu/hour. Thus, Power Boiler #1 is not subject to the NSPS requirements of Subpart D.

   Power Boiler #1 is not an electric utility steam-generating unit and is therefore not subject to NSPS 40 C.F.R. Part 60 Subpart Da - *Standards of Performance for Electric Utility Steam Generating Units*.

   Power Boiler #1 was installed prior to June 19, 1984, the applicability date for NSPS 40 C.F.R. Part 60 Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, specified in §60.40b(a).

   Power Boiler #1 has not been modified as defined in 40 C.F.R. §60.14 or reconstructed as defined in §60.15. Thus, Power Boiler #1 is not subject to the requirements of Subpart D or Db.

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

   Power Boiler #1 is subject to the applicable emission standards, work practice standards, operating limits, performance testing, monitoring and reporting requirements of 40 C.F.R. Part 63, Subpart DDDDD (Boiler MACT).

   Power Boiler #1 has been determined by the Department to be in the hybrid suspension grate category, and the limits for this boiler have been determined as such.

   Boilers considered to be in the hybrid suspension grate subcategory shall be subject to the following emission limits starting on the applicable compliance date:
   - HCl emission limit of 0.022 lb/MMBtu of heat input or 0.025 lb/MMBtu of steam output;
   - Mercury emission limit of 5.7E-06 lb/MMBtu of heat input 6.4E-06 lb/MMBtu of steam output;
   - CO emission limit of 3,500 ppmdv by volume on a dry basis corrected to 3 percent oxygen or 3.5 lb/MMBtu of steam output or 900 ppmdv by volume on a dry basis corrected to 3 percent oxygen 30-day rolling average when using a CO CEMS to demonstrate compliance;
   - Filterable PM emission limit of 0.44 lb/MMBtu of heat input (or TSM 4.5E-4 lb/MMBtu) or 0.055 lb/MMBtu of steam output (or TSM 5.7E-4 lb/MMBtu).

   [Subpart DDDDD, Table 2]

Power Boiler #1 is subject to the following operating limits at all operating times except for periods of startup and shutdown:

a. Visible emissions from the Power Boiler #1 stack 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)]
b. The 30-day rolling average operating load for Power Boiler #1 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]

Sappi shall conduct performance testing per the requirements in Table 5 of Subpart DDDDD as applicable. Sappi shall comply with the requirements listed in Table 6 of Subpart DDDDD if fuel analyses are utilized to calculate and determine PM (or TSM), HCl, and Hg emissions.

Sappi shall conduct a tune up of the boiler as specified in 40 C.F.R. § 63.7540. [Subpart DDDDD, Table 3]

Sappi shall demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis or continuous monitoring systems. The source may demonstrate compliance with applicable emission limits for hydrogen chloride, mercury or total selected metals using fuel analysis if the emission rate calculated according to § 63.7530(c) is less than the applicable emission limit. Otherwise the source must demonstrate compliance for HCl, mercury or PM (or TSM) using performance testing.

Sappi shall meet the applicable initial compliance requirements listed in 40 C.F.R. § 63.7510.

Sappi shall conduct applicable performance tests and follow the applicable requirements of 40 C.F.R. § 63.7515.

Sappi shall develop a site-specific stack test plan according to the requirements in 40 C.F.R. 63.7(c), (d), (f), and (h).

Sappi shall report the results of performance tests and the associated fuel analyses within 60 days after completion of the performance tests. This report shall also verify that the operating limits for each boiler have not changed or provide documentation of revised operating limits according to § 63.7550 and Table 7. The reports for all subsequent performance tests must include all applicable information required in § 63.7550.

Sappi shall install, operate, and maintain an oxygen analyzer system as defined in 40 C.F.R. § 63.7575 or install, certify, operate, and maintain continuous emissions monitoring systems for CO and oxygen according to the procedure described in 40 C.F.R. § 63.7525 (a)(1) through (7).

3. 06-096 C.M.R. ch. 101

Power Boiler #1 is exempt from this regulation, pursuant to 06-096 C.M.R. ch. 101 § 1(C)(8) since it is an emissions unit subject to a visible emissions standard under 40 C.F.R. Part 63, Subpart DDDDD.

4. Control Equipment

Power Boiler #1 is equipped with primary cyclones, an electrostatic precipitator (ESP), staged combustion control (burner out of service), and Low NO_x burners.

Except as provided in the paragraph below, while operating Power Boiler #1, Sappi shall operate the primary cyclones and the ESP for control of particulate matter emissions as well as the staged combustion control (burner out of service) and Low NO_x burners for control of NO_x emissions.
[06-096 C.M.R. ch. 138 and 06-096 C.M.R. ch. 140, BPT]

Except during startups and shutdowns, Sappi shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate matter emission limits has been demonstrated. Upon written notification to the Department, and in accordance with the Bureau of Air Quality Air Emission Compliance Test Protocol, Sappi may perform additional particulate matter emission testing to demonstrate compliance with the applicable emission limits under alternative operating scenarios.
[06-096 C.M.R. ch. 140, BPT]

The ESP is not required to be in operation when only clean fuels are being fired during startup and shutdown per 40 C.F.R. Part 63, Subpart DDDDD, Table 3.

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	0.26 lb/MMBtu	A-19-71-A-A (7/9/86), BPT	Streamlining requested 0.26 lb/MMBtu
	0.30 lb/MMbtu	06-096 C.M.R. ch. 103, §2A(3)(b)	
	220 lb/hr	A-19-71-A-A (7/9/1986), BPT	220 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM Note (1)	0.44 lb/MMBtu	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.b.	0.44 lb/MMBtu
PM_{10} Note (2)	220 lb/hr	A-19-71-F-A (8/23/1989), BPT	220 lb/hr
SO_2	744 lb/hr, on a 24-hour block average basis, except as specified below Note (3)	A-19-71-K-A (3/25/1994), BPT	744 lb/hr, on a 24-hour block average basis, except as specified below Note (3)
NO_x	0.4 lb/MMBtu on a 30-day rolling average basis	A-19-70-A-I (12/2/2004), BPT	0.4 lb/MMBtu on a 30-day rolling average basis
	299 lb/hr	A-19-71-K-A (3/25/1994), BPT	299 lb/hr
CO	900 ppmdv corrected to 3% O_2 on a 30-day rolling average basis	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.a.	900 ppmdv corrected to 3% O_2 on a 30-day rolling average basis
	2270 lb/hr	A-19-71-K-A (3/25/1994), BPT	2270 lb/hr
VOC	13.7 lb/hr	A-19-70-A-I (12/2/2004), BPT	13.7 lb/hr
HCl	0.022 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2, Row 1.a. and Table 3, Row 6	0.022 lb/MMBtu (except during startup/shutdown)
Hg	5.7E-06 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2, Row 1.b. and Table 3, Row 6	5.7E-06 lb/MMBtu (except during startup/shutdown)
Visible Emission	10% opacity on a daily block average or the highest hourly average opacity reading measured during the last NESHAP performance test. Note (4)	40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 4	10% opacity on a daily block average or the highest hourly average opacity reading measured during the last NESHAP performance test. Note (4)

Note (1) - This limit applies at all times including periods of startup and shutdown.
Note (2) - The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Note (3) - When LVHC and/or HVLC gases and/or kraft condensates are fired in Power Boiler #1, and the SO_2 emissions are greater than 744 lb/hr on a 24-hour block average basis (midnight to midnight), Sappi shall report to the Department on a quarterly basis the SO_2 lb/hr 24-hour block emissions calculated according to Section. III.A. During this period the Main Stack SO_2 lb/hr limit shall apply. [A-19-71-K-A (3/25/1994)]

Note (4) - Daily block average is the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown or downtime.

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Power Boiler #1 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Power Boiler #1			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart DDDDD. Note (1)
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hr	SO_2 CEMS	Continuously
NO_X	lb/MMBtu	NO_x CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	ppmdv	CO CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63, Subpart DDDDD. Note (1)
Hg	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63, Subpart DDDDD Note (1)
Visible Emissions	% opacity	COMS located in the duct from the Power Boiler #1 to the Main Stack.	Continuously

Note (1) - In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the emission limit for that pollutant and if there are no changes in operation of the boiler or air pollution control equipment that could

increase emissions, Sappi may opt to conduct performance testing every third year on this unit. Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

7. Compliance Assurance Monitoring (CAM)

For Power Boiler #1, CAM requirements are not applicable to PM emissions because the boiler is subject to PM emission standards under 40 C.F.R. Part 63, Subpart DDDDD. SO_2 and NO_x are exempt from CAM because the facility operates and maintains CEMS for both pollutants on this boiler.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Power Boiler #1 and delivery receipts from the supplier or other records indicating the percent sulfur by weight of the fuel oil.

9. Parameter Monitors

Sappi shall monitor and record the following parameters for the Power Boiler #1:

Power Boiler #1		
Parameter	**Monitor**	**Record**
Total Steam Production	Continuously	30-day rolling average

Power Boiler #1 ESP		
Parameter	**Monitor**	**Record**
Total Secondary Power Input	Continuously	30-day rolling average

[40 C.F.R. Part 63, Subpart DDDDD, Table 8]

10. CEMS and COMS

Sappi shall maintain and operate the following CEMS and COMS to monitor emissions from the Power Boiler #1.

Pollutant Monitor	Unit of Measure	Origin and Authority
SO_2 CEMS	lb/hr Note (1)	A-19-71-K-A (3/25/94)
NO_X CEMS	lb/MMBtu	A-19-71-U-A (7/6/95), 06-096 C.M.R. ch. 117, and 06-096 C.M.R. ch. 138
CO CEMS	ppmdv	40 C.F.R. Part 63, Subpart DDDDD

Pollutant Monitor	Unit of Measure	Origin and Authority
O_2 CEMS	%	A-19-71-K-A (3/25/94), A-19-71-U-A (7/6/95), 06-096 C.M.R. ch. 117, and 06-096 C.M.R. ch. 138 40 C.F.R. Part 63, Subpart DDDDD
Opacity COMS	%	06-096 C.M.R. ch. 117, 40 C.F.R. Part 63, Subpart DDDDD

Note (1): The lb/hr emissions are based on a calculated gas flow.

D. Power Boiler #2

Power Boiler #2 was manufactured by Combustion Engineering and has a maximum heat input capacity of 1,300 MMBtu/hr. The boiler is licensed to fire residual fuel, distillate fuel, natural gas, used oil, tire derived fuel (TDF), biomass, waste paper, wastewater treatment plant sludge, LVHC gases, HVLC gases, solid oily waste, and kraft condensates. Sappi is licensed to fire #6 fuel oil (residual fuel). Per 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 #6 fuel oil purchased or otherwise obtained for use in this unit shall not exceed 0.5% sulfur by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but shall comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. Based on the applicability requirements outlined in 06-096 C.M.R. ch. 106, the 1.92 lb/MMBtu SO_2 emission limit no longer applies to this boiler.
[06-096 C.M.R. ch. 140, BPT]

Emissions exit through a 289 ft. stack. Maximum and average emissions from Power Boiler #2 were modeled as part of the two PSD/NSR licenses (Amendments #4 and #9) which were issued in 1989 (A-19-71-F-A) and 1994 (A-19-71-K-A).

On March 4, 2004, Sappi was issued Air Emission License Amendment #22 (A-19-71-AF-M) which licensed the replacement of the existing over fire air (OFA) system in Power Boiler #2 as a pollution control project pursuant to 06-096 C.M.R. ch. 115, Section 2(T) and (W).

On August 23, 2004, Sappi was issued Air License Amendment #24 (A-19-71-AH-M) which licensed the ability to burn both LVHC and HVLC gases in Power Boiler #2. As specified in the license, the HVLC conveyance system installed is capable of handling both the HVLC gases alone or in combination with the LVHC gases. Therefore, the installation of additional dedicated LVHC piping or equipment necessary to separate and convey the LVHC gases directly to the Power Boiler #2 in the future shall not be a modification nor require a further license amendment since there would be no emissions increase.

On June 4, 2012, Sappi was issued Air License Amendment #6 (A-19-77-6-A) which licensed a minor modification to enable natural gas to be fired in Power Boiler #2 and included an upgrade to the boiler steam desuperheater system.

1. New Source Performance Standards (NSPS)

   Power Boiler #2 was installed in 1989 and is subject to NSPS 40 C.F.R. Part 60, Subpart Db. Specifically, Power Boiler #2 is subject to standards for boilers that commenced construction, reconstruction, or modification on or before February 28, 2005. Power Boiler #2 is subject to Subpart Db and is therefore not subject to Subpart D.

   Power Boiler #2 is not an electric utility steam generating unit and is therefore not subject to NSPS 40 C.F.R. Part 60 Subpart Da.

   Power Boiler #2 is subject to applicable emission standards, work practice standards, operating limits, performance testing, monitoring, and reporting.

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

   Power Boiler #2 is subject to the applicable emission standards, work practice standards, operating limits, performance testing, monitoring, and reporting requirements of 40 C.F.R. Part 63, Subpart DDDDD.

   Power Boiler #2 has been determined by the Department to be in the hybrid suspension grate category, and the limits for this boiler have been determined as such. Sappi shall comply with the applicable requirements specified in 40 C.F.R. Part 63, Subpart DDDDD.

3. 006-096 C.M.R. ch. 101

   Pursuant to 06-096 C.M.R. ch. 101, § 1(C)(7) Power Boiler #2 is exempt from 06-096 C.M.R. ch. 101 since it is an emissions unit subject to a visible emissions standard under 40 C.F.R. Part 60, Subpart Db.

4. Control Equipment

   Power Boiler #2 is equipped with multicyclones, ESP, Selective Non-Catalytic Reduction (SNCR), and a wet scrubber.

   Except as provided in the paragraphs below, while operating Power Boiler #2, Sappi shall operate the multi-cyclones and ESP for control of particulate matter emissions, SNCR for control of NO_x emissions, and a wet scrubber for control of SO_2 emissions.

a. Wet Scrubber

The wet scrubber may be operated with sodium carbonate (soda ash) solution or a caustic (NaOH) solution of scrubbing media.

As provided for in NSPS, 40 C.F.R. §60.42b(i), Power Boiler #2 may be operated without the soda ash or caustic in the wet scrubber while firing very low sulfur oil (not to exceed 0.5% sulfur content by weight), or natural gas in combination with any other licensed fuel, except residual oil or used oil, because of a malfunction or maintenance of the SO_2 control system. During such times, compliance with the SO_2 lb/MMBtu emission limits shall be demonstrated according NSPS, 40 C.F.R. Part 60, Subpart Db.

b. Electrostatic Precipitator (ESP)

Except during startups and shutdowns, Sappi shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate matter emission limits has been demonstrated. Upon written notification to the Department, and in accordance with the Bureau of Air Quality Air Emission Compliance Test Protocol, Sappi may perform additional particulate emission testing to demonstrate compliance with the applicable emission limits under alternative operating scenarios.

Notwithstanding the previous paragraph, the ESP is not required to operate during the following:
(1) periods of natural gas firing only;
(2) boiler trips triggered by Burner Management System (BMS) safety protocols resulting in the shutdown of the ESP,
(3) periods in which natural gas and HVLC and/or LVHC gases (no solid or liquid fuels) are combusted in the boiler, or
(4) periods in which distillate fuel ignitors are used to ignite the natural gas burners. The distillate fuel ignitors may be used to ignite the No.6 oil burners, but the ESP shall be online when this occurs.

[A-19-77-8-M (5/7/14), A-19-77-12-M (10/2/19), A-19-77-12-M (10/1/2019)]

The ESP is not required to be in operation when only clean fuels are being fired during start-up and shutdown per 40 C.F.R Part 63, Subpart DDDDD, Table 3.

c. SNCR

The SNCR system may utilize and ammonia solution or a urea solution. The SNCR system is not required to operate:

(1) when boiler load is below 200,000 lb/hr steam, because gas exit temperature is not within the required high temperature range necessary for NO_x reduction reactions to occur; or

(2) during startup or shutdown when firing only clean fuels are being fired per 40 C.F.R. Part 63 Subpart DDDDD.

SNCR downtime caused by equipment malfunction shall not constitute a violation provided NO_x emissions are below applicable limits based on CEMS data. [A-19-70-A-I (12/2/04)]

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	0.03 lb/MMBtu	A-19-71-K-A (3/25/94)	Streamlining Requested: 0.03 lb/MMBtu
	0.10 lb/ MMBtu	40 C.F.R. Part 60, 60.43b(c)(1)	
	0.06 lb/MMBtu	06-096 C.M.R. ch. 103 §2B(4)(c)	
	39.0 lb/hr	A-19-71-K-A (3/25/94)	39.0 lb/hr
PM Note (1)	0.44 lb/MMBtu	40 C.F.R. Part 63, Subpart DDDDD, Table 2 Row 13.b.	0.44 lb/MMBtu
PM_{10} Note (2)	0.03 lb/MMBtu	A-19-71-K-A (3/25/94)	0.03 lb/MMBtu
	39.0 lb/hr	A-19-71-K-A (3/25/94)	39.0 lb/hr
SO_2	0.20 lb/MMBtu on a 30-day rolling average basis. Note (3)	40 C.F.R. Part 60, § 60.42b (a) A-19-77-13-M (2/24/20)	0.20 lb/MMBtu on a 30-day rolling average basis. Note (3)
	351.0 lb/hr, on a 24-hour block average basis	A-19-71-K-A (3/25/94)	351.0 lb/hr, on a 24-hour block average basis
SO_2	975.0 lb/hr on a 3-hour block average basis	A-19-71-K-A (3/25/94)	975.0 lb/hr on a 3-hour block average basis
NOx	0.2 lb/MMBtu on a 30-day rolling average basis	40 C.F.R. Part 60, § 60.44b, A-19-71-K-A (3/25/94)	0.2 lb/MMBtu on a 30-day rolling average basis
	260 lb/hr on a 24-hour block average basis	A-19-71-K-A (3/25/94)	260 lb/hr on a 24-hour block average basis

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
CO	900 ppmdv corrected at 3% O_2 on a 30-day rolling average basis	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.a.	900 ppmdv corrected at 3% O_2 on a 30-day rolling average basis
	0.40 lb/MMBtu on a 30-day rolling average basis	A-19-71-K-A (3/25/94)	0.40 lb/MMBtu on a 30-day rolling average basis
	520 lb/hr on a 24-hour block average basis	A-19-71-K-A (3/25/94)	520 lb/hr on a 24-hour block average basis
VOC	0.007 lb/MMBtu	A-19-71-K-A (3/25/94)	0.007 lb/MMBtu
	9.1 lb/hr	A-19-71-K-A (3/25/94)	9.1 lb/hr
Visible Emissions	Not to exceed an opacity of 20% opacity on a six (6) minute average except for one (1) six (6) minute period per hour of not more than 27% opacity.	40 C.F.R. Part 60, § 60.43b(f) A-19-71-K-A (3/25/94)	Not to exceed an opacity of 20% opacity on a six (6) minute average except for one (1) six (6) minute period per hour of not more than 27% opacity.
HCl	0.022 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2 Row 1.a	0.022 lb/MMBtu (except during startup/shutdown)
Hg	5.7E-6 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2 Row 1.b.	5.7E-6 lb/MMBtu (except during startup/shutdown)

Note (1): This limit applies at all times including periods of startup and shutdown.
Note (2): the PM_{10} limits are based on filterable particulate matter only and do not include condensables.
Note (3): A fossil fuel SO_2 outlet limit of 0.20 lb/MMBtu on a 30-day rolling average basis is required. This standard shall apply only to the firing of fuel oil. The calculations and procedures for maintaining compliance with the standard for mixed fuel boilers in 40 C.F.R. Part 60, Subpart Db §60.45b and shall be followed for compliance purposes. [40 C.F.R. Part 60, Subpart Db]

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with Power Boiler #2 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Power Boiler #2			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart DDDDD Note (1)
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/MMBtu and lb/hr	SO_2 CEMS	Continuously
NO_X	lb/MMBtu and lb/hr	NO_x CEMS	Continuously
CO	lb/MMBtu, lb/hr, and ppmdv	CO CEMS	Continuously
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63, Subpart DDDDD Note (1)
Hg	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63 Subpart DDDDD Note (1)
Visible Emissions	% opacity	40 C.F.R. Part 60, App. A Method 9	As requested

Note (1) In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the emission limit for that pollutant and if there are no changes in operation of the boiler or air pollution control equipment that could increase emissions, Sappi may opt to conduct performance testing every third year on this unit. Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

7. Compliance Assurance Monitoring (CAM)

For Power Boiler #2, CAM requirements are not applicable to PM emissions because the boiler is subject to PM emission standards under 40 C.F.R. Part 63 Subpart DDDDD, and 40 C.F.R. 60 Subpart Db. SO_2 and NO_x are exempt from CAM because the facility operates and maintains CEMS for both pollutants on this boiler.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Power Boiler #2 and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

Pursuant to 40 C.F.R. § 60.49b(d), Sappi shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas, distillate fuel, residual fuel, and grate fuels wood (Sappi may combine biomass, TDF, and sludge) for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 C.F.R. Part 60.49b(d)]

9. Parameter Monitors

Sappi shall monitor and record the following parameters for the Power Boiler #2:

Power Boiler #2		
Parameter	**Monitor**	**Record**
Total Steam Production	Continuously	30-day rolling average

Power Boiler #2 ESP		
Parameter	**Monitor**	**Record**
Total Secondary Power Input	Continuously	30-day rolling average

Power Boiler #2 SO_2 Scrubber		
Parameter	**Monitor**	**Record**
Scrubber liquid flow rate	Continuously	30-day rolling average
Scrubber effluent pH	Continuously	30-day rolling average
Scrubber pressure drop or Scrubber liquid supply pressure	Continuously	30-day rolling average

[40 C.F.R. Part 63, Subpart DDDDD, Table 8]

Pursuant to 40 C.F.R. Part 63, Subpart DDDDD, Table 4, the 30-day rolling average boiler operating load of Power Boiler #2 shall be maintained such that is does not exceed 110% of the highest hourly average boiler operating load record during the most recent performance test.

Power Boiler #2 is operated with a wet scrubber and installation of a COMS specified by 40 C.F.R. Part 60, Subpart Db would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases. Therefore, pursuant to 40 C.F.R. Part 60.13(i)(1) alternate monitoring as approved by

EPA and the Department was incorporated in the PSD/NSR licenses (A-19-71-F-A and A-19-71-K-A). The Department has determined that meeting the monitoring requirements of 40 C.F.R. Part 63, Subpart DDDDD shall meet these alternative monitoring requirements.

In April 2015 and July 2015, Sappi submitted a request to EPA for approval to monitor scrubber liquid supply pressure in lieu of scrubber pressure drop. Approval to use the alternative monitoring approaches from the specifications of 40 C.F.R. Subpart DDDDD, Table 8 for Power Boiler #2 was approved in a letter from EPA Region 1 to Sappi dated August 13, 2015.

10. CEMS and COMS

Sappi shall maintain and operate the following CEMS to monitor emissions from the Power Boiler #2:

Power Boiler #2		
Pollutant Monitor	**Unit of Measure**	**Origin and Authority**
SO_2 CEMS	lb/MMBtu	A-19-71-K-A (3/25/94), 06-096 C.M.R. ch. 117, 40 C.F.R. Part 60, Subpart Db
	lb/hr Note (1)	A-19-71-K-A (3/25/94)
NOx CEMS	lb/MMBtu	A-19-71-K-A (3/25/94), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch 138, 40 C.F.R. Part 60, Subpart Db
	lb/hr Note (1)	A-19-71-K-A (3/25/94)
CO CEMS	lb/MMBtu and lb/hr Note (1)	A-19-71-K-A (3/25/94)
	ppmdv	40 C.F.R. Part 63, Subpart DDDDD
O_2 CEMS	%	A-19-71-K-A (3/25/94), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 138, 40 C.F.R. Part 60, Subpart Db 40 C.F.R. Part 63, Subpart DDDDD

Note (1): The lb/hr emissions are based on a calculated gas flow.

Pursuant to 06-096 C.M.R. ch. 117, Section 1(E)(1) the Department has determined that a COMS is not required since the condensed, uncombined water vapor from the wet scrubber would not provide accurate determination of emissions.

E. Recovery Boiler

The Recovery Boiler was manufactured by Combustion Engineering to recover pulping chemicals and produce steam and has a licensed firing rate of 5.5 MM lbs BLS/day. The boiler is licensed to fire residual fuel, distillate fuel, used oil, black liquor, LVHC gases, and HVLC gases. Sappi is licensed to fire #6 fuel oil (residual fuel). Per 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 #6 fuel oil purchased or otherwise obtained for this unit shall not exceed 0.5 % sulfur by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but shall comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. Based on the applicability requirements outlined in 06-096 C.M.R. ch. 106, the 1.92 lb/MMBtu SO_2 emission limit no longer applies to this boiler.
[06-096 C.M.R. ch. 140, BPT]

Emissions exit through the combined Main Stack. Maximum and average emissions from the Recovery Boiler were modeled as part of the three PSD/NSR licenses (Amendments #1, #4 and #9) which were issued in 1986 (A-19-71-A-A), 1989 (A-19-71-F-A), and 1994 (A-19-71-K-A). A tertiary air system and the third ESP chamber was added to the boiler in 1992 as a pollution control project to reduce SO_2 and PM emissions.

In 2009, the Recovery Boiler was upgraded to increase the capacity and efficiency of the boiler to enable the mill to burn all of the black liquor it produces and to increase the energy efficiency of the mill. The two primary changes to the boiler included 1) replacement of the recovery boiler economizer, and 2) the recovery boiler combustion air system was upgraded, which included an upgrade to the quaternary air feed system. The new air system, through improved combustion control, was also designed to reduce solids carryover and the concentration of carbon monoxide. This project was licensed as a PSD/NSR major modification for NO_x emissions in NSR License A-19-77-2-A issued on June 2, 2008.

1. <u>New Source Performance Standards (NSPS)</u>

The Recovery Boiler was installed in 1975-1976, prior to the applicability dates of NSPS 40 C.F.R. Part 60, Subpart BB – *Standards of Performance for Kraft Pulp Mills* and of 40 C.F.R. Part 60, Subpart Db. The Recovery Boiler (RB) is not an electric utility steam generating unit and is therefore not subject to NSPS 40 C.F.R. Part 60,

Subpart Da. The Recovery Boiler is also not subject to 40 C.F.R. Part 60, Subpart D for fossil fuel fired steam generating units because the boiler does not operate at an annual capacity factor for oil is greater than 10 percent. See the memo dated June 15, 1990, entitled "Applicability Clarification to Kraft Recovery Boilers" from John Seitz, EPA Stationary Source Compliance Division, Office of Air Quality Planning and Standards, to Louis Gitto, EPA Air Management Division, Region I.

The Recovery Boiler was upgraded in 2009 (A-19-77-2-A) and at that time became subject to the 40 C.F.R. Part 60, Subpart BB. Applicable requirements of 40 C.F.R. Part 60, Subpart BB are included in this license. As specified in the license (A-19-77-2-A), the project did not affect the oil firing system and therefore did not trigger applicability of 40 C.F.R. Part 60, Subpart D or Db.

The Recovery Boiler was updated prior to May 23, 2013 and is therefore not subject to NSPS 40 C.F.R. Part 60, Subpart BBa - *Standards of Performance for Kraft Pulp Mills for which Construction, Reconstruction, or Modification Commenced After May 23, 2013.*

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

Subpart MM

The Recovery Boiler is subject to the requirements for existing kraft recovery boilers found in 40 C.F.R. Part 63, Subpart MM. Applicable provisions contained in 40 C.F.R. Part 63, Subpart MM are included in this license.

Sappi established a PM limit pursuant to § 63.862(a)(1)(ii). The emission limit was submitted as part of the Notification of Compliance status required under Subpart A of Part 63, pursuant to § 63.867(b)(1). Sappi may reestablish a different alternative MACT PM limit by following procedures required in § 63.862(a)(1)(ii), and this would not be considered a modification.

The Recovery Boiler is not subject to 40 C.F.R. Part 63, Subpart DDDDD because units covered by 40 C.F.R. Part 63, Subpart MM are not subject to Subpart DDDDD standards. [40 C.F.R. Part 63, § 63.7491(f)]

3. 06-096 C.M.R. ch. 101

Pursuant to 06-096 C.M.R. ch. 101, § 1(C)(5) and (6), the Recovery Boiler is exempt from 06-096 C.M.R. ch. 101 since it is an emissions unit subject to a visible emissions standard under 40 C.F.R. Part 60, Subpart BB and 40 C.F.R. Part 63, Subpart MM.

4. Control Equipment

The Recovery Boiler is equipped with a three-chambered ESP. While operating the Recovery Boiler, Sappi shall operate the ESP for control of particulate matter emissions. Sappi shall operate three ESP chambers at all operating times except for periods of startup, shutdown, malfunction, maintenance, and repair. During these periods, the minimum number of chambers to be operated in the ESP shall be determined through compliance testing for PM while firing black liquor and operating less than three chambers.

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	0.030 gr/dscf at 8% O_2 when operating with 3 ESP chambers and firing only black liquor	A-19-77-2-A (6/2/08)	Streamlining Requested: 0.030 gr/dscf at 8% O_2 when operating with 3 ESP chambers and firing only black liquor); and 0.038 gr/dscf at 8% O_2 when operating with 2 ESP chambers and firing only black liquor
	0.038 gr/dscf at 8% O_2 When operating with 2 ESP chambers and firing only black liquor	A-19-77-2-A (6/2/08)	
	0.038 gr/dscf at 8% O_2 when firing only black liquor	40 C.F.R. Part 63, Subpart MM 63.862 (a)(1)(ii)	
	0.044 gr/dscf at 8% O_2 when firing only black liquor	40 C.F.R. Part 60, Subpart BB	
	4 lb/adt pulp	06-096 C.M.R. ch. 105, BPT	
	207 lb/hr when firing only black liquor	A-19-77-2-A (6/2/08)	207 lb/hr when firing only black liquor
	283 lb/hr when firing oil alone or in combination with black liquor	A-19-77-2-A (6/2/08)	283 lb/hr when firing oil alone or in combination with black liquor
PM_{10} Note (1)	207 lb/hr when firing only black liquor	A-19-77-2-A (6/2/08)	207 lb/hr when firing only black liquor
	283 lb/hr when firing oil alone or in combination with black liquor	A-19-77-2-A (6/2/08)	283 lb/hr when firing oil alone or in combination with black liquor

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
SO_2	150 ppmdv at 8% O_2, on a 30-day rolling average basis, when firing only black liquor	A-19-77-2-A (6/2/08)	Streamlining Requested: 100 ppmdv at 8% O_2 on a 30-day rolling average basis when firing only black liquor
	100 ppmdv at 8% O_2 on a 30-day rolling average basis when firing only black liquor	A-19-77-5-M (11/2/10), 40 C.F.R. Part 51, BART	
	1975 lb/hr on a 24-hour block average basis	A-19-77-2-A (6/2/08)	1975 lb/hr on a 24-hour block average basis
NO_x	120 ppmdv at 8% O_2 on a 30-day rolling average basis, when firing only black liquor	A-19-77-2-A (6/2/08)	120 ppmdv at 8% O_2 on a 30-day rolling average basis when firing only black liquor
	750 lb/hr	A-19-77-2-A (6/2/08)	750 lb/hr
CO	500 ppmdv at 8% O_2 on a 30-day rolling average basis, when firing only black liquor	A-19-77-2-A (6/2/08)	500 ppmdv at 8% O_2 on a 30-day rolling average basis, when firing only black liquor
	3113 lb/hr	A-19-77-2-A (6/2/08)	3113 lb/hr
VOC	15 lb/hr	A-19-77-2-A (6/2/08)	15 lb/hr
TRS	5 ppmdv at 8% O_2 measured as H_2S on a 12-hour block average basis, when firing only black liquor	A-19-77-2-A (6/2/08) 06-096 C.M.R. ch. 124, 5(C)(1), 40 C.F.R. Part 60, Subpart BB	5 ppmdv at 8% O_2 measured as H_2S on a 12-hour block average basis, when firing only black liquor
Visible Emissions	Not to exceed an opacity of 35 percent on a six (6) minute average basis. Note (2)	A-19-77-2-A (6/2/08), 40 C.F.R. Part 60, Subpart BB	Not to exceed an opacity of 35 percent on a six (6) minute average basis. Note (2)
	Not to exceed an opacity of 35 percent on a six (6) minute average basis. Note (3)	40 C.F.R. Part 63, Subpart MM	Not to exceed an opacity of 35 percent on a six (6) minute average basis. Note (3)

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Note (2): Pursuant to 40 C.F.R. § 60.284(e)(1), periods when opacity is greater than 35 percent shall not be indicative of a violation of 40 C.F.R. Part 60.11(d) provided that the percent of total excess emissions in a quarter does not exceed six percent for average opacities from the Recovery Boiler.

Note (3): Pursuant to 40 C.F.R. § 63.864(k)(2), visible emissions from the Recovery Boiler shall be in violation of the standards of 40 C.F.R. § 63.862 if the monitoring exceedances occur during times when spent pulping liquor is fed and opacity is greater than 35 percent for 2 percent or more of the operating time within a semiannual period.

Compliance with the TRS ppmdv emission limit shall be determined on a 12-hour block average basis demonstrated by means of a CEMS, measured as H_2S. Pursuant to 06-096 C.M.R. ch. 124, Section 5(C)(1), and 40 C.F.R. § 60.284(e)(1)(i), the first two 12-hr block averages or 1% of the 12-hour block averages in a quarter which exceed either license limits or emission standards are exempt and are not considered a violation. [06-096 C.M.R. ch. 124, 40 C.F.R. Part 60, Subpart BB]

Sappi shall implement corrective action if monitoring shows an average of ten consecutive six-minute averages greater than 20% opacity.
[40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(i)]

6. Emission Limit Compliance Methods

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

Recovery Boiler			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	gr/dscf	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart MM Note (1)
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	ppmdv and lb/hr	SO_2 CEMS	Continuously
NO_X	ppmdv	NO_x CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	ppmdv	CO CEMS	Continuously
	lb/hr	40 C.F.R. 60, App. A Method 10,	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS measured as H_2S	Continuously
Visible Emissions	% Opacity	COMS located in the duct from the Recovery Boiler to the Main Stack	Continuously

Note (1): Compliance testing for PM while firing black liquor and operating less than 3 chambers of the ESP shall be performed once every 5 calendar years. [A-19-70-F-A (12/9/09)]

Sappi shall comply with the ongoing compliance provisions of 40 C.F.R. § 63.864(k).

7. Compliance Assurance Monitoring (CAM)

For the Recovery Boiler, CAM requirements are not applicable to PM emissions because the boiler is subject to PM emission standards under 40 C.F.R. Part 63, Subpart MM. SO_2 and NOx are exempt from CAM because the facility operates and maintains CEMS for both pollutants on this unit.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Recovery Boiler and delivery receipts or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

Pursuant to 40 C.F.R. § 63.866(c)(1), Sappi shall maintain records of black liquor solids firing rates in units of Mg/d or ton/d. [40 C.F.R. Part 63.866(c)(1)]

9. Parameter Monitors

There are no Parameter Monitors required for the Recovery Boiler.

10. CEMS and COMS

Sappi shall maintain and operate the following CEMS and COMS to monitor emissions from the Recovery Boiler:

Recovery Boiler		
Pollutant Monitor	**Unit of Measurement**	**Origin and Authority**
SO_2 CEMS	ppmdv	A-19-77-2-A (6/2/08)
	lb/hr Note (1)	A-19-71-A-A (7/9/86)
NOx CEMS	ppmdv	A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 138,
CO CEMS	ppmdv	A-19-77-2-A (6/2/08)
TRS CEMS measured as H_2S	ppmdv	06-096 C.M.R. ch. 124, 40 C.F.R. Part 60, Subpart BB
O_2 CEMS	%	A-19-71-A-A (7/9/86), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 124, 06-096 C.M.R. ch. 138, 40 C.F.R. Part 60, Subpart BB

Recovery Boiler		
Pollutant Monitor	**Unit of Measurement**	**Origin and Authority**
Opacity COMS located in the duct from the Recovery Boiler to Main Stack Note (2)	%	06-096 C.M.R. ch. 117, 40 C.F.R. Part 63, Subpart MM § 63.864(d), 40 C.F.R. Part 60, Subpart BB § 60.284(a)

Note (1): The lb/hr emissions are based on a calculated gas flow.

Note (2): The location of the COMS for the Recovery Boiler was approved by the Department on September 8, 2010 and found to be acceptable for 40 C.F.R. Part 60 Subpart BB and 40 C.F.R. Part 63 Subpart MM purposes. The approval was determined not to be a major change to monitoring under 40 C.F.R. Part 63.8(f).

Pursuant to 06-096 C.M.R. ch. 124 Section 4(A)(2) a span of 25% for the O_2 CEMS has been approved by the Department for the Recovery Boiler.

F. Smelt Dissolving Tanks #1 & #2

Smelt Dissolving Tanks #1 & #2 were installed in 1976. Each Smelt Tank (#1 & #2) is equipped with a wetted fan scrubber. Emissions exit through the Main Stack.

1. New Source Performance Standards (NSPS), 40 C.F.R. Part 60

   Smelt Dissolving Tanks #1 & #2 were installed prior to the applicability date the of NSPS 40 C.F.R. Part 60 Subparts BB and BBa and are thus not subject to the requirements of these Subparts. The Recovery Boiler was upgraded in 2009 (A-19-77-2-A) to increase the capacity and efficiency of the boiler. The changes to the Recovery Boiler did not constitute a modification to Smelt Dissolving Tanks #1 & #2 as defined in 40 C.F.R. § 60.14.

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

   Smelt Dissolving Tanks #1 & #2 are subject to the requirements for existing smelt dissolving tanks found in 40 C.F.R. Part 63, Subpart MM. Applicable requirements of 40 C.F.R. Part 63, Subpart MM are included in this license.

   Sappi established a PM limit pursuant to § 63.862(a)(1)(ii). The emission limit was submitted as part of the Notification of Compliance status required under Subpart A of Part 63, pursuant to § 63.867(b)(1). Sappi may reestablish a different alternative MACT PM limit by following procedures required in § 63.862(a)(1)(ii), and this would not be considered a modification.

3. 06-096 C.M.R. ch. 101

Pursuant to 06-096 C.M.R. ch. 101, § 1(C)(8), the Smelt Dissolving Tanks are exempt from 06-096 C.M.R. ch. 101 since they are emission units with a wet plume subject to operating limits to demonstrate compliance with a particulate matter emission limit under 40 C.F.R. Part 63, Subpart MM.

4. Control Equipment

Each Smelt Tank #1 & #2 is equipped with a wetted fan scrubber. While operating either Smelt Dissolving Tank #1 & #2, Sappi shall operate the corresponding wetted fan scrubber for control of particulate matter emissions. Each wetted fan scrubber may be operated with water, weak wash solution, or a caustic solution as the scrubbing media.

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Combined Emission Limits
PM	0.5 lb/ADT pulp, 2-hr sampling period	06-096 C.M.R. ch. 105(2)	Streamlining Requested: 0.20 lb/ton BLS
	0.20 lb/ton BLS	40 C.F.R. Part 63, Subpart MM C.F.R. § 63.862(a)(1)(ii)	
	26 lb/hr	A-19-70-A-I (12/2/04)	26 lb/hr
SO_2	26 lb/hr	A-19-70-A-I (12/2/04)	26 lb/hr
TRS	0.033 lb/ton measured as H_2S	06-096 C.M.R. ch. 124	0.033 lb/ton bls measured as H_2S

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with Smelt Dissolving Tanks #1 & #2 shall be demonstrated on combined emissions in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Smelt Tank #1 & #2			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/ton BLS fired	40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hour	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hour	40 C.F.R. Part 60, App. A, Method 6	As requested
TRS	lb/ton BLS measured as H_2S	40 C.F.R. part 60, App. A, Method 16	Once every two calendar years

7. Compliance Assurance Monitoring

For the Smelt Dissolving Tanks #1 & #2, CAM requirements are not applicable to PM emissions because they are subject to PM emission standards under 40 C.F.R. Part 63 Subpart MM. SO_2 is exempt from CAM because a control device is not used to achieve compliance with an applicable emission limit.

8. Periodic Monitoring

There is no periodic monitoring required for the Smelt Dissolving Tanks #1 & #2.

9. Parameter Monitors

Sappi shall monitor and record the following parameters for each of the Smelt Dissolving Tank Scrubbers #1 & #2:

Parameter	Monitor	Record
Total scrubber media flowrate	Continuously	3-hour block average
Scrubber pressure drop or fan amperage	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart MM]

The CPMS range shall be determined or modified, as necessary, according to the procedures as specified in 40 C.F.R. Part § 63.864(j). Since emissions are tested on a combined basis, one CPMS range for media flowrate and pressure drop or fan amperage shall be determined for both scrubbers.

In November 2002, Sappi submitted a request to EPA for approval to monitor scrubber fan amperage in lieu of scrubber pressure drop. Approval to use the alternative monitoring approaches from the specifications of 40 C.F.R. § 63.864 for Smelt Dissolving Tank Scrubbers #1 & #2 was approved in a letter from EPA Region 1 to Sappi dated December 12, 2002. Records shall be maintained demonstrating which monitoring option (pressure drop or fan amperage) is being used at all times.

Sappi shall implement corrective action when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(ii)]

Sappi shall not exceed 6 or more 3-hour MACT CMS values within any 6-month reporting period which are outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(2)(iii)]

10. CEMS and COMS

There are no CEMS or COMS required to be operated for Smelt Dissolving Tanks #1 & #2.

G. Lime Kiln

The Lime Kiln has a maximum design heat input capacity 125 MMBtu/hr firing residual fuel or natural gas. The residual fuel is fired to aid in the recalcination of the lime, which is then returned to the slaker. The Lime Kiln is licensed to fire residual fuel, distillate fuel, natural gas, used oil, propane, LVHC gases, and kraft condensates. Sappi is licensed to fire #6 fuel oil (residual fuel). Per 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 #6 fuel oil purchased or otherwise obtained for this unit shall not exceed 0.5 % sulfur by weight.

The facility may continue to burn fuel already on-site in fuel storage tanks but shall comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018. Based on the applicability requirements outlined in 06-096 C.M.R. ch. 106, the 1.92 lb/MMBtu SO_2 emission limit no longer applies to this boiler. [06-096 C.M.R. ch. 140, BPT]

Emissions from the Lime Kiln are controlled by a Variable Throat Venturi Scrubber. CO_2 emissions from the Lime Kiln are also used in the precipitated calcium carbonate (PCC) manufacturing process. The lime itself is also an effective media to scrub SO_2 emissions generated from the combustion of TRS. Emissions exit through the combined Main Stack.

Sappi installed a new precoat filter in 2004. Because the precoat filter allows for more efficient washing of the lime mud and thereby reduces the potential to form kiln rings, and reduces sulfides going to the Lime Kiln thereby reducing the potential increase of TRS emissions, the project was determined by the Department to be a pollution control project pursuant to 06-096 C.M.R. ch. 115, Section 2(T) and (W). Air License Amendment #25 (A-19-71-AI-M) was issued on September 29, 2004, to license this project.

Sappi amended their license to enable the burning of natural gas as an alternate fuel on July 8, 2013. This minor NSR amendment, A-19-77-7-A, also allowed for the installation of No3 New Purchased Lime Silo and a new bin vent bag house filter installed on top of the No2 Reburnt (or Purchased) Lime Silo designed to handle the exhaust from the No2 Reburnt Lime Silo and No3 New Purchased Lime Silo.

1. New Source Performance Standards (NSPS)

   The Lime Kiln was installed prior to the applicability dates of NSPS 40 C.F.R. Part 60, Subparts BB and BBa and thus not subject to the requirements of these Subparts. The changes to the Lime Kiln to burn natural gas (A-19-77-7-A) were not a modification of the Lime Kiln as defined in 40 C.F.R. § 60.14.

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

   The Lime Kiln is subject to the requirements for existing lime kilns found in 40 C.F.R. Part 63, Subpart MM. Applicable requirements of 40 C.F.R. Part 63, Subpart MM are included in this license.

   Sappi established a PM limit pursuant to 63.862(a)(1)(ii). The emission limit was submitted as part of the Notification of Compliance status required under Subpart A of Part 63, pursuant to Section 63.867(b)(1). Compliance with the PM limit shall be based on Lime Kiln emissions prior to gas extraction by the PCC Plant. Sappi may reestablish a different alternative MACT PM limit by following procedures required in § 63.862(a)(1)(ii), and this would not be considered a modification.

3. 06-096 C.M.R. ch. 101

   Pursuant to 06-096 C.M.R. ch. 101, § 1(C)(8), the Lime Kiln is exempt from 06-096 C.M.R. ch. 101 since it is an emissions unit with a wet plume subject to operating limits to demonstrate compliance with a particulate matter emission limit under 40 C.F.R. Part 63, Subpart MM.

4. Control Equipment

   The Lime Kiln is equipped with a Variable Throat Venturi Scrubber. While operating the Lime Kiln, Sappi shall operate the scrubber for the control of particulate matter emissions. The scrubber may be operated with water, a weak wash solution, or a caustic solution as the scrubbing media.

5. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	1.0 lb/ADT pulp, 2-hr sampling period	06-096 C.M.R. ch. 105 (2)	Streamlining Requested: 0.100 gr/dscf at 10% O_2
	0.100 gr/dscf at 10% O_2	A-19-77-7-A (7/8/13) 40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)	
	58 lb/hr	A-19-77-7-A (7/8/13)	58 lb/hr
PM_{10}	70 lb/hr firing natural gas	A-19-77-7-A (7/8/13)	70 lb/hr
$PM_{2.5}$	70 lb/hr firing natural gas	A-19-77-7-A (7/8/2013)	70 lb/hr firing natural gas
SO_2	100 TPY, on a 12-month rolling total basis	A-19-77-5-M (11/2/10), 40 C.F.R. Part 51, BART	100 TPY, on a 12-month rolling total basis
	75 lb/hr	A-19-77-7-A (7/8/2013)	75 lb/hr
NO_X	120 ppmvw at 10% O_2	06-096 C.M.R. ch. 138	120 ppmvw at 10% O_2
	58 lb/hr	A-19-77-7-A (7/8/2013)	58 lb/hr
CO	58 lb/hr	A-19-77-7-A (7/8/2013)	58 lb/hr
VOC	10 lb/hr	A-19-70-A-I (12/2/04)	10 lb/hr
TRS	20 ppmdv at 10% O_2 measured as H_2S on a 12-hour block average basis	06-096 C.M.R. ch. 124	20 ppmdv at 10% O_2 measured as H_2S on a 12-hour block average basis

Compliance with the TRS ppmdv emission limit shall be determined on a 12-hour block average basis demonstrated by means of a CEMS, measured as H_2S. Pursuant to 06-096 C.M.R. ch. 124, Section 5(C)(2), the first four 12-hour block averages in a quarter which exceed either license limits or emission standards in 06-096 C.M.R. ch. 124 are exempt and are not considered a violation. [06-096 C.M.R. ch. 124].

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Lime Kiln shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Lime Kiln			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	gr/dscf	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 201 or 201A, Method 202	As requested
$PM_{2.5}$	lb/hr	40 C.F.R. Part 60, App. A, Method 201 or 201A, Method 202	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	ppmvw	40 C.F.R. Part 60, App. A, Method 7E	Once every five calendar years
	lb/hr	40 C.F.R. Part 60, App. A, Method 7E	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS measured as H_2S	Continuously

7. Compliance Assurance Monitoring (CAM)

   For the Lime Kiln, CAM requirements are not applicable to PM emissions because the kiln is subject to PM emission standards under 40 C.F.R. Part 63, Subpart MM. SO_2 and NOx is exempt from CAM because a control device is not used to achieve compliance with an applicable emission limit.

8. Periodic Monitoring

   Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Lime Kiln and delivery receipts from the supplier or other records indicating the percent sulfur by weight of the fuel oil fired, as applicable.

   Pursuant to 40 C.F.R. § 63.866(c)(1), Sappi shall maintain records of Lime Kiln CaO daily production rates in units of Mg/d or ton/d. [40 C.F.R. § 63.866(c)(2)]

9. Parameter Monitors

In accordance with 40 C.F.R. Part 63, Subpart MM, Sappi shall monitor and record the following parameters for the Lime Kiln Scrubber:

Lime Kiln Scrubber		
Parameter	**Monitor**	**Record**
Scrubber liquid flowrate	Continuously	3-hour block average
Scrubber pressure drop	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart MM

The CPMS range shall be determined or modified as necessary according to the procedures as specified in 40 C.F.R. § 63.864(j).

Sappi shall implement corrective action when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 C.F.R. § 63.864(j).
[40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(ii)]

Sappi shall not exceed 6 or more 3-hour MACT CMS values within any 6-month reporting period which are outside the range of values established pursuant to 40 C.F.R. § 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(2)(iii)]

10. CEMS and COMS

Sappi shall maintain and operate the following CEMS to monitor emissions from the Lime Kiln:

Pollutant Monitor	**Unit of Measure**	**Origin and Authority**
TRS CEMS measured as H_2S	ppmdv	06-096 C.M.R. ch. 124
O_2 CEMS	%	06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 124

There are no COMS required to be operated for the Lime Kiln.

A SO_2 CEMS is not required pursuant to 06-096 C.M.R. ch. 117 Section 1(F).

Pursuant to 06-096 C.M.R. ch. 124 Section 4(A)(2) a span of 25% for the O_2 CEMS has been approved by the Department for the Lime Kiln.

H. Precipitated Calcium Carbonate (PCC) Plant

On March 23, 1998, Sappi was issued Air Emission License Amendment #17 (A-19-71-AA-M) which licensed the installation of a PCC Plant. On February 16, 2007,

Sappi was issued a license to increase the number of carbonators from four to five under a 502(b)(10) change (A-19-70-C-A) since there would be no increase in emissions. The PCC plant was installed in 1998. The primary source of the carbon dioxide (CO_2) used in the PCC plant process is the flue gas from Sappi's Lime Kiln. When flue gas from the Lime Kiln is not available, liquid CO_2 from a storage tank is utilized in the process.

Raw lime (calcium oxide) is received by truck and loaded into one of two lime silos equipped with a baghouse. The lime is then fed to the slakers where it is mixed with water. This reaction produces calcium hydroxide. The carbon dioxide in the flue gas is reacted with calcium hydroxide to form calcium carbonate in the five carbonator reactors. The carbonator reactors do not generate any additional emissions. The quantity of NO_x, CO, and VOC in the Lime Kiln flue gas does not increase, and quantities of CO_2, PM, SO_2, and TRS are reduced as a result of the process. The carbonators are equipped with two-stage demisters with water spray cleaning.

The processed Lime Kiln flue gas is returned from the PCC plant back to the Lime Kiln duct before being discharged through the Main Stack. When the liquid carbon dioxide is used, there is no associated exhaust gas. The total maximum design capacity of the PCC plant is 120,000 dry tons of PCC/year.

1. Emission Limits and Streamlining

   Visible Emissions

   06-096 C.M.R. ch. 101, § 3(B)(3) contains an applicable opacity standard for the PCC silo baghouses. Visible emissions from each PCC silo baghouse shall not exceed 10% opacity on a six-minute average basis. The PCC Plant shall take corrective action if visible emissions from the baghouses exceed an opacity of 5 percent on a six (6) minute average basis. [06-096 C.M.R. ch. 101]

   PM

   a. 06-096 C.M.R. ch. 105, Table 105A contains an applicable PM lb/hr emission standard for the PCC silo baghouses based on process rate.

   b. BPT establishes an applicable PM limit of 0.01 grains/dscf for each PCC silo baghouse and 1 ton per year total from all PCC silo baghouses.
   [A-19-71-AA-M (6/23/98)]

      Sappi accepts streamlining for the PCC silo baghouse PM limits. The BPT limit is more stringent and is therefore the only PM limit included in this license.

c. BPT establishes a combined PM emission rate from the PCC carbonators and the lime kiln shall not exceed the licensed Lime Kiln PM lb/hr limit. [A-19-71-AA-M (6/23/98)]

2. Emission Limit Compliance Methods

Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B, Method 9 upon request by the Department. [A-19-70-A-I (12/2/04)]

Compliance with the combined PM emission limit for the PCC carbonators and Lime Kiln shall be demonstrated by stack testing in accordance with 40 C.F.R. Part 60, Appendix B, Method 5 upon request by the Department. In order to demonstrate compliance with the combined PM limit, Sappi may perform stack testing of the total Lime Kiln exhaust prior to PCC plant gas extraction and testing of the PCC plant gas return line to the Main Stack and then ratio the results to calculate the combined PM emissions. [A-19-70-A-I (12/2/04)]

3. Control Equipment

While operating the carbonators, the PCC plant shall operate the corresponding two-stage demisters with water spray cleaning for control of particulate matter emissions. [A-19-71-AA-M (6/23/98)]

While operating the two lime silos, the PCC plant shall operate the corresponding two baghouses for control of particulate matter emissions. [A-19-71-AA-M (6/23/98)]

4. Compliance Assurance Monitoring (CAM)

For the PCC Plant, CAM requirements are not applicable since pre-control emissions are not greater than 100 tons per year.

5. Periodic Monitoring

Periodic monitoring for the PCC plant shall also include a maintenance log recording the date of all routine and non-routine maintenance of the two-stage demisters with water spray cleaning. [A-19-71-AA-M (6/23/98)]

See additional monitoring addressed in the *Bulk Handling Systems* part of this license.

6. Parameter Monitors

There are no parameter monitors required for the PCC plant.

7. CEMS and COMS

There are no CEMS or COMS required for the PCC plant.

I. Lime Slakers #1 & #2

The pulping process has an associated recausticizing system which includes the Lime Kiln, Lime Slakers, Causticizers and the Lime Mud Precoat Filter. In the Lime Slakers, green liquor containing sodium carbonate (Na_2CO_3) is reacted with lime (CaO) to form white liquor (NaOH) and lime mud ($CaCO_3$). The white liquor is used in the Kraft pulping process, and the lime mud is oxidized in the lime kiln to recover lime.

The caustic recovery system consists of several process tanks, filtration units, lime silos, and other equipment used to clarify and separate solid material (dregs and grits) from green liquor, clarify white liquor for use in the digester, and prepare lime mud for oxidation in the lime kiln. Of this equipment, the Lime Kiln, the Lime Slakers, and the Lime Silos (addressed in the *Bulk Handling Systems* part of this license) are the units required to be in the air emission license.

Sappi operates two Lime Slakers manufactured by Dorr-Oliver. Lime Slaker #1 was installed in 1976. Lime Slaker #2 was installed in 1982. Emissions from each slaker are controlled by separate wetted fan scrubbers. The scrubber for Lime Slaker #1 was installed in 1990 and vents to a 90-foot stack. The scrubber for Lime Slaker #2 was installed in 1982 and vents to an 86-foot stack. Wet scrubbing is considered the most appropriate control alternative for this type of source.

1. New Source Performance Standards (NSPS)

Lime slakers are not addressed by NSPS 40 C.F.R. Part 60, Subpart BB.

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

Lime slakers are not addressed by 40 C.F.R. Part 63, Subpart S or Subpart MM.

3. Emission Limits and Streamlining

a. State rule 06-096 C.M.R. ch. 101, Section 3(B) contains the only applicable visible emissions standard for the lime slakers, the general process sources opacity limit.

b. State rule 06-096 C.M.R. ch. 105 contains an applicable PM emission limit.

Sappi accepts streamlining. The general process source opacity limit is more stringent than the PM emission limit and is therefore the only limit included in this license.

Visible emissions from each Lime Slaker shall not exceed 20% opacity on a six (6) minute block average basis. [06-096 C.M.R. ch. 101, Section 3(B)(4)]

4. Emission Limit Compliance Methods

Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B Method 9 upon request by the Department. [A-19-70-A-I (12/2/04)]

5. Control Equipment

Lime Slakers #1 & #2 are each equipped with a wetted fan scrubber. While operating Lime Slakers #1 or #2, Sappi shall operate the corresponding wetted fan scrubber for the control of particulate matter emissions. Each wetted fan scrubber may be operated with water, a green liquor solution, or both as the scrubbing media.

6. Compliance Assurance Monitoring (CAM)

For the Lime Slakers #1 & #2, CAM requirements are not applicable because a control device is not used to achieve compliance with an applicable emission limit.

7. Periodic Monitoring

Periodic monitoring for the Lime Slaker Scrubbers #1 & #2 shall consist of the following:

Lime Slaker Scrubbers #1 & #2		
Monitor	**Unit of Measure**	**Record**
Total scrubber media flow rate	gallons/minute	Once every 12-hour shift

8. Parameter Monitors

There are no parameter monitors required for the Lime Slakers #1 & #2.

9. CEMS and COMS

There are no CEMS or COMS required to be operated for the Lime Slakers #1 & #2.

Pursuant to 06-096 C.M.R. ch. 117, Section 1(E)(1), the Department has determined that a COMS is not required since the condensed, uncombined water vapor from the wet scrubbers would not provide accurate determination of emissions.

J. Bleaching System

The Sappi Bleaching System consists of a single five stage Bleaching Line, the Central Scrubber System, the Back-Up Scrubber System, and the ClO_2 Generation System. The Bleaching Line and the Back-Up Scrubber were Bleaching System components installed in 1976. In 1992, Sappi installed the Central Scrubber, and the older scrubber was kept in service as a Back-Up Scrubber (A-19-71-N-A, 7/7/92). In order to meet the requirements of EPA's Cluster Rule and Maine's air and water discharge requirements, Sappi converted the original R-3 ClO_2 Generation System to a R-10 ClO_2 Generation System in 1997 (A-19-71-Z-A, 5/27/97). This pollution control project enabled the mill to have an elemental chlorine free (ECF) Bleaching System.

The "Bleaching System" as defined by 40 C.F.R. § 63.441 is subject to 40 C.F.R. Part 63, Subpart S. Pursuant to 40 C.F.R. § 63.445(b), Sappi is required to enclose, vent into a closed vent system, and route to a control device, process equipment at each bleaching stage where chlorinated compounds are introduced. Subpart S does not require the collection of process equipment from the extraction and washing stages of the bleaching process or the chlorine dioxide generation process.

Components of the Bleaching System subject to 40 C.F.R. Part 63, Subpart S, § 63.445 are those identified as part of the Bleaching System in this Subpart. Bleaching system means all process equipment after brownstock high-density pulp storage prior to the first application of oxidizing chemicals or reducing chemicals following the pulping system, up to and including the final bleaching stage. These applicable components shall meet the standards for enclosure and closed-vent systems specified in 40 C.F.R. § 63.450.

To meet Subpart S, Sappi currently collects the following process emissions from the D100, D1, and D2 chlorine dioxide stages by an enclosure that is routed to the Central Bleach Plant Scrubber System:

- D1 and D2 towers (the D100 towers are enclosed and have no vent)
- D100, D1, and D2 washer hoods
- D100, D1, and D2 seal tanks
- Blend Chest

1. <u>New Source Performance Standards (NSPS)</u>

   The Bleaching System is not addressed by NSPS 40 C.F.R. Part 60, Subpart BB.

2. <u>National Emission Standards for Hazardous Air Pollutants (NESHAP)</u>

   The Bleaching System (as defined by Subpart S) is subject to the requirements of NESHAP 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

3. Control Equipment

Control equipment for the Bleaching System consists of the Central Scrubber or the Back-Up Scrubber. While operating the Bleaching System, Sappi shall operate either the Central Scrubber or Back-Up Scrubber for control of chlorine and chlorine dioxide emissions. The scrubbers may be operated with water, a white liquor solution, or a caustic solution as the scrubbing media.

4. Emission Limits and Streamlining

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
Cl_2	9 ppmdv	A-19-77-13-M (2/24/20)	9 ppmdv
	3 lb/hour – Note (1)	06-096 C.M.R. ch. 122	
ClO_2	9 ppmdv	A-19-77-13-M (2/24/20)	9 ppmdv
	3 lb/hour – Note (1)	06-096 C.M.R. ch. 122	

Note (1) - Chapter 122 was repealed in 10/16/2011; Sappi requested to convert their emission limit from a lb/hr to a concentration basis (A-19-77-13-M, 2/24/20).

Pursuant to 40 C.F.R. § 63.445, Sappi shall comply with the following:

a. reduce total chlorinated HAP in the vent stream entering the control device by 99 percent or more by weight; or
b. achieve a treatment outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or
c. achieve a treatment device outlet emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.

5. Emission Limit Compliance Methods

For purposes of complying with the Bleaching System requirements, Sappi shall measure the total HAP concentration as the sum of all individual chlorinated HAPs or as chlorine, as provided in § 63.457(h). Sappi shall use the National Council for Air and Stream Improvement, Inc (NCASI) Method 520 for sampling chlorine and chlorine dioxide or an alternative method approved by the Department.
[40 C.F.R. Part 63, Subpart S]

Sappi shall stack test the Central Scrubber once every five calendar years for Cl_2 and ClO_2 emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide. [A-19-70-F-A (12/9/09), 38 M.R.S. § 589, Subsection 2]

Sappi shall stack test the Back-Up Scrubber once every five calendar years for Cl_2 and ClO_2 emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide to the extent that Sappi wishes to operate in this mode.
[A-19-70-F-A (12/9/09), 38 M.R.S. § 589, Subsection 2]

Sappi shall stack test while venting the S-10 tower to atmosphere once every five years for Cl_2 and ClO_2 emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide to the extent that Sappi wishes to operate in this mode. [A-19-70-F-A (12/9/09), 38 M.R.S. § 589, Subsection 2]

Sappi shall stack test the Central Scrubber and Back -Up Scrubber once every 5 years in accordance with 40 C.F.R Part 63, Subpart S.

6. Compliance Assurance Monitoring (CAM)

For the Bleaching System, CAM requirements are not applicable because it is subject to emission standards under 40 C.F.R. Part 63, Subpart S.

7. Periodic Monitoring

There is no periodic monitoring required for the Sappi Bleaching System.

8. Parameter Monitors

Sappi shall monitor and record the following parameters for the Bleaching System scrubbers:

Central Scrubber		
Parameter	**Monitor**	**Record**
gas scrubber liquid influent flow rate	Continuously	3-hour block average
gas scrubber vent gas inlet flow or gas scrubber ID fan amps	Continuously	3-hour block average
pH or ORP of the gas scrubber effluent or pH or ORP of the liquid recycle influent flow	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart S]

Back-Up Scrubber		
Parameter	**Monitor**	**Record**
gas scrubber liquid influent flow rate	Continuously	3-hour block average
gas scrubber FD fan ON/OFF status	Continuously	Fan status once every 15 minutes
pH or ORP of the gas scrubber effluent or pH or ORP of the gas scrubber liquid recycle influent flow	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart S]

The CPMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 C.F.R. Part § 63.453(n).

In February 2001, Sappi submitted a request to EPA for approval to 1) monitor gas scrubber ID fan amps in lieu of vent gas inlet flow rate, and 2) monitor pH or oxidation reduction potential (ORP) of the scrubber liquid recycle influent flow in lieu of scrubber effluent. Approval to use the alternative monitoring approaches from the specifications of 40 C.F.R. § 63.453(c) for the Central Scrubber and Back-Up Scrubber was approved in separate letters from EPA Region 1 to Sappi each dated March 14, 2001.

On June 30, 2011, Sappi was granted a Title V Amendment (A-19-77-G-A) to monitor FD fan ON and OFF status in lieu of vent gas inlet flow rate for the Back-Up Scrubber since the scrubber operates with a non-variable speed fan.

K. Digester System

Sappi operates one Kamyr continuous digester which pulps hardwood, softwood, or combinations thereof. Sappi operates one chip bin and one chip steaming vessel. Wood chips from the woodyard are conveyed by a belt to the chip bin. The chips are delivered from the bottom of the bin to a chip meter then to a low-pressure feeder and then to the chip steaming vessel. The chips are removed from the low-pressure feeder with a fresh steam pocket purge. Sappi has the ability to convey the pocket purge steam either to the top or bottom of the chip bin or the HVLC system. The top of the chip bin is connected to the HVLC system. The chip steaming vessel uses flash steam, and thus the chip steaming vessel is considered part of the "Digester System" as defined by 40 C.F.R. § 63.441. Pursuant to EPA's Question and Answers (Q&A's) for the Pulp and Paper NESHAP, dated March 31, 2000, collection of the chip bin emissions are not required as long as Sappi conveys the pocket purge steam to the bottom of the chip bin. The chip bin is not considered part of the "Digester System" for purposes of 06-096 C.M.R. ch. 124. Emissions from the chip bin are collected by the HVLC system and combusted in Power Boiler #1, Power Boiler #2, or the Recovery Boiler. The chip bin is defined as a miscellaneous source per Chapter 124.

1. <u>New Source Performance Standards (NSPS)</u>

   The digester was installed in 1976, prior to the applicability date of NSPS 40 C.F.R. Part 60, Subpart BB for "Digester Systems".

2. <u>National Emission Standards for Hazardous Air Pollutants (NESHAP)</u>

   The "Digester System" as defined by 40 C.F.R. § 63.441 is subject to 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

3. 06-096 C.M.R. ch. 124

Emissions of TRS in excess of 0.75 lb/hr or 5 ppmdv on a 12-hr block average basis from the digester system (excluding the chip bin), as defined by 06-096 C.M.R. ch. 124, shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Digester System.

4. Compliance Assurance Monitoring (CAM)

For the Digester System, CAM requirements are not applicable because it is subject to emission standards under 40 C.F.R. Part 63, Subpart S.

L. Pulp Washing System

Sappi operates one pressure diffusion washer, followed by one two-stage atmospheric washer, followed by one enclosed brown stock rewasher. Each washer may be shut down or bypassed individually without shutting down the system. The atmospheric washer and the brownstock rewasher were installed in 1976. The pressure diffusion washer was installed in 1988.

1. New Source Performance Standards (NSPS)

The atmospheric washer and the brownstock rewasher were installed in 1976 prior to the applicability date of NSPS 40 C.F.R. Part 60, Subpart BB for "brown stock washer systems" and thus are not subject to the requirements of this Subpart. The pressure diffusion washer was installed in 1988 but is not subject to NSPS because diffusion washers are excluded from the definition of "brown stock washer systems" as specified in 40 C.F.R. Part 60, Subpart BB § 62.281(e).

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

The "pulp washing system", as defined by 40 CF.R. § 63.441, is subject to 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

3. 06-096 C.M.R. ch. 124

Emissions of TRS in excess of 0.75 lb/hr or 5 ppmdv on a 12-hr block average basis from the "brownstock washer system", as defined by 06-096 C.M.R. ch. 124, shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Brownstock Washer System.

4. Compliance Assurance Monitoring (CAM)

For the Pulp Washing System, CAM requirements are not applicable because it is subject to emission standards under 40 C.F.R. Part 63, Subpart S.

M. Evaporator System

The multiple effect evaporators were designed and manufactured by Birmingham and Goslin. The Evaporator System consists of six effects, three liquor concentrators, three liquor preheaters, and two surface condensers, all of which are no-contact systems. Steam ejectors and a hog steam ejector are also part of the system. One or more of the effects, concentrators, or preheaters may be shut down or bypassed without shutting down the entire system. The "multiple effect evaporator system" was upgraded as part of the recovery boiler project addressed in licenses A-19-77-2-A (6/2/08) and A-19-70-F-A (12/9/09). In 2009, the changes included replacement of two existing concentrators with three new concentrators.

1. New Source Performance Standards (NSPS)

The Evaporator System was installed in 1976. The system was modified in 2008. The "evaporator system", as defined by 40 C.F.R. § 60.280 is subject to 40 C.F.R. Part 60, Subpart BB. Applicable requirements of 40 C.F.R. Part 60, Subpart BB are included in this license.

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

The "evaporator system", as defined by 40 C.F.R. § 63.441, is subject to 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

3. 06-096 C.M.R. ch. 124

Emissions of TRS in excess of 0.75 lb/hr or 5 ppmdv on a 12-hr block average basis from the "evaporator system", as defined by 06-096 C.M.R. ch. 124, shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Evaporator System.

4. Compliance Assurance Monitoring (CAM)

For the Evaporator System, CAM requirements are not applicable because it is subject to emission standards under 40 C.F.R. Part 63, Subpart S.

N. Condensate Collection System

Sappi handles various kraft pulping condensate streams within the mill and operates both an air stripping and steam stripping system that were installed in 1976. The air stripper can be used to strip a portion of the foul evaporator condensates. The steam stripper can be used to strip the digester relief condensates.

1. New Source Performance Standards (NSPS)

   The Condensate Collection System was installed in 1976 prior to the applicability date of NSPS 40 C.F.R. Part 60, Subpart BB. Condensate Collection Systems are not addressed by NSPS 40 C.F.R. Part 60, Subpart BB.

   "Condensate stripper systems" are addressed by NSPS 40 C.F.R. Part 60, Subpart BB. However, the Air Stripper and Steam Stripper were installed in 1976 prior to the applicability date of NSPS 40 C.F.R. Part 60, Subpart BB.

   The original Turpentine/Methanol Storage Tank was replaced by a new tank installed in 2001 with a design capacity of 19,675 gallons. The original Turpentine Decantor was replaced by a new decantor installed in 2016 with a design capacity of 13,969 gallons. Therefore, the provisions of 40 C.F.R. Part 60, Subpart Kb apply. See additional requirements addressed in the *Organic Liquid Storage Tanks* part of this license.

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

   The "pulping process condensates", as defined by 40 C.F.R. § 63.441, are subject to 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

3. Emission Limits

   Sappi shall meet the condensate collection requirements in 40 C.F.R. § 63.446(c) by demonstrating that it collects for treatment at least 11.1 lbs of HAP/ton of oven dried brownstock pulp (ODP) (see 40 C.F.R. § 63.446(c)(3)) from the named sources. Sappi shall meet the treatment requirements in 40 C.F.R. § 63.446(e)(5) by demonstrating the treatment of at least 10.2 lbs of HAP/ton of oven dried brownstock pulp (ODP). These collection and treatment requirements shall be demonstrated for Sappi utilizing any of the following condensate streams, or portions thereof:

   a. Digester system condensates from the Turpentine Decanter
   b. Kraft condensates from the Turpentine/Methanol storage tank

c. Evaporator System condensates following the stage where the first weak black liquor is fed and vacuum system condensates, which may include the following:
   (1) #5 and #6 evaporator body condensates
   (2) #5 and #6 evaporator preheater body condensates
   (3) Main Surface Condenser condensates
   (4) Auxiliary Surface Condenser condensates
   (5) Steam Ejector Condenser condensates
d. HVLC condensates from the High-Volume Cooler Condenser
e. Other HVLC and LVHC Condensate streams as necessary

4. Control Equipment

The condensates collected in the #1 Seal Tank can be sent through the Air Stripper. However, if the Air Stripper is down, the condensates go directly to the Stripped Condensate Tank for collection. Sappi and the Department have concluded that the operation of the Air Stripper is not required by 40 C.F.R. § 63.446. Emissions from the Air Stripper are collected by the HVLC System.

The condensates collected in the #2 Seal Tank can be sent to the Contaminated Condensate Surge Tank along with the condensates from the Turpentine Decanter (i.e., digester relief condensers). The condensates collected in the Contaminated Condensate Surge Tank can be sent to the Steam Stripper System. The condensable gaseous products exiting the Steam Stripper are condensed and stored in the Turpentine/Methanol Storage Tank until they are fired in Power Boiler #1, Power Boiler #2, or the Lime Kiln. If the Steam Stripper is down, all condensates pass directly to the Stripped Condensate Tank for collection. The Steam Stripper does not have to meet a minimum efficiency since all bottom products from the stripper are sent to the Stripped Condensate Tank. Sappi does not therefore have to operate a CMS for the process wastewater feed flow, steam feed flow, and the process wastewater column feed temperature and is not subject to the requirements of § 63.453(g). The operation of the Steam Stripper is not required for MACT compliance as prescribed by the requirements of 40 C.F.R. § 63.446.

The condensates collected in the Stripped Condensate Tank are used as wash water on the brownstock rewasher. The brownstock rewasher and the rewasher seal tank are enclosed and vented into the HVLC system.

5. Compliance Assurance Monitoring (CAM)

CAM requirements are not applicable to the Condensate Collection System because it is subject to emission standards under 40 C.F.R. Part 63 Subpart S.

The operation of the Air Stripper and Steam Stripper is not required to meet license requirements and is therefore not subject to CAM requirements.

6. Periodic Monitoring

There is no periodic monitoring required for the Condensate Collection System.

7. Parameter Monitors

Level indicators have been installed as necessary to demonstrate compliance with the 11.1 lb methanol/ton ODP collection standard. To determine the level achieved for condensates recycled to the brownstock rewasher, Sappi utilized EPA's guidance, which specifies that condensate sent to an enclosed system meeting 40 C.F.R. § 63.450 achieves 98% treatment. Thus, Sappi uses 100% of the condensate sent to Power Boiler #1, Power Boiler #2, or the Lime Kiln and 98% of the condensates sent to the brownstock rewasher as the assumed destruction efficiencies in its calculation for meeting the 10.2 lb methanol/ton ODP treatment standard. Pursuant to the MACT regulations, it is not required to utilize a CMS for either of these units. Compliance with the collection and treatment standard shall both be demonstrated on a 30-day rolling average basis. If Sappi wants to use a longer averaging period, justification to the Department for the increase will be required.

MACT CMS
Pursuant to 40 C.F.R. Part § 63.453(i), level indicators on the following sources which indicate overflows or condensate loss are determined to be acceptable CMS to demonstrate compliance with § 63.446(c):

a. Stripped Condensate Tank
b. Turpentine/Methanol Storage Tank
c. Contaminated Condensate Surge Tank
d. #1 Evaporator Seal Tank
e. #2 Evaporator Seal Tank
f. High Volume Cooler Condenser
g. Air Stripper
h. Steam Stripper

A CMS is not required to demonstrate compliance with the treatment standards of 40 C.F.R. Part § 63.446(e)(4). The CMS range shall be determined or modified, as necessary, according to the procedures as specified in 40 C.F.R. § 63.453(n).

O. LVHC and HVLC System

In accordance with the applicable requirements of 40 C.F.R. 63, Subpart S and 06-096 C.M.R. ch. 124, Sappi collects and controls both Low Volume, High Concentration (LVHC) and High Volume, Low Concentration (HVLC) non-condensable gas streams from a variety of emission units in several process areas of the mill. The systems are

equipped with safety relief points and safety interlocks for use during start-ups, shutdowns, and malfunction situations.

The Sappi facility was originally constructed in 1976 with both a HVLC and LVHC Systems. The LVHC gases are combusted in the Lime Kiln or mixed with the HVLC system and combusted in Power Boiler #1 or Power Boiler #2. The HVLC system gases are combusted in Power Boiler #1, Power Boiler #2, or the Recovery Boiler.

In 2004, Sappi installed a white liquor scrubber on the LVHC system. The scrubber is located in the LVHC system just prior to the LVHC gases being combusted in the kiln. Because the scrubber 1) reduces TRS emissions to the kiln, 2) reduces the potential to form kiln rings, and 3) reduces sulfides going to the Lime Kiln, the project was determined by the Department to be pollution control project pursuant to 06-096 C.M.R. ch. 115, Section 2(T) and (W). Air License Amendment #24 (A-19-71-AH-M) was issued on August 23, 2004, to license this project. The operation of the white liquor scrubber is not required to meet license requirements and is therefore not subject to CAM requirements.

The major collection components of the LVHC System consist of the following equipment. The LVHC shall be considered to begin at these designated locations:

- Digester System at the Secondary Relief Condenser
- Turpentine System at the Turpentine Decanter and the Methanol/Turpentine Storage Tank
- Evaporator System at the Second Steam Ejector Condenser and the #1 and #2 Seal Tanks
- Steam Stripper System at the Secondary Reflux Condenser and the Contaminated Condensate Surge Tank.

The major collection components for the HVLC System consist of the following equipment. The HVLC shall be considered to begin at the locations designated:

- Atmospheric Diffusion Washer and filtrate tanks at the atmospheric washer
- Brownstock Rewasher and seal tank at the brownstock rewasher hood
- Pressure Diffusion Washer filtrate tank at the #3 Flash Tank
- Digester System at the #3 Digester Flash Tank and at the Chip Bin
- Evaporator System at the Stripped Condensate Tank
- The Air Stripper at the air stripper outlet.

1. <u>New Source Performance Standards (NSPS)</u>

   Sappi's digester system was installed in 1976 prior to the applicability date for 40 C.F.R. part 60, Subpart BB. The LVHC and HVLC systems are not addressed by NSPS 40 C.F.R. Part 60, Subpart BB.

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

The "LVHC system" and "HVLC system", as defined by 40 C.F.R. § 63.441 are subject to 40 C.F.R. Part 63, Subpart S. Applicable requirements of 40 C.F.R. Part 63, Subpart S are included in this license.

Subpart S requires the following condensate storage tanks at this facility to be enclosed and collected pursuant to 40 C.F.R. § 63.446(d)(2)(i):

- Contaminated Condensate Surge Tank by the LVHC System
- The Turpentine/Methanol Storage Tank by the LVHC System
- The Stripped Condensate Tank by the HVLC system

The knotter and screen systems do not require collection as required by Section § 63.443(a)(1)(ii) for the following reasons:

a. The Mill operates three pressurized knotters and one three-stage pressurized screening system which are enclosed and therefore release no emissions. The knotters and screening system are therefore not subject to control requirements specified in 40 C.F.R. Part 63, Subpart S.

b. The Mill operates three knot drainers, one tailing screen, and two final reject screens. The Mill has sampled emissions from the knot drainers, tailing screen, and final reject screens. The sampling results show that emissions from these units are below the thresholds requiring control as set forth in 40 C.F.R. § 63.443(a)(1)(ii).

c. The Mill operates primary, secondary, and tertiary screen supply tanks which are currently collected and vented to the Mill's HVLC system. Although no testing has been performed, the existing controls meet the requirements of Subpart S for applicable equipment. The Mill may elect at any time to undertake emissions sampling on these units to determine the actual applicability of Subpart S.

3. 06-096 C.M.R ch. 124

The Air Stripper is considered an alternate TRS control system under 06-096 C.M.R. ch. 124. Emissions from the Air Stripper are collected by the HVLC system and are therefore not subject to the 99% collection and control requirement specified in 06-096 C.M.R. ch. 124 Section 3(F).

To be consistent with 40 C.F.R. Part 63, Subpart S, the introduction of the LVHC and HVLC systems with the primary fuel into the flame zone or with the combustion air of one of the combustion units identified above meets the requirements of Section 3(A) of 06-096 C.M.R. ch. 124.

4. Compliance Assurance Monitoring (CAM)

   CAM requirements are not applicable to the LHVC and HVLC Systems because they are subject to emission standards under 40 C.F.R. Part 63 Subpart S.

   The operation of the white liquor scrubber is not required to meet license requirements and is therefore not subject to CAM requirements.

5. Periodic Monitoring

   The Federal regulation 40 C.F.R. Part 63, Subpart S contains a requirement to operate the LVHC and the HVLC Collection Systems with no detectable leaks. However, any leaks which are found during site inspections as required by 40 C.F.R. § 63.453(k) and 40 C.F.R. § 63.454(b) shall not be a violation of 40 C.F.R. § 63.446 and § 63.450 or this License, provided the steps as specified by 40 C.F.R. § 63.453(k)(6) are taken. [40 C.F.R. Part 63, Subpart S]

   In addition, Subpart S requires that a computer-controlled flow indicator be installed and operated on each bypass line. Sappi monitors valve position with a computer. Pursuant to EPA's Question and Answers (Q&A's) for the Pulp and Paper NESHAP, dated March 31, 2000, use of computers to monitor valve position is an acceptable method to indicate flow in the bypass line. These position indicators are not considered to be a MACT CMS for purposes of the requirements applicable to a CMS in 40 C.F.R. Part 63, Subpart A and shall not be defined as such.

   Components of the LVHC and the HVLC systems subject to 40 C.F.R. § 63.443 shall meet the standards for enclosure and closed vent systems in 40 C.F.R. § 63.450. [40 C.F.R. Part 63, Subpart S]

6. Recordkeeping and Reporting

   a. Pursuant to 06-096 C.M.R. ch. 124, Sappi shall not allow venting of TRS from the LVHC system or associated equipment that is required to be controlled which:
      (1) exceeds 40 minutes in duration (each venting occurrence); or
      (2) contributes to an aggregate TRS venting of more than 1.0% of quarterly operation time.

      Venting within these parameters are not violations of this license. [06-096 C.M.R. ch. 124]

   b. Pursuant to 06-096 C.M.R. ch. 124, Sappi shall submit with the quarterly report, as outlined in the Conditions of this license, a record of all TRS venting events from the LVHC system of greater than fifteen (15) minutes when the aggregate TRS venting exceeds 0.5% of quarterly operating time. Pursuant to Chapter 124, Sappi shall also submit with the quarterly report all venting of TRS from the LVHC

system or associated equipment for greater than one (1) minute which contributes to an aggregate TRS venting from the LVHC system of more than one (1)% of quarterly operating time. [06-096 C.M.R. ch. 124]

c. Pursuant to 06-096 C.M.R. ch. 124, any TRS venting from the LVHC system or Steam Stripper collection system greater than 15 minutes shall be reported to the Department before the end of the next State working day. Sappi shall submit these reports with the quarterly reports specified in the conditions of this license and the applicable reports outlined in Section 5(B) & (C) of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 124]

d. Pursuant to 06-096 C.M.R. ch. 124, any TRS venting from the HVLC system greater than 4 hours shall be reported to the Department before the end of the next State working day. Sappi shall submit the applicable reports as outlined in in Section 5(B) & (C) of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 124]

e. BPT requires that LVHC gases shall be combusted in Power Boiler #1 less than 1,314 hours in a calendar year. Compliance is based on the summation of hours that either the digester system or the multi-effect evaporator system is operating and being collected by the LVHC system and combusted in Power Boiler #1. [06-096 C.M.R. ch. 140, BPT]

f. BPT has been determined that HVLC gases shall be combusted in Power Boiler #1 less than 1,314 hours in a calendar year. Compliance is based on hours that the brown stock rewasher is operating and being collected by the HVLC system and combusted in Power Boiler #1. Time when the HVLC system is used for the sole purpose of conveying the LVHC gases for treatment in Power Boiler #1 shall not be counted towards the HVLC 1,314 hours/year limit. [A-19-70-A-I (12/2/04)]

g. The "LVHC System" and "HVLC System" as defined by 40 C.F.R. § 63.441 are to be controlled in accordance with 40 C.F.R. Part 63, Subpart S. The venting allowances in 40 C.F.R. Part 63, Subpart S shall apply to the LVHC System and HVLC System. [40 C.F.R. Part 63, Subpart S]

h. State rule 06-096 C.M.R. ch. 124 defines which sources are to be collected by the HVLC System. Pursuant to 06-096 C.M.R. ch. 124, the HVLC system shall maintain a 96% collection and control uptime based on quarterly brownstock washer system operating time on a total mass weighted basis. [06-096 C.M.R. ch. 124]

i. Pursuant to 40 C.F.R. § 63.443(e), excess emissions reported under § 63.455 shall not be a violation of § 63.443(c) and (d), or this License, provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided

by the total process operating time in a semi-annual reporting period does not exceed any of the following:

- one percent for control devices used to reduce the total HAP emission from the LVHC system;
- four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
- four percent for control devices used to reduce the total HAP emission from both the LVHC and HVLC systems.

P. Closed Collection and Vent System Monitoring

The following were approved by EPA in response to an alternative monitoring request dated March 25, 2002:

1. For equipment required to be inspected per 40 C.F.R. § 63.453(k) and (l), Sappi shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an or potential danger, or the equipment could not be inspected without elevating the inspection personnel more than six feet above a supported surface. The site-specific monitoring plan must identify exempted equipment and describe how the equipment will be inspected and/or repaired during periods determined safe which must be at least once during each permit term.

2. Sappi shall perform inspections in accordance with 40 C.F.R. § 63.453(k) and (l) once during each calendar month with at least 21 days elapsed time between inspections.

[40 C.F.R. Part 63, Subpart S, § 63.453(k) and (l)]

Q. Paper Machines and On-Machine Coaters

Sappi operates three paper machines, each equipped with on-machine aqueous based coaters. Air Emission License Renewal #2152, issued January 26, 1983, licensed the installation of Paper Machine #1. Air Emission License Amendment #1 (A-19-71-A-A), issued July 9, 1986, licensed the installation of Paper Machine #2. Air Emission License Amendment #4 (A-19-71-F-A), issued August 23, 1989, licensed the installation of Paper Machine #3.

Air Emission License Amendment #11 (A-19-77-11-A) issued April 20, 2017, licensed the rebuilding of the No.1 Paper Machine in order to produce higher basis weight paper products. As part of the project, a new size press, new on-machine coating, and coating dryer sections in addition to natural gas fired dryers were added.

1. <u>New Source Performance Standards (NSPS)</u>

   Paper machines are not subject to 40 C.F.R. Part 60, Subpart BB.
   [40 C.F.R. Part 60, Subpart BB, §60.280]

2. National Emission Standards for Hazardous Air Pollutants (NESHAP),

Subpart S
Pursuant to the Clean Air Act Amendments (CAAA) of 1990, Sappi is subject to 40 C.F.R. Part 63, Subpart S. However, this Subpart includes no requirements applicable to the #1, #2, and #3 Paper Machines. EPA determined that MACT for paper machines did not require controls (see 63 F.R. 18504, 18510, April 15, 1998). [40 C.F.R. § 63.440]

Subpart JJJJ

Federal regulation 40 C.F.R. Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*, applies to facilities that perform paper and other web coating operations. Sappi performs coating operations on their paper machines. However, the coating is part of the sheet formation and on-machine operations. Pursuant to a letter dated November 19, 2003, from the U.S. EPA to Timothy Hunt of the American Forest and Paper Association, both size presses and on-machine coaters that function as part of the in-line papermaking system used to form the paper substrate are not subject to 40 C.F.R. Part 63, Subpart JJJJ requirements. Therefore, Subpart JJJJ does not apply to the #1, #2, and #3 Paper Machines operations.

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

Pursuant to Section 1.C. of 06-096 C.M.R. ch. 123 – *Paper Coating Regulation*, the regulation does not apply to size presses and on-machine coaters on papermaking machines that apply sizing (e.g., starch) or water-based clays. Since the size presses and on-machine coaters on Sappi's #1, #2, and #3 Paper Machines apply sizing or water-based clays, they are not subject to this regulation.

4. Emission Limits and Streamlining

The following emission limits were established as BACT; no streamlining was required.

a. The combined emissions from the combustion of natural gas in the No.1 Paper Machine size press dryer and coating dryers shall not exceed the following:

No.1 Paper Machine Size Press Natural Gas Dryers	
Pollutant	**Emission Limit**
PM	0.16 lb/hr
PM_{10}	0.63 lb/hr
$PM_{2.5}$	0.63 lb/hr

No.1 Paper Machine Size Press Natural Gas Dryers	
Pollutant	**Emission Limit**
SO_2	0.084 lb/hr
NOx	6.3 lb/hr
CO	6.7 lb/hr
VOC	0.46 lb/hr

b. Visible Emissions from each of the size press natural gas dryer exhausts and each of the coating natural gas dryer exhausts shall not exceed an opacity of 10 percent on a six (6) minute block average basis.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with the No.1 Paper Machine natural gas fired size press and coating dryers shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A upon request by the Department.

6. Control Equipment

Sappi shall use good combustion practices, shall fire natural gas, and use Low NO_x burners on the No.1 Paper Machine size press and coating dryers.

7. Compliance Assurance Monitoring (CAM)

The #1, #2, and #3 Paper Machines are not subject to CAM requirements of 40 C.F.R. Part 64 because the paper machines do not use a control device to achieve compliance with an applicable emission limit. [40 C.F.R. § 64.2].

8. Periodic Monitoring

Sappi shall maintain records of the production and the coating additives and ingredients used in the paper or substrate formation associated with the on-machine coaters. Annual production and VOC emissions based on site specific and industry emission factors are to be reported in the annual emissions reporting required by 06-096 C.M.R. ch. 137, *Emission Statements*. [06-096 C.M.R. ch. 140, BPT]

9. CEMS and COMS

There are no CEMS or COMS required for the Paper Machines and On-Machine Coaters.

R. Woodroom Debarker

The Sappi woodroom built in 1976 consisted of a portal crane, three drum debarkers, a wood chipper and several woodchip conveyors. Air Emission License Amendment #10, A-19-77-10-A, issued November 10, 2016, licensed the replacement of the three drum debarkers, the chipper and certain woodyard woodchip conveyors. The new single drum debarker, the chipper, and associated equipment (grapples, cranes, conveyor belts, metal detectors, etc.) are in a new building. The drum debarker is equipped with a cyclone separator to control PM emissions generated by the debarking process.

1. Emission Limits and Streamlining

Visible emissions from the debarker exhaust system cyclone separator shall not exceed an opacity of 20 percent on a six (6) minute block average basis.

2. Emission Limit Compliance Methods

Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, Appendix B, Method 9 upon request by the Department.

S. Lime Kiln Diesel and Emergency Diesel #1, #2, and #3

Sappi operates the following distillate fired engines:

Unit	Max. Capacity (MMBtu/hr)	Output (HP)	Fuel Type, % sulfur	Mfr. Date	Install. Date
Emergency Diesel #1 - Paper Mill Fire Pump	2.63	376	Distillate fuel, 0.0015%	1982	1982
Emergency Diesel #2 - Pulp Mill Fire Pump	2.32	330		1976	1976
Emergency Diesel #3 - River Pump House	2.98	425		1976	1976
Lime Kiln Diesel	0.15	40		1976	1976

1. New Source Performance Standards (NSPS)

The Emergency Diesel #1, #2, #3 and the Lime Kiln Diesel were installed prior to 2005 and therefore are not subject 40 C.F.R. Part 60, Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

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

The federal regulation 40 C.F.R. Part 63, Subpart ZZZZ - *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal*

Combustion Engines is applicable to Emergency Diesels #1, #2, and #3 and the Lime Kiln Diesel. Applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ are included in this license.

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 Emergency Diesels #1, #2, and #3 and the Lime Kiln Diesel from the 40 C.F.R. Part 63, Subpart ZZZZ requirements.

a. Emergency Engine Designation and Operating Criteria for Emergency Diesels #1, #2, and #3

Under Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) 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:

- 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.

Emergency Diesels #1, #2, and #3 shall be limited to the usage outlined in § 63.6640(f) and therefore may be classified as an 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 § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all the requirements for non-emergency engines.

The Lime Kiln Diesel is classified as a non-emergency, existing stationary RICE with a site rating of less than 100 HP located at a major source and therefore does not have a restriction on operating hours.

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

(1) Operation and Maintenance Requirements

	Operating Limitations (40 C.F.R. § 63.6602 and Table 2(c))
Compression ignition (diesel, fuel oil) units:	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - 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.

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Sappi shall develop a maintenance plan

which provides 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)]

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

(3) Non-Resettable Hour Meter 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, after which time the non-startup emission limitations apply. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(5) Emergency Diesels #1, #2, and #3 Annual Time Limit for Maintenance and Testing
The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency 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 for Emergency Diesels #1, #2, and #3
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 hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. [40 C.F.R. § 63.6655(e) and (f)]

3. 06-096 C.M.R. ch. 103

Fuel Burning Equipment Particulate Emission Standards, 06-096 C.M.R. ch. 103 is applicable to all fuel burning equipment having a rated capacity of 3 MMBtu/hr or

greater. The Emergency Diesel #1, #2, and #3 and the Lime Kiln Diesel each have a heat input capacity of less than 3.0 MMBtu/hr and are therefore not subject to 06-096 C.M.R. ch. 103.

4. 06-096 C.M.R. ch. 148

Emissions from Smaller-Scale Electric Generating Facilities, 06-096 C.M.R. ch. 148 is applicable to all non-mobile generators having a capacity equal to or greater than 50 kilowatts installed on or after January 1, 2005. The Emergency Diesels #1, #2, and #3 and the Lime Kiln Diesel were installed prior to January 1, 2005, therefore not subject to this regulation.

5. Emission Limits and Streamlining

The following emission limits are established as BPT, no streamlining is required.

Lime Kiln Diesel and Emergency Diesels #1, #2, and #3 Note (1)						
Emission Unit	**PM (lb/hr)**	**PM_{10} (lb/hr)** Note (2)	**SO_2 (lb/hr)**	**NO_x (lb/hr)**	**CO (lb/hr)**	**VOC (lb/hr)**
Emergency Diesel #1 – Paper Mill Fire Pump (2.63 MMBtu/hr)	0.32	0.32	0.14	11.58	2.49	0.92
Emergency Diesel #2 – Pulp Mill Fire Pump (2.32 MMBtu/hr)	0.28	0.28	0.12	10.24	2.20	0.81
Emergency Diesel #3 – River Pump House (2.98 MMBtu/hr)	0.36	0.36	0.15	13.12	2.83	1.04
Lime Kiln Diesel (0.15 MMBtu/hr)	0.02	0.02	0.01	0.66	0.14	0.05

Note (1): Emission limits are **Enforceable by State-only.**
Note (2): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Visible emissions from each diesel engine shall not exceed an opacity of 20 percent on a six (6) minute block average basis. During periods of startup, the unit operator of a reciprocating engine may elect to comply with the work practice standards of 06-096 C.M.R. ch. 101, § 3(B) in lieu of this visible emission standard.
[06-096 C.M.R. ch. 101]

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the distillate fuel fired engines listed above shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A upon request by the Department.

7. Compliance Assurance Monitoring (CAM)

CAM requirements are not applicable to the Lime Kiln Diesel and Emergency Diesel #1, #2, and #3 because they do not use a control device to achieve compliance with an applicable emission limit.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use by the distillate fuel-fired engines and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel fired, as applicable.

9. Parameter Monitors

There are no Parameter Monitors required for the Emergency Diesel #1, #2, and #3 and the Lime Kiln Diesel.

10. CEMS and COMS

There are no CEMS or COMS required for the Emergency Diesel #1, #2, and #3 and the Lime Kiln Diesel.

T. No. 2 Power Boiler Emergency Diesel

Air Emission License Amendment # 2 (A-19-77-3-A), issued July 16, 2008, licensed the installation of a new emergency engine for the wet scrubber of Power Boiler #2. During normal operations, the exhaust gases from Power Boiler #2 are reduced from approximately 450 ^{o}F to 150 ^{o}F by the existing spray tower SO_2 scrubber. In order to protect the fiberglass stack liner from thermal damage in the event of a scrubber failure, an emergency backup system was installed. The back-up system consists of the upper most level in the SO_2 scrubber used to deliver a back-up water supply to cool the exhaust in the event of scrubber malfunction. The dedicated shower system and pumping system is powered with a 755 Hp (3.4 MMBtu/hr) Cummings emergency diesel engine.

1. New Source Performance Standards (NSPS)

The No. 2 Power Boiler Scrubber Emergency Diesel was purchased after July 11, 2005 and manufactured after April 1, 2006. Therefore, the engine is subject to

40 C.F.R. 60, Subpart IIII. Applicable Requirements of 40 C.F.R. 60, Subpart IIII are included in this license.

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

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

b. Ultra-Low Sulfur Diesel Requirement
The diesel fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 C.F.R. § 60.4207(b)]

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

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

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

f. Initial Notification Requirement
No initial notification is required for emergency engines. [40 C.F.R. §60.4214(b)]

g. Recordkeeping
Sappi shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. [40 C.F.R. §60.4214(b)]

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

   The No.2 Power Boiler Scrubber Emergency Diesel is subject 40 C.F.R. Part 63, Subpart ZZZZ. Pursuant to 40 C.F.R. § 63.6590(b)(1), by meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit does not have to meet the requirements found in 40 C.F.R. Part 63, Subpart A and ZZZZ, except for the initial notification requirements found in 40 C.F.R. Part 63.6645(f).

3. 06-096 C.M.R. ch. 101
   Pursuant to 06-096 C.M.R. ch. 101, § 1 (C)(7), the No.2 Power Boiler Scrubber Emergency Diesel is exempt from 06-096 C.M.R. ch. 101 since it is an emissions unit subject to a visible emissions standard under 40 C.F.R. Part 60, Subpart IIII.

4. 06-096 C.M.R. ch. 148

   The No. 2 Power Boiler Scrubber Emergency Diesel is not subject to *Emissions from Smaller-Scale Generating Resources,* 06-096 C.M.R. ch. 148. This unit was licensed subject to New Source Review requirements; therefore, this engine is exempt from this chapter, as specified in 06-096 C.M.R. ch. 148 (3)(B).

5. Emission Limits and Streamlining

   The following emission limits are established as BACT, no streamlining is required.

Pollutant	Applicable Emission Standards	Origin and Authority	Emission Limits
PM	0.08 lb/MMBtu	A-19-77-3-A (7/16/08)	0.08 lb/MMBtu
	0.2 g/kW-hr	40 C.F.R. § 60.4205(b)	0.2 g/kW-hr
	0.25 lb/hr	A-19-77-3-A (7/16/08)	0.25 lb/hr
PM_{10} Note (1)	0.25 lb/hr	A-19-77-3-A (7/16/08)	0.25 lb/hr
SO_2	0.17 lb/hr	A-19-77-3-A (7/16/08)	0.17 lb/hr
NOx + VOC	6.4 g/kW-hr	40 C.F.R. §60.4205(b)	6.4 g/kW-hr
	7.94 lb/hr	A-19-77-3-A (7/16/08)	7.94 lb/hr
CO	3.5 g/kW-hr	40 C.F.R. §60.4205(b)	3.5 g/kW-hr
	4.34 lb/hr	A-19-77-3-A (7/16/08)	4.34 lb/hr

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Visible emissions from the No.2 Power Boiler Scrubber Diesel shall not exceed the following opacity limits:
a. 20 percent during the acceleration mode;
b. 15 percent during the lugging mode; and
c. 50 percent during the peaks in either the acceleration or lugging modes.
[50 C.F.R. Part 60.4205(b)]

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the No.2 Power Boiler Scrubber Diesel shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A upon request by the Department.

7. Compliance Assurance Monitoring (CAM)

CAM requirements are not applicable to the No.2 Power Boiler Scrubber Diesel since it does not use a control device to achieve compliance with an applicable emission limit.

8. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use by the No.2 Power Boiler Scrubber Diesel and delivery receipts from the supplier or other records indicating the percent sulfur by weight of the fuel fired, as applicable.

9. Parameter Monitors, CEMS, and COMS

There are no Parameter Monitors, CEMS, or COMS required for the No.2 Power Boiler Scrubber Diesel.

U. Organic Liquid Storage Tanks

The following Organic Liquid Storage Tanks are located at the Sappi facility:

Organic Liquid Storage Tanks	Capacity (gallons)	Installation
Gasoline Storage Tank	4,000	2015
Woodyard Diesel Fuel Storage Tank	10,000	1985
Turpentine/Methanol Tank	19,675	2001
Turpentine Decantor	13,969	2016
Methanol Bulk Storage Tank	38,850	1997
No.2 Fuel Oil Storage Tank	40,000	1990
No.6 Fuel Oil Storage Tank	2,307,900	1976

The 4,000-gallon gasoline storage tank is an underground, double-walled fiberglass tank equipped with a submerged fill pipe. The fiberglass tank was installed with a leak detection system between the double walls of the tank. Monthly gasoline throughput at the Mill is less than 10,000 gallons, and annual throughput is less than 1,000,000 gallons averaging ~34,000 gallons per year.

1. New Source Performance Standards (NSPS)

   The gasoline tank is less than 40 cubic meters (approximately 10,567 gallons) and is therefore not subject to NSPS 40 C.F.R. Part 60, Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*.

   The 2.3-million-gallon No.6 Fuel Oil Storage Tank was installed prior to 1984 and is therefore not subject to NSPS 40 C.F.R. Part 60, Subpart Kb.

   The other Organic Liquid Storage Tanks listed above, not including the No.6 Fuel Oil Storage Tank and the Gasoline Storage Tank, were installed after July 23, 1984, and each have a capacity greater than or equal to 40 cubic meters. These tanks are therefore subject to NSPS 40 C.F.R. Part 60, Subpart Kb. Applicable requirements of 40 C.F.R. Part 60, Subpart Kb are included in this license. Based on the size of the tank and/or the maximum true vapor pressure of the liquids, the only applicable requirements for these tanks are specified in 40 C.F.R. Part 60.110(a) and (b) which require Sappi to keep records showing the dimensions and an analysis showing the capacity of these storage tanks for the life of the tank.

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

   Federal Regulation 40 C.F.R. Part 63, Subpart CCCCCC - *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*, is not applicable, as it only applies to gasoline dispensing facilities located at an area source of HAP emissions.
   [40 C.F.R. Part 63, Subpart CCCCCC, § 63.11111(a)]

3. 06-096 C.M.R. ch. 118

   The parts of this Chapter applicable to the Gasoline Storage Tank include a submerged fill pipe and recordkeeping requirements. Because the monthly and annual throughputs for this tank are not at or above the applicability thresholds for 06-096 C.M.R. ch. 118, there are no additional applicable requirements. Sappi shall maintain records and provide notices in accordance with 06-096 C.M.R. ch. 118. Sappi shall maintain a submerged fill pipe that extends to within six inches of the bottom of the gasoline storage tank. [06-096 C.M.R. ch. 118 (4)(A)]

4. Compliance Assurance Monitoring (CAM)

   CAM requirements are not applicable to the Organic Liquid Storage Tanks since they do not use a control device to achieve compliance with an applicable emission limit.

V. Bulk Handling Systems

Sappi operates the following bulk handling systems:

Bulk Handling Systems	Control Equipment
4 Paper Mill Starch Silos	1 Baghouse for each silo
Paper Mill $CaCO_3$ or Starch Silo	1 Baghouse
Power Boiler #2 Soda Ash Handling	Wetted baffles
Power Boiler #2 Fly Ash Handling	1 Baghouse
Wood Pellet Silo Systems #1 & #2 and Conveyor System	1 Baghouse for all three sources
No1 Reburnt (or Purchased) Lime Silo No2 Reburnt Lime Silo No3 New Purchased Lime Silo	1 Bin Vent Baghouse for both the No2 and No3 silos 1 Baghouse for the No1 silo
Talc Silo	1 Baghouse
2 PCC Lime Plant Silos	1 Baghouse for each silo

1. Best Management Plan (BMP)

In order to minimize fugitive emissions, Sappi shall follow an established Best Management Practice (BMP) Plan for the above listed mill bulk handling systems. The BMP Plan shall be available to the Department upon request. For the bulk handling systems, Sappi shall:

a. Maintain all baghouses and wetted baffles to achieve visible emissions no greater than 10 percent opacity on a six (6) minute average.
b. Take corrective action if visible emissions from the baghouses exceed 5 percent opacity on a six (6) minute average basis.
c. Start the clean-up of all spills within 24 hours of the occurrence of each spill.
d. Include in the BMP Plan a description of the process to inspect all unloading systems for leaks and malfunctions.
e. Discontinue unloading from trucks and/or rail cars until leaks and/or malfunctions are eliminated.
f. Maintain records of the dates of all maintenance performed on the baghouses and identify which baghouse(s) required maintenance.
g. Documentation that Sappi is maintaining a BMP Plan for bulk handling systems.

Sappi may change any of the systems listed in order to vent the control equipment inside of a building. For those units which are vented inside a building, the requirements of this Section shall not apply.

2. Control Equipment

The control equipment for the bulk handling systems is noted in the table above for particulate matter emissions. Control equipment operation, malfunction and downtime shall not be reportable or considered a violation provided there are no visible emissions in excess of the opacity standard.

3. Emission Limits

Visible emissions are limited to 10% opacity on a six-minute block average basis. Corrective action shall be taken if emissions from any baghouse or wetted baffles exceed 5% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 101 Section 3(B)(3)]

4. Emission Limit Compliance Methods

Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, Appendix B, Method 9 upon request by the Department.

5. Compliance Assurance Monitoring (CAM)

CAM requirements are not applicable to the Bulk Handling Systems since pre-control emissions are not greater than 100 tons per year.

6. Periodic Monitoring

Periodic Monitoring is established as part of Sappi's BMP plan for the Bulk Handling Systems and includes inspection of all unloading systems for leaks and malfunctions and triggers for corrective action.

7. Parameter Monitors, CEMS, and COMS

There are no Parameter Monitors, CEMS, or COMS required for the Bulk Handling Systems.

W. Waste Water Treatment Plant (WTP)

Sappi operates an onsite WTP to treat waste streams generated by the production of pulp and paper, other mill activities, and sanitary wastes. The WTP is licensed to discharge to the Kennebec River by a Maine Pollution Discharge Elimination System Permit (MEPDES). Operation of the waste water treatment plant system as required by the effluent discharge license restrictions issued pursuant to its NPDES Permit and/or MEPDES Permit was previously determined to meet the requirements of VOC RACT.
[06-096 C.M.R. ch. 134]

X. Solvent Cleaners, Parts Washers

Cold cleaning machines and parts washers that use more than 68 ounces of solvent containing greater than 5% VOC by weight at Sappi are subject to the requirements of 06-096 C.M.R. ch. 130, *Solvent Cleaners*. Certain parts washers utilized at Sappi are subject to 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance. The applicable requirements of this regulation are incorporated into this license.

Y. Fugitive Emissions

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

Z. General Process Sources

Visible emissions from any general process source not specifically addressed in this license shall not exceed an opacity of 20 percent on a six (6) minute block average basis. Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, Appendix B, Method 9 upon request by the Department.
[06-096 C.M.R. ch. 101]

AA. Facility Annual Emissions

1. Total Annual Emissions

The following ton/year totals are calculated from those emission limits which have been identified in this license and are used only to calculate the annual license fee.

Please note the following:

- PM_{10} and CO are not used in calculating the annual fee but are included for completeness.
- TPY emissions do not include emission units (e.g., woodyard, paper machines) which have no license emissions limits.
- VOC lb/hr limits, lb/MMBtu limits, and VOC TPY emissions listed in this license are based on VOC emissions reported as carbon by EPA Method 25A.

Total Tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Package Boiler	0.5	0.5	0.6	4.5	1.2	0.1
Power Boiler #1	963.6	963.6	3,258.7	1,309.6	9,942.6	60.0
Power Boiler #2	170.8	170.8	1,537.4	1,138.8	2,277.6	39.9
Recovery Boiler	906.7	906.7	8650.5	3,285.0	13,634.9	65.7
Smelt Dissolving Tanks #1 & #2	113.9	--	113.9	--	--	--
Lime Kiln	254.0	306.6	100.0	254.0	254.0	43.8
No.2 Power Boiler Scrubber Diesel	0.1	0.1	0.1	1.8	1.1	0.1
Emergency Diesel #1, #2, and #3 and Lime Kiln Diesel	0.3	0.3	0.1	11.6	2.5	0.9
No.1 PM Natural Gas Dryers	0.7	2.8	0.4	27.6	29.3	2.0
Total TPY	**2,410.6**	**2,351.4**	**13,661.7**	**6,032.9**	**26,143.2**	**212.5**

Note (1): The PM_{10} numbers are based on filterable particulate matter only and do not include condensables, except for the Lime Kiln and No.1 PM Natural Gas Dryers.

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

The quantity of CO_2e emissions from this facility is greater than 100,000 tons per year, based on the following:

- the facility's fuel use limit***s***;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 C.F.R. Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required.

IV. AMBIENT AIR QUALITY ANALYSIS

Sappi previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. This analysis was done as part of a PSD Permit in 1986 (A-19-71-A-A), a PSD Permit in 1989 (A-19-71-F-A), a PSD permit in 1994 (A-19-71-K-A), and for a PSD permit in 2009 (A-19-77-2-A). An additional ambient air quality analysis is not required for this Part 70 License renewal.

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-19-70-E-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 in 06-096 C.M.R. ch. 108 or 115 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 permit. 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 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**

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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 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]

(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 an application dated May 26, 2009 and supplemented on June 9, 2017. [06-096 C.M.R. ch. 140]

Permit Shield Table

	Source	Citation	Description	Basis for Determination
A	Power Boiler #1	40 C.F.R. Part 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Boiler has a federally enforceable fossil fuel rate limit.
B	Power Boiler #2	40 C.F.R. Part 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Power Boiler #2 is subject to Subpart Db and construction commenced after June 19, 1986.
C	Recovery Boiler	40 C.F.R. Part 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	The Recovery Boiler is not a fossil fired steam generating unit.
D	Power Boiler #1 & #2 and Recovery Boiler	40 C.F.R. Part 60, Subpart Da	NSPS for Electric Utility Units	Boilers are not electric utility units.
E	Package Boiler	40 C.F.R. Part 60, Subpart D, Db, and Dc	NSPS for Steam Generating Units	Heat input less than 100 MMBtu/hr and installed before June 9, 1989.
F	Power Boiler #1	40 C.F.R. Part 60, Subpart Db	NSPS for Industrial, Commercial, Institutional Steam Generating Units	Construction of boiler was in 1976, prior to the NSPS applicability date and has a federally enforceable fossil fuel firing rate limit.
G	Power Boiler #2	40 C.F.R. Part 60, Subpart Db and 06-096 C.M.R. ch. 117	Requirements to operate COM or PM CPMS	Unit is not required to operate a COM or PM CPMS because DEP approved alternate monitoring.
H	Power Boiler #1 & #2	40 C.F.R. Part 60, Subpart Dc	NSPS for Steam Generating Units	Heat input is greater than 100 MMBtu/hr.
I	Pressure Diffusion Washer	40 C.F.R. Part 60, Subpart BB and 06-096 C.M.R. ch. 124	NSPS for Kraft Pulp Mills and TRS Control from Kraft Pulp Mills	Definition of brownstock washer systems excludes diffusion washer systems
J	Facility	40 C.F.R. Part 60, Subparts C, Ca, Cb	Emission Guidelines and Compliance times for Municipal Waste Combustors and Incinerators	No applicable sources at this facility.
K	Facility	40 C.F.R. Part 60, Subpart E, and Ea and 06-096 C.M.R. ch. 104	NSPS for Incinerators	Facility does not operate an incinerator.
L	#2 & #6 Fuel Oil Storage Tanks	40 C.F.R. Part 60, Subpart K and Ka	Standards of Performance for Petroleum Liquid and Volatile Organic Liquid Storage Vessels	#2 and #6 fuel oil are not petroleum liquids as defined in 60.111a(b).
M	Facility	40 C.F.R. 60 Subpart RR	Pressure Sensitive Tape and Label Surface Coating	No applicable sources at this facility.
N	Lime Kiln, Smelt Dissolving Tanks #1 & #2, Digester Systems, Atmospheric Diffusion Washer, Brown Stock Washer	40 C.F.R. Part 60, Subpart BB and 06-096 C.M.R. ch. 124	NSPS for Kraft Pulp Mills and TRS Control from Kraft Pulp Mills	These units were constructed before 9/24/76. Recent equipment modifications have not exceeded 50% of the cost of the construction of a new unit.
O	Paper Machines #1, #2, and #3	40 C.F.R. Part 60, Subpart BB	NSPS for Kraft Pulp Mills and TRS Control from Kraft Pulp Mills	The paper machines do not qualify as affected facilities under this Subpart.

	Source	Citation	Description	Basis for Determination
P	Woodyard Diesel Fuel Storage Tank, Turpentine/Methanol Storage Tank, Turpentine Decantor, Methanol Bulk Storage Tank, No.2 Fuel Oil Storage Tank	40 C.F.R. Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	The only applicable requirement is to keep records showing the dimensions and capacity of tanks. No other requirements are applicable to these tanks.
Q	Small Non-road diesel engines	40 C.F.R Part 60, Subpart IIII, JJJJ and 40 C.F.R. Part 63 Subpart ZZZZ	NESHAP for SI and CI RICE units	Non-road engines defined by 40 C.F.R. 1068.30 are not subject to regulation as a stationary source.
R	Cooling Towers	40 C.F.R. Part 63, Subpart Q	NESHAP for Industrial Process Cooling Towers	The mill cooling towers are not subject to this regulation.
S	Paper Machines #1, #2, and #3 & Chlorine Dioxide Generation	40 C.F.R. Part 63, Subpart S and Subpart MM	NESHAP for the Pulp and Paper Industry and NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-Chemical Pulp Mills	There are no requirements applicable to these units.
T	Solvent Washers	40 C.F.R. Part 63, Subpart T	NESHAPs for Halogenated Solvent Cleaning	Sappi does not operate any halogenated solvent cleaning operations subject to this rule.
U	Methanol Storage Tank	40 C.F.R. Part 63, Subpart EEEE	NESHAP for Organic Liquids Distribution (Non-Gasoline)	The methanol tank is not subject based on the EPA letter of Dec. 14, 2004, stating that storage tanks associated with chlorine dioxide generation equipment are exempt.
V	Paper Machines	40 C.F.R. Part 63, Subpart JJJJ and Subpart HHHHH	NESHAP for Paper and Other Web Coating and NESHAP for Miscellaneous Coating Manufacturing	On-machine coating is considered substrate formation and not coating; thus, it is not subject to this regulation.
W	Lime Kiln	40 C.F.R. Part 63, Subpart AAAAA	NESHAP for Lime Manufacturing	Lime Kilns are covered under 40 C.F.R. Part 63, Subpart MM.
X	Recovery Boiler	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters	Recovery Boilers are covered under 40 C.F.R. Part 63, Subpart MM.
Y	Gasoline Storage Tank	40 C.F.R. Part 63, Subpart CCCCCC	NESHAP for Source Category: Gasoline Dispensing Facilities	This subpart applies to area HAP sources; Sappi is a major HAP source.
Z	Power Boiler #2	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters	Scrubber liquid supply pressure instead of pressure drop on SO2 scrubber.
AA	Smelt Dissolving Tanks	40 C.F.R. Part 63, Subpart MM	NESHAPs for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mill	Scrubber fan amps instead of gas flow on smelt dissolving tank scrubbers.
BB	Bleaching System Central Scrubber and Back-Up Scrubber	40 C.F.R. Part 63, Subpart S	NESHAPs for Pulp and Paper Industry	Scrubber liquid influent ORP or pH instead of effluent ORP or pH.

	Source	Citation	Description	Basis for Determination
CC	Bleaching System Central Scrubber	40 C.F.R. Part 63, Subpart S	NESHAPs for Pulp and Paper Industry	Scrubber fan amps instead of gas flow on Central Scrubber.
DD	Bleaching System Back-Up Scrubber	40 C.F.R. Part 63, Subpart S	NESHAPs for Pulp and Paper Industry	Scrubber fan on/off status instead of gas flow on Back-Up Scrubber.
EE	Power Boiler #1 & #2	40 C.F.R. Part 61, Subpart E	NESHAPs for Mercury	Power Boiler #1 & #2 are not incinerators.
FF	Paper Machines #1, #2, & #3	40 C.F.R. Part 64	Compliance Assurance Monitoring	The paper machines do not satisfy the applicability requirements of 40 C.F.R. Part 64.2.
GG	Facility	40 C.F.R. Parts 72 thru 78	EPA Acid Rain Program	Sappi is not an electric utility.
HH	Power Boiler #1 & #2	40 C.F.R. Part 51 Subpart Y	Regional Haze Rule (BART)	Power Boiler #2 was not in operation 15 years prior to the adoption of the CAA. Power Boiler #1 was not determined as eligible Nov 29, 2011 Federal Register.
II	Facility	40 C.F.R. Part 98, Subpart D	Electricity Generation	The Sappi facility does not qualify as an affected facility under this Subpart.
JJ	Lime Kiln	40 C.F.R. Part 98, Subpart S	Lime Manufacturing	The Sappi Lime Kiln does not qualify as an affected unit under this Subpart.
KK	Wastewater Treatment	40 C.F.R. Part 98, Subpart II	Industrial Wastewater Treatment	The Sappi wastewater treatment plant does not qualify as an affected unit under this Subpart.
LL	Recovery Boiler & Lime Kiln	06-096 C.M.R. ch. 103	Fuel Burning Particulate Standard	These units are specifically covered under 06-096 C.M.R. ch. 105.
MM	Paper Machines	06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard	Paper machines do not emit measurable particulate matter.
NN	Facility	06-096 C.M.R. ch. 107	Sulfur Dioxide Standards for Sulfite Pulp Mills	Sappi is not a sulfite pulp mill.
OO	Facility	06-096 C.M.R. ch. 111	Petroleum Liquid Vapor Storage Control	All petroleum tanks at the facility greater than 39,000 gallons (volume) contain liquid with true vapor pressures <1.0 psia.
PP	Petroleum Tanks	06-096 C.M.R. ch. 112	Bulk Terminal Petroleum Liquid Transfer Requirements	Sappi does not have a bulk gasoline terminal.
QQ	Gasoline Tank	06-096 C.M.R. ch. 119	Motor Vehicle Fuel Volatility Limit	Sappi does not have a bulk gasoline terminal.
RR	Power Boiler #1 & #2 and Recovery Boiler	06-096 C.M.R. ch. 121	Emission limits and emission testing of resource recovery facilities	Sappi is not a resource recovery facility.
SS	Paper Machines #1, #2, and #3	06-096 C.M.R. ch. 123	Paper Coating Regulations	This rule does not apply to on-machine coaters on paper making machines.
TT	Facility	06-096 C.M.R. ch. 125	Perchloroethylene Dry Cleaning Regulation	Sappi does not have any dry cleaning operations.
UU	Facility	06-096 C.M.R. ch. 126	Capture Efficiency Test Procedure	Sappi does not have add-on controls for VOCs with total enclosures.
VV	Facility	06-096 C.M.R. ch. 127	New Motor Vehicle Emission Standards	Sappi is not a truck or car dealer.

	Source	Citation	Description	Basis for Determination
WW	Paper Machines	06-096 C.M.R. ch. 129	Surface Coating Facilities	Sappi does not operate units subject to this rule.
XX	Facility	06-096 C.M.R. ch. 131	Cutback Asphalt and Emulsified Asphalt	Sappi does not have equipment for paving and maintenance of public roads and highways.
YY	Facility	06-096 C.M.R. ch. 132	Graphic Arts-Rotogravure and Flexography	This rule does not apply to Quality Control Printing Presses.
ZZ	Gasoline Tank	06-096 C.M.R. ch. 133	Petroleum Liquid Transfer Vapor Recovery at Bulk Handling Gasoline Plants	Sappi does not have or operate a bulk handling gasoline plant.
AAA	Recovery Boiler, Lime Kiln, & Paper Machines	06-096 C.M.R. ch. 134	VOC RACT	Recovery Boilers are exempt per Section 1(C)(5) of Chapter 134, the Lime Kiln is exempt as fuel burning equipment per Section 1(C)(4), and the paper machines are exempt per Section 1(C)(7).
BBB	Power Boiler #1 & #2	06-096 C.M.R. ch. 135	Hexavalent Chromium Particulate Emission Standard	Power Boiler #1 & #2 do not burn fuel which contain a total aggregate chromium concentration of 0.05% (or 500ppm) by weight, as cited in Section 2 of Chapter 135.
CCC	Package Boiler	06-096 C.M.R. ch. 138	Annual Tune-ups	The boiler has a Low NOx burner.
DDD	Facility	06-096 C.M.R. ch. 145	NOx Control Program	The amount of fossil fuel burned in the units does not comprise 51% or greater of the annual heat input.
EEE	Facility	06-096 C.M.R. ch. 152	Control of Emissions of Volatile Organic Compounds from Consumer Products	Sappi does not offer for sale consumer products with VOCs.
FFF	Paper Quality Lab	06-096 C.M.R. ch. 154	Control of Volatile Organic Compounds from Flexible Package Printing	The potential to emit for the presses used in the lab are less than 25 tons per year.

(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 3 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]

(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 Chapter 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 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]

(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]

(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

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 quarterly basis 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]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. 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 at least annually, 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) **Facility Wide Limitations**

A. Fuel Oil Sulfur Content

Per 38 M.R.S. § 603-A(2)(A)(1), the facility shall comply with the following statements; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision.

1. Residual Oil
   a. Prior to July 1, 2018, or the date specified in 38 M.R.S. § 603-A(2)(A)(1), the residual fuel fired at the facility shall have a maximum sulfur content of 2.0% by weight, except as allowed under 06-096 C.M.R. ch. 106.
   [38 M.R.S. §603-A(2)(A)(1) and 06-096 C.M.R. ch. 140, BPT]

b. Beginning July 1, 2018, or the date specified in 38 M.R.S. § 603-A(2)(A)(1), the residual fuel delivered to the facility shall not exceed a maximum sulfur content limit of 0.5% by weight, except as allowed under 06-096 C.M.R. ch. 106.

[38 M.R.S. § 603-A(2)(A)(1) and 06-096 C.M.R. ch. 140, BPT]

2. Distillate Fuel
   a. Prior to July 1, 2018 or the date specified in 38 M.R.S. § 603-A(2)(A)(3), the distillate fuel delivered to the facility shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [06-096 C.M.R. ch. 140, BPT]
   b. Beginning July 1, 2018 or the date specified in 38 M.R.S. § 603-A(2)(A)(3), the distillate fuel delivered to the facility shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm), except as allowed under 06-096 C.M.R. ch. 106.

[38 M.R.S. §603-A(2)(A)(3)(b), 06-096 C.M.R. ch 140, BPT]

B. Fuel Oil Sulfur Content Compliance

1. Sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts or other documentation from the supplier if the maximum sulfur content delivered is at or below the sulfur content limits listed above. The sulfur content of used oil shall be demonstrated by purchase records from the supplier or by test results performed on a representative sample of specification or off-specification used oil generated on-site, both within the accuracy of the test methods used. For distillate fuel, compliance shall be demonstrated based on purchasing receipts documenting ASTM D396 compliant distillate fuel or fuel receipts documenting ULS diesel fuel (ultra-low sulfur fuel, i.e., fuel with sulfur content no greater than 15 ppm by weight).

2. The facility may continue to burn fuel already on-site in fuel storage tanks but must comply with the fuel sulfur content limits mandated by the above cited statutes for all fuel received as of July 1, 2018.

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

C. Main Stack

1. Sappi shall not exceed a SO_2 emission limit of 2,871 lb/hr from the Main Stack on a 24-hour block average basis (midnight to midnight). [A-19-71-K-A (3/25/94]

2. Compliance with the SO_2 lb/hr emission limit shall be demonstrated by the sum of the SO_2 lb/hr 24-hour block emissions from the Power Boiler #1, Recovery Boiler, Smelt Dissolving Tanks #1 & #2, Lime Kiln, and Package Boiler (when the Package Boiler is venting through the Main Stack). To calculate the total SO_2 lb/hr

24-hour block emissions, Sappi may utilize the SO_2 license limit for the Smelt Dissolving Tanks #1 & #2, Lime Kiln, and Package Boiler or may calculate SO_2 emissions from the average firing rate and the sulfur content of the fuel fired during the 24-hour block period (midnight to midnight). [A-19-70-A-I (12/2/04)]

(15) **Package Boiler**

A. Fuels

1. The Package Boiler is licensed to fire distillate fuel, used oil, propane, and kerosene.

2. The distillate fuel fired in the Package Boiler shall comply with the fuel sulfur contents and corresponding dates as specified in Specific Condition (14) of this license.

B. Annual Capacity Factor Limit

1. The Package Boiler shall operate no more than 10% if its annual capacity factor, equivalent to a heat input limit of 61,845 MMBtu/year. Records documenting compliance with the annual capacity factor limit shall be kept on a calendar year basis. [A-19-77-9-M (7/19/16), 40 C.F.R. § 63.7525(k)]

2. Sappi shall keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the Package Boiler was operating. [40 C.F.R. § 63.7555(a)(3)]

C. Control Equipment

While operating the Package Boiler, Sappi shall use the Low NO_x Burner for control of NO_x emissions. [A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 138]

D. Emission Limits

Package Boiler		
Pollutant	**Emission Limit**	**Origin and Authority**
PM	0.08 lb MMBtu/hr	06-096 C.M.R. ch. 103 2.B.(1)(b)
	1.02 lb/hr	A-19-71-F-A (8/23/89), BPT
PM_{10} Note (1)	1.02 lb/hr	A-19-71-F-A (8/23/89), BPT
SO_2	1.4 lb/hr	06-096 C.M.R. ch. 140, BPT
NO_x	10.2 lb/hr	A-19-71-F-A (8/23/89), BPT
CO	2.6 lb/hr	A-19-71-F-A (8/23/89), BPT
VOC	0.1 lb/hr	A-19-70-A-I (12/2/04), BPT

Package Boiler		
Pollutant	**Emission Limit**	**Origin and Authority**
Visible Emissions	Not to exceed an opacity of 20 % on a six-minute block average basis	06-096 C.M.R. ch. 101, § 3(A)(2), BPT

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Emissions from the Package Boiler shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant.

E. Emission Limit Compliance Methods

Compliance with the emission limits for the Package Boiler shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Package Boiler			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr		As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	40 C.F.R. Part 60, App. A, Method 9	As requested

F. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel firing rates by the Package Boiler and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

G. *National Emission Standards for Hazardous Air Pollutants (NESHAP)* – 40 C.F.R. Part 63, Subpart DDDDD (Boiler MACT)

1. Sappi shall comply with the work practice standards, recordkeeping, and reporting requirements of 40 C.F.R. Part 63, Subpart DDDDD and the applicable provisions of Subpart A for the Package Boiler. [40 C.F.R. Part 63, Subpart DDDDD]

2. The facility shall complete an initial tune-up of the package boiler following the procedures described in § 63.7540(a)(10)(i) through (vi) no later than January 31, 2016, and subsequently every 5 years if the boiler operates, and as specified in § 63.7540. [40 C.F.R. § 63.7510(e)]

(16) **Power Boiler #1**

A. Fuel

1. Power Boiler #1 is licensed to fire residual fuel, distillate fuel, used oil, biomass, TDF, wood pellets, waste paper, kraft condensates, LVHC gases, HVLC gases, solid oily waste, and wastewater treatment plant sludge. [A-19-71-K-A (3/25/94)]

2. The residual oil, including used oil, fired in the Power Boiler #1 shall comply with the fuel sulfur contents and corresponding dates as specified in Specific Condition (14) of this license. [06-096 C.M.R. ch. 140, BPT]

B. Firing Rates

1. Power Boiler #1 shall continue to be limited by a computer control system such that the fossil fuel firing rate shall not exceed 250 MMBtu/hr at any time. The oil control system and pumping system shall use the following set points:
   - Flow control system ≤ 13,400 lb/hr and
   - Power Boiler #1 oil pump ≤ 27.6 gal/min.

   Sappi shall maintain records of hourly oil firing rates computed through the computer control system. [OAR Docket No. AAA-04-0014 (6/8/04)]

2. Sappi shall operate and maintain a single dedicated oil supply line and associated heater to Power Boiler #1. [OAR Docket No. AAA-04-0014 (6/8/04)]

3. Sappi shall operate and maintain a single oil pump drive system which is designed to physically limit oil firing to less than 250 MMBtu/hr and which cannot be changed without shutting down the pump. [OAR Docket No. AAA-04-0014 (6/8/04)]

C. Emission Limits

Emissions from Power Boiler #1 shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant.

Power Boiler #1		
Pollutant	**Emission limit**	**Origin and Authority**
PM	0.26 lb/MMBtu	A-19-71-A-A, (7/9/86)
	0.44 lb/MMBtu Note (1)	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.b.
	220 lb/hour	A-19-71-A-A, (7/9/86)
PM_{10} Note (2)	220 lb/hour	A-19-71-F-A, (8/23/89)
SO_2	744 lb/hr on a 24-hour block average basis, except as specified below Note (3)	A-19-71-K-A (3/25/1994)
NO_x	0.4 lb/MMBtu on a 30-day rolling average basis	A-19-70-A-I (12/2/2004), BPT
	299 lb/hour	A-19-71-K-A (3/25/1994)
CO	2270 lb/hour	A-19-71-K-A (3/25/1994)
	900 ppmdv corrected to 3% oxygen on a 30-day rolling average basis	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.a.
VOC	13.7 lb/hr	A-19-70-A-I (12/2/2004), BPT
HCl	0.022 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2, Row 1.a and Table 3, Row 6.
Hg	5.7E-06 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2, Row 1.b and Table 3, Row 6.
Visible Emission	10% opacity on a daily block average or the highest hourly average opacity reading measured during the last NESHAP performance test. Note (4)	40 C.F.R. Part 63, Subpart DDDDD, Table 4, Row 4

Note (1): This limit applies at all times including periods of startup and shutdown

Note (2): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Note (3): When LVHC and/or HVLC gases and/or kraft condensates are fired in Power Boiler #1, and the SO_2 emissions are greater than 744 lb/hr on a 24 hour block average basis (midnight to midnight), Sappi shall report to the Department on a quarterly basis the SO_2 lb/hr 24-hour block emissions calculated according to Condition (14)C. During this period the Main Stack SO_2 lb/hr limit shall apply. [A-19-71-K-A (3/25/94)]

Note (4): Daily block average is the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown or downtime.

D. Emission Limit Compliance Methods

Compliance with the emission limits for the Power Boiler #1 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Power Boiler #1			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart DDDDD Note (1)
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years.
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hr	SO_2 CEMS	Continuously
NO_X	lb/MMBtu	NO_x CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	ppmdv	CO CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63, Subpart DDDDD. Note (1)
Hg	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63, Subpart DDDDD. Note (1)
Visible Emissions	% opacity	COMS located in the duct for the Power Boiler #1 to the Main Stack	Continuously

Note (1) - In accordance with 40 C.F.R. § 63.7515 if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the emission limit for that pollutant and if there are no changes in operation of the boiler or air pollution control equipment that could increase emissions, Sappi may opt to conduct performance testing every third year on this unit. Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

E. Control Equipment

1. Except as provided in Condition (16)E.2. and (16)E.3. below, while operating Power Boiler #1, Sappi shall operate the primary cyclones and the ESP for control

of particulate matter emissions and the staged combustion control (burner out of service) and Low NO_x burners for control of NO_x emissions.
[06-096 C.M.R ch. 138, 06-096 C.M.R. ch. 140, BPT]

2. Except during startups and shutdowns, Sappi shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate matter emission limits has been demonstrated. Upon written notification to the Department, and in accordance with the Bureau of Air Quality Air Emission Compliance Test Protocol, Sappi may perform additional particulate matter emission testing to demonstrate compliance with the applicable emission limits under alternative operating scenarios. [06-096 C.M.R. ch. 140, BPT]

3. The ESP is not required to be in operation when only clean fuels are being fired during startup and shutdown per 40 C.F.R. Part 63, Subpart DDDDD.

F. Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by Power Boiler #1 and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

G. Parameter Monitoring

Sappi shall monitor and record the following parameters for the Power Boiler #1:

Power Boiler #1		
Parameter	**Monitor**	**Record**
Total Steam Production	Continuously	30-day rolling average

Power Boiler #1 ESP		
Parameter	**Monitor**	**Record**
Total Secondary Power Input	Continuously	30-day rolling average

[40 C.F.R. Part 63, Subpart DDDDD, Table 8]

H. CEMS and COMS

Sappi shall maintain and operate the following CEMS and COMS to monitor emissions from the Power Boiler #1:

Power Boiler #1		
Pollutant Monitor	**Unit of Measure**	**Origin and Authority**
SO_2 CEMS	lb/hr	A-19-71-K-A (3/25/94)
NOx CEMS	lb/MMBtu	A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, and 06-096 C.M.R. ch. 138
CO CEMS	ppmdv	40 C.F.R. Part 63, Subpart DDDDD
O_2 CEMS	%	A-19-71-K-A (3/25/94), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 138, 40 C.F.R. Part 63, Subpart DDDDD
Opacity COMS	%	06-096 C.M.R. ch. 117, 40 C.F.R. Part 63, Subpart DDDDD

I. NESHAP - 40 C.F.R. Part 63, Subpart DDDDD (Boiler MACT)

Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 63, Subpart DDDDD and the applicable provisions of Subpart A for Power Boiler #1. [40 C.F.R. Part 63, Subpart DDDDD]

1. Emission Limits [40 C.F.R. Part 63, Subpart DDDDD Table 2]

   Power Boiler #1 shall comply with the applicable emission limits for specific pollutants in 40 C.F.R. Part 63, Subpart DDDDD, Table 2. [40 C.F.R. § 63.7505(a)]

   The Subpart DDDDD emission limits shall apply at all times the affected unit is operating, except during periods of startup and shutdown, during which the source must comply only with applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD, Table 3. [40 C.F.R. Part 63, Subpart DDDDD, § 63.7500(f)]

2. In accordance with 40 C.F.R. Part 63, Subpart DDDDD and for the purposes of the standards and requirements pursuant to Subpart DDDDD, the definitions of *startup* and *shutdown* are as defined in 40 C.F.R. Part 63, § 63.7575, or as modified in subsequent rulemaking.

3. Work Practice Standards and Operating Limits
   [40 C.F.R. Part 63, Subpart DDDDD, Tables 3, 4, and 8]

   a. Sappi shall conduct an initial tune-up of Power Boiler #1 according to the procedures specified in § 63.7540 no later than the initial tune-up due date established per 40 C.F.R. § 63.7495 or per a compliance extension.
   b. Subsequent tune-ups must be conducted at the frequency specified by Subpart DDDDD and as specified in § 63.7540. [40 C.F.R. § 63.7510(e)]

4. Performance testing for filterable PM (or TSM), HCl, and Hg shall be conducted according to the specifics contained in Table 5 of 40 C.F.R. Part 63, Subpart DDDDD, as applicable. Performance testing will not be required for HCl or Hg if the fuel analysis alternative in Subpart DDDDD is used.

   The 30-day rolling average operating load of Power Boiler #1 shall be maintained such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test.
   [40 C.F.R. Part 63, Subpart DDDDD, Table 4]

5. Reporting requirements shall be in accordance with the applicable requirements of Table 9 of Subpart DDDDD.

(17) **Power Boiler #2**

A. Fuels

1. Power Boiler #2 is licensed to fire residual fuel, distillate fuel, natural gas, used oil, TDF, biomass, waste paper, kraft condensates, LVHC gases, HVLC gases, solid oily waste, and wastewater treatment plant sludge.
   [A-19-71-F-A (8/23/89), A-19-71-K-A (3/25/94), A-19-77-6-A]

2. The residual oil, including used oil, fired in the Power Boiler #2 shall comply with the fuel sulfur contents and corresponding dates as specified in Specific Condition (14) of this license. [06-096 C.M.R. ch. 140, BPT]

B. Emission Limits

Emissions from the Power Boiler #2 shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant.

Power Boiler #2		
Pollutant	**Emission Limit**	**Origin and Authority**
PM	0.03 lb/MMBtu	A-19-71-K-A (3/25/94)
	0.44 lb/MMBtu Note (1)	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 13.b.
	39.0 lb/hr	A-19-71-K-A (3/25/94)
PM_{10} Note (2)	0.03 lb/MMBtu	A-19-71-K-A (3/25/94)
	39.0 lb/hr	A-19-71-K-A (3/25/94)
SO_2	0.20 lb/MMBtu on a 30-day rolling average basis Note (3)	A-19-77-13-M (2/24/20), 40 C.F.R. § 60.42b(a)
	351.0 lb/hr on a 24-hour block average basis	A-19-71-K-A (3/25/94)
	975.0 lb/hr on a 3-hour block average basis	A-19-71-K-A (3/25/94)
NO_x	0.2 lb/MMBtu on a 30-day rolling average basis	40 C.F.R. § 60.44b, A-19-71-K-A (3/25/94)
	260 lb/hr on a 24-hour block average	A-19-71-K-A (3/25/94)
CO	900 ppmdv corrected at 3% O_2 on a 30-day rolling average basis	40 C.F.R. Part 63, Subpart DDDDD, Table 2
	0.40 lb/MMBtu on a 30-day rolling average	A-19-71-K-A (3/25/94)
	520 lb/hr, on a 24-hour block average basis	A-19-71-K-A (3/25/94)
VOC	0.007 lb/MMBtu	A-19-71-K-A (3/25/94)
	9.1 lb/hr	A-19-71-K-A (3/25/94)
Visible Emissions	Not to exceed an opacity of 20 percent on a six (6) average, except for no more than one (1) six (6) minute period per hour of not more than 27% opacity	40 C.F.R. § 60.43b(f), A-19-71-K-A (3/25/94)
HCl	0.022 lb/MMBtu (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2 (1)(a) and Table 3, Row 6
Hg	5.7E-6 lb/hr (except during startup/shutdown)	40 C.F.R. 63, Subpart DDDDD, Table 2 (1)(b) and Table 3, Row 6

Note (1): This limit applies at all times including periods of startup and shutdown.
Note (2): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.
Note (3): A fossil fuel SO_2 outlet limit of 0.20 lb/MMBtu on a 30-day rolling average basis is required. This standard shall apply only to the firing of fuel oil. The calculations and procedures for maintaining compliance with the standard for mixed fuel boilers in 40 C.F.R. Part 60, Subpart Db §60.45b and shall be followed for compliance purposes. [40 C.F.R. Part 60, Subpart Db]

C. Emission Limit Compliance Methods

Compliance with the emission limits for Power Boiler #2 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Power Boiler #2			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart DDDDD Note (1)
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hr and lb/MMBtu	SO_2 CEMS	Continuously
NO_X	lb/MMBtu and lb/hr	NO_x CEMS	Continuously
CO	lb/MMBtu, lb/hr, and ppmdv	CO CEMS	Continuously
VOC	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
HCl	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63 Subpart DDDDD Note (1)
Hg	lb/MMBtu	40 C.F.R. 63, Subpart DDDDD, Table 5 or Table 6	In accordance with 40 C.F.R. Part 63 Subpart DDDDD Note (1)
Visible Emissions	% Opacity	40 C.F.R. Part 60, App. A, Method 9	As requested

Note (1) In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the emission limit for that pollutant and if there are no changes in operation of the boiler or air pollution control equipment that could increase emissions, Sappi may opt to conduct performance testing every third year on this unit. Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63. 7515.

D. Control Equipment

1. Except as provided in Condition (17) D.2, (17) D.3, and (17) D.4. below, while operating Power Boiler #2, Sappi shall operate the multi-cyclones and the ESP for

control of particulate matter emissions, the SNCR for control of NO_x emissions, and the wet scrubber for control of SO_2 emissions.
[06-096 C.M.R. ch. 138, A-19-71-F-A (8/23/89), A-19-71-K-A (3/25/94)]

2. Wet Scrubber
The Wet Scrubber may be operated with a sodium carbonate (soda ash) solution or a caustic (NaOH) solution as the scrubbing media. As provided for in NSPS, 40 C.F.R. § 60.42b(i), Power Boiler #2 may be operated without soda ash or caustic in the wet scrubber while firing very low sulfur oil (not to exceed 0.5% by weight sulfur content), or natural gas in combination with any other licensed fuel except residual oil or used oil, because of a malfunction or maintenance of the SO_2 control system. During such times, compliance with the SO_2 lb/MMBtu emission limits shall be demonstrated according to NSPS, 40 C.F.R. Part 60, Subpart Db.

3. Electrostatic Precipitator (ESP)
Except during startups and shutdowns, Sappi shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate matter emission limits has been most recently demonstrated. Upon written notification to the Department and in accordance with the Bureau of Air Quality Air Emission Compliance Test Protocol, Sappi may perform additional particulate emission testing to demonstrate compliance with applicable emission limits under alternative operating scenarios. [A-19-70-A-I (12/2/04)]

Notwithstanding the previous paragraph, pursuant to Air Emission License A-19-77-8-M (5/7/14) and A-19-77-12-M (10/1/2019), the ESP is not required to operate during the following:
   a. periods of natural gas firing only;
   b. boiler trips triggered by Burner Management System (BMS) safety protocols resulting in the shutdown of the ESP,
   c. periods in which natural gas and HVLC and/or LVHC gases (no solid or liquid fuels) are combusted in the boiler, or
   d. periods in which distillate fuel ignitors are used to ignite the natural gas burners. The distillate fuel ignitors may be used to ignite the No.6 oil burners, but the ESP shall be online when this occurs.

The ESP is not required to be in operation when only clean fuels are being fired during startup and shutdown per 40 C.F.R. Part 63, Subpart DDDDD.

4. SNCR
The SNCR system may utilize an aqueous ammonia solution or a urea solution. The SNCR system is not required to operate:
   a. when boiler load is below 200,000 lb/hr steam, because exit gas temperatures are not within the required high temperature range necessary for NO_x reduction reactions to occur; or

b. during startup or shutdown when firing only clean fuels are being fired per 40 C.F.R. Part 63, Subpart DDDDD

5. SNCR downtime caused by equipment malfunction shall not constitute a violation provided NOx emissions are below applicable limits based on CEMS data. [A-19-70-A-I (12/2/04)]

E. Periodic Monitoring

1. Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Power Boiler #2 and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

2. Sappi shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas, distillate fuel, residual fuel, and grate fuels (Sappi may combine biomass, TDF, and sludge) for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 C.F.R. Part 60.49b(d)]

3. If Sappi combusts fuel oil with a sulfur content greater than 0.5% within Power Boiler #2, Sappi shall submit with the quarterly report the data specified pursuant to 06-096 C.M.R. ch. 106 § 4(C).

F. Parameter Monitors

Sappi shall monitor and record the following parameters for Power Boiler #2:

Power Boiler #2		
Parameter	**Monitor**	**Record**
Total Steam Production	Continuously	30-day rolling average

Power Boiler #2 ESP		
Parameter	**Monitor**	**Record**
Total Secondary Power Input	Continuously	30-day rolling average

Power Boiler #2 SO_2 Scrubber		
Parameter	**Monitor**	**Record**
Scrubber liquid flow rate	Continuously	30-day rolling average
Scrubber effluent pH	Continuously	30-day rolling average
Scrubber pressure drop or Scrubber liquid supply pressure	Continuously	30-day rolling average

[40 C.F.R. Part 63, Subpart DDDDD, Table 8]

G. CEMS and COMS

Sappi shall maintain and operate the following CEMS to monitor emissions from the Power Boiler #2:

Power Boiler #2		
Pollutant Monitor	**Unit of Measure**	**Origin and Authority**
SO_2 CEMS	lb/MMBtu	A-19-71-K-A (3/25/94), 06-096 C.M.R. ch. 117, 40 C.F.R. Part 60, Subpart Db
	lb/hr	A-19-71-K-A (3/25/94)
NO_x CEMS	lb/MMBtu	A-19-71-K-A (3/25/94), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch 138, 40 C.F.R. Part 60, Subpart Db
	lb/hr	A-19-71-K-A (3/25/94)
CO CEMS	lb/MMBtu and lb/hr	A-19-71-K-A (3/25/94)
	ppmdv	40 C.F.R. Part 63, Subpart DDDDD
O_2 CEMS	%	A-19-71-K-A (3/25/94), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 138, 40 C.F.R. Part 60, Subpart Db 40 C.F.R. Part 63, Subpart DDDDD

H. Power Boiler #2 is subject to and shall comply with the applicable requirements of 40 C.F.R. Part 60, Subparts A and Db. [40 C.F.R. Part 60, Subpart A and Db]

I. NESHAP - 40 C.F.R. Part 63, Subpart DDDDD (Boiler MACT)

Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 63, Subpart DDDDD and the applicable provisions of Subpart A for Power Boiler #2. [40 C.F.R. Part 63, Subpart DDDDD]

1. Emission Limits [40 C.F.R. Part 63, Subpart DDDDD Table 2]
   Power Boiler #2 shall comply with the applicable emission limits for specific pollutants in 40 C.F.R. Part 63, Subpart DDDDD, Table 2. [40 C.F.R. § 63.7505(a)]

   Subpart DDDDD emission limits shall apply at all times the affected unit is operating, except during periods of startup and shutdown, during which the source

must comply only with applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD, Table 3. [40 C.F.R. Part 63, Subpart DDDDD, § 63.7500(f)]

2. In accordance with 40 C.F.R. Part 63, Subpart DDDDD and for the purposes of the standards and requirements pursuant to Subpart DDDDD, the definitions of *startup* and *shutdown* are as defined in 40 C.F.R. Part 63, § 63.7575, or as modified in subsequent rule-making.

3. Work Practice Standards and Operating Limits [40 C.F.R. Part 63, Subpart DDDDD, Tables 3, 4, and 8]

   a. Sappi shall conduct an initial tune-up of Power Boiler #2 according to the procedures specified in § 63.7540 no later than the initial tune-up due date established per 40 C.F.R. § 63.7495 or per a compliance extension.
   b. Subsequent tune-ups shall be conducted at the frequency specified by Subpart DDDDD and as specified in § 63.7540. [40 C.F.R. § 63.7510(e)]

4. Performance testing for filterable PM (or TSM), HCl, and Hg shall be conducted according to the specifics contained in Table 5 of 40 C.F.R. Part 63, Subpart DDDDD, as applicable. Performance testing will not be required for HCl or Hg if the fuel analysis alternative in Subpart DDDDD is used.

   The 30-day rolling average operating load of Power Boiler #2 shall be maintained such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test.
   [40 C.F.R. Part 63, Subpart DDDDD, Table 4]

5. Reporting requirements shall be in accordance with the applicable requirements of Table 9 of Subpart DDDDD.

(18) **Recovery Boiler**

A. Fuels

1. The Recovery Boiler is licensed to fire black liquor, residual oil, distillate fuel, used oil, LVHC gases, and HVLC gases. [A-19-70-F-A (12/09/09)]

2. The residual oil, including used oil, fired in the Recovery Boiler shall comply with the fuel sulfur contents and corresponding dates as specified in Specific Condition (14) of this license. [06-096 C.M.R. ch. 140, BPT]

B. Emission Limits

1. Emissions from the Recovery Boiler shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are

based on the specified averaging time of the applicable test method for each pollutant.

Pollutant	Licensed Emission Limit(s)	Origin and Authority
PM	0.030 gr/dscf at 8% O_2 when operating with 3 ESP chambers and firing only black liquor	A-19-77-2-A (6/2/08)
	0.038 gr/dscf at 8% O_2 when operating with 2 ESP chambers and firing only black liquor	A-19-77-2-A (6/2/08), 40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)(ii)
	207 lb/hr when firing only black liquor	A-19-77-2-A (6/2/08)
	283 lb/hr when firing oil alone or in combination with black liquor	A-19-77-2-A (6/2/08)
PM_{10} Note (1)	207 lb/hr when firing black liquor	A-19-77-2-A (6/2/08)
	283 lb/hr when firing oil alone or in combination with black liquor	A-19-77-2-A (6/2/08)
	100 ppmdv at 8% O_2, on a 30-day rolling average basis, when firing only black liquor	A-19-77-5-M (11/2/2010), 40 C.F.R. 51, BART
	1,975 lb/hour on a 24-hour block average basis	A-19-77-2-A (6/2/08)
NO_x	120 ppmdv at 8% O_2 on a 30- day rolling average	A-19-77-2-A (6/2/08)
	750 lb/hr	A-19-77-2-A (6/2/08)
CO	500 ppmdv at 8% O_2 on a 30- day rolling average basis, when firing only black liquor	A-19-77-2-A (6/2/08)
	3,113 lb/hr	A-19-77-2-A (6/2/08)
VOC	15 lb/hr	A-19-77-2-A (6/2/08)
TRS	5 ppmdv at 8% O_2, measured as H_2S, 12-hour block average basis, when firing only black liquor	06-096 C.M.R. ch. 124, Section 5(C)(1), 40 C.F.R. Part 60, Subpart BB
Visible Emissions	Not to exceed 35 percent opacity on a six (6) minute average basis. Note (2)	A-19-77-2-A (6/2/08), 40 C.F.R. Part 60, Subpart BB
	Not to exceed an opacity of 35 percent on a six (6) minute average basis. Note (3)	40 C.F.R. Part 63, Subpart MM

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

Note (2): Pursuant to 40 C.F.R. Part 60 Subpart § 60.284(e)(1), periods when opacity is greater than 35 percent shall not be indicative of a violation of 40 C.F.R. Part 60.11(d) provided

that the percent of total excess emissions in a quarter does not exceed six percent for average opacities from the Recovery Boiler.

Note (3): Pursuant to 40 C.F.R. Part 63, Subpart 63.864(k)(2), visible emissions from the Recovery Boiler shall be in violation of the standards of 40 C.F.R. § 63.862 if the monitoring exceedances occur during times when spent pulping liquor is fed and opacity is greater than 35 percent for 2 percent or more of the operating time within a semiannual period.

2. Compliance with the TRS ppmdv emission limit shall be determined on a 12-hour block average basis demonstrated by means of a CEMS, measured as H_2S. Pursuant to 06-096 C.M.R. ch. 124, Section 5(C)(1) and 40 C.F.R. Part 60.284(e)(1)(i), the first two 12-hour block averages in a quarter which exceed either license limits or emission standards in 06-096 C.M.R. ch. 124 are exempt and are not considered a violation.
   [06-096 C.M.R. ch. 124, 06-096 C.M.R. ch. 117, & 40 C.F.R. Part 60 Subpart BB]

3. Sappi shall implement corrective action if opacity monitoring shows an average of 10 consecutive six-minute averages greater than 20% opacity.
   [40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(i)]

C. Emission Limit Compliance Methods

Compliance with the emission limits for the Recovery Boiler shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Recovery Boiler			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	gr/dscf	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or in accordance with 40 C.F.R. Part 63, Subpart MM Note (1)
PM	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	ppmdv, and lb/hr	SO_2 CEMS	Continuously
NO_X	ppmdv	NO_x CEMS	Continuously
	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	ppmdv	CO CEMS	Continuously
	lb/hr	40 C.F.R 60, App. A, Method 10	As requested

Recovery Boiler			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS measured as H_2S	Continuously
Visible Emissions	% Opacity	COMS located in the duct for the Recovery Boiler to the Main Stack	Continuously

Note (1): Compliance testing for PM while firing black liquor and operating less than 3 chambers shall be performed once every 5 calendar years. [A-19-70-F-A (12/9/09)]

D. Control Equipment

While operating the Recovery Boiler, Sappi shall operate the ESP for control of particulate matter emissions. Sappi shall operate three ESP chambers at all operating times except for periods of startup, shutdown, malfunction, maintenance, and repair. During these periods the minimum chambers to be operated in the ESP shall be determined through compliance stack tests for PM while firing black liquor and operating less than 3 chambers of the ESP. [A-19-70-F-A (12/09/09)]

E. Periodic Monitoring

1. Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Recovery Boiler and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

2. Pursuant to 40 C.F.R. § 63.866(c)(1), Sappi shall maintain records of black liquor solids firing rates in units of Mg/d or ton/d. [40 C.F.R. § 63.866(c)(1)]

F. CEMS and COMS

Sappi shall maintain and operate the following CEMS and COMS to monitor emissions from the Recovery Boiler:

Recovery Boiler		
Pollutant	**Unit of Measure**	**Origin and Authority**
SO_2 CEMS	ppmdv	19-77-2-A (6/2/08)
	lb/hr	A-19-71-A-A (7/9/86)
NO_x CEMS	ppmdv	A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 138
CO CEMS	ppmdv	A-19-77-2-A (6/2/08)

Recovery Boiler		
Pollutant	**Unit of Measure**	**Origin and Authority**
TRS CEMS measured as H_2S	ppmdv	06-096 C.M.R. ch. 124, 40 C.F.R. Part 60, Subpart BB
O_2 CEMS	%	A-19-71-A-A (7/9/86), A-19-71-U-A (6/7/95), 06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 124, 06-096 C.M.R. ch. 138, 40 C.F.R. Part 60, Subpart BB
Opacity COMS located in the duct from the Recovery Boiler to the Main Stack	%	40 C.F.R. Part 63, Subpart MM, § 63.864(d) & 40 C.F.R. Part 60, Subpart BB § 60.284(a)

G. Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 63, Subpart MM and the applicable provisions of Subpart A for the Recovery Boiler. [40 C.F.R. Part 63, Subpart MM]

H. Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 60, Subpart BB and the applicable provisions of Subpart A for the Recovery Boiler. [40 C.F.R. Part 60, Subpart BB]

(19) **Smelt Dissolving Tanks #1 & #2**

A. Emission Limits

Combined emissions from the Smelt Dissolving Tanks #1 & #2 shall not exceed the following limits. Unless otherwise specified, the average times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant.

Smelt Dissolving Tanks #1 & #2		
Pollutant	**Emission Limit**	**Origin and Authority**
PM	0.20 lb/ton BLS	40 C.F.R. Part 63, Subpart MM; 40 C.F.R.§ 63.862(a)(1)(ii)
	26 lb/hr	A-19-70-A-I (12/2/04)
SO_2	26 lb/hr	A-19-70-A-I(12/2/04)
TRS	0.033 lb/ton BLS, measured as H_2S	06-096 C.M.R. ch. 124

B. Emission Limit Compliance Methods

Compliance with the emission limits associated with Smelt Dissolving Tanks #1 & #2 shall be demonstrated on combined emissions in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Smelt Dissolving Tanks #1 & #2			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/ton BLS	40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
TRS	lb/ton BLS measured as H_2S	40 C.F.R. part 60, App. A, Method 16	Once every two calendar years

C. Control Equipment

While operating either Smelt Dissolving Tank #1 or #2, Sappi shall operate the corresponding wetted fan scrubber for control of particulate matter emissions. Each wetted fan scrubber may be operated with water, a weak wash solution, or a caustic solution as the scrubbing media. [A-19-70-A-I (12/2/04)]

D. Parameter Monitors

1. Sappi shall monitor and record the following parameters for each of the Smelt Dissolving Tank Scrubbers #1 & #2:

Parameter	**Monitor**	**Record**
Total Scrubber media flowrate	Continuously	3-hour block average
Scrubber pressure drop or fan amperage	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart MM § 63.864]

2. The CPMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 C.F.R. Part 63.864(j). One CPMS range for media flowrate and pressure drop or fan amperage shall be determined for both scrubbers. [40 C.F.R. Part 63, Subpart MM]

3. Records shall be maintained demonstrating which monitoring option (pressure drop or fan amperage) is being used at all times. [40 C.F.R. Part 63, Subpart MM]

E. Recordkeeping

1. Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 63, Subpart MM and the applicable provisions of Subpart A for each Smelt Dissolving Tank. [40 C.F.R. Part 63, Subpart MM]

2. Sappi shall implement corrective action, when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(ii)]

3. Sappi shall not exceed 6 or more 3-hour MACT CMS values within any 6-month reporting period which are outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(2)(iii)]

(20) **Lime Kiln**

A. Fuel

1. The Lime Kiln is licensed to fire residual fuel, distillate fuel, natural gas, used oil, propane, LVHC gases, and kraft condensates. [A-19-70-A-I (12/4/2004)]

2. The residual oil, including used oil, fired in the Lime Kiln shall comply with the fuel sulfur contents and corresponding dates as specified in Specific Condition (14) of this license. [06-096 C.M.R. ch. 140, BPT]

B. Emission Limits

1. Emissions from the Lime Kiln shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant:

Pollutant	Licensed Emission Limits	Origin and Authority
PM	0.100 gr/dscf at 10% O_2	A-19-77-7-A (7/8/13), 40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)(ii)
	58 lb/hr	A-19-77-7-A (7/8/13)
PM_{10}	70 lb/hr firing natural gas	A-19-77-7-A (7/8/13)
$PM_{2.5}$	70 lb/hr firing natural gas	A-19-77-7-A (7/8/13)
SO_2	100 TPY, on a 12-month rolling total basis	A-19-77-5-M (11/2/10), 40 C.F.R. Part 51, BART
	75 lb/hr	A-19-77-7-A (7/8/13)
NO_X	120 ppmvw at 10% O_2	06-096 C.M.R. ch. 138
	58 lb/hr	A-19-77-7-A (7/8/13)
CO	58 lb/hr	A-19-71-F-A (August 23, 1989)

Pollutant	Licensed Emission Limits	Origin and Authority
VOC	10 lb/hr	A-19-77-7-A (7/8/13)
TRS	20 ppmdv at10% O_2 measured as H_2S, on a 12-hour block average basis	06-96 C.M.R. ch. 124

2. The PM emission limit was established pursuant to § 63.862(a)(1)(ii) and submitted as part of the notification of compliance status required under Subpart A of Part 63, pursuant to § 63.867(b)(1). Compliance with the PM limit shall be based on Lime Kiln emissions prior to gas extraction by the PCC Plant.
[40 C.F.R. Part 63, Subpart MM]

3. The lime kiln shall not exceed an SO_2 emission rate of 100 tons/year from the Lime Kiln, based on a 12-month rolling total. Compliance shall be based on site specific emission factors which have been approved by the Department.
[40 C.F.R. 51, BART, A-19-77-5-M]

4. Compliance with the TRS ppmdv emission limit shall be determined on a 12-hour block average basis demonstrated by means of a CEMS, measured as H_2S. Pursuant to 06-096 C.M.R. ch. 124, Section 5(C)(2), the first four 12-hour block averages in a quarter which exceed either license limits or emission standards in 06-096 C.M.R. ch. 124 are exempt and are not considered a violation.
[06-096 C.M.R. ch. 124 and 117]

C. Emission Limit Compliance Methods

Compliance with the emission limits for the Lime Kiln shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Lime Kiln			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
PM	gr/dscf	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years or accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr	40 C.F.R. Part 60, App. A, Method 5	Once every five calendar years
PM_{10}	lb/hr	40 C.F.R. Part 60, App. A, Method 201, 201A, or 202	As requested
$PM_{2.5}$	lb/hr	40 C.F.R. Part 60, App. A, Method 201, 201 A, or Method 202	As requested

Lime Kiln			
Pollutant	**Emission Limit**	**Compliance Method**	**Frequency**
SO_2	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO_X	ppmvw	40 C.F.R. Part 60, App. A, Method 7E	Once every five calendar years
	lb/hr	40 C.F.R. Part 60, App. A, Method 7E	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS measured as H_2S	Continuously

D. Control Equipment

While operating the Lime Kiln, Sappi shall operate the Venturi Scrubber for control of particulate matter emissions. The scrubber may be operated with water, a weak wash, or a caustic solution as the scrubbing media. [A-19-70-A-I (12/2/04)]

E. Periodic Monitoring

1. Periodic monitoring shall consist of recordkeeping which demonstrates fuel use and fuel oil firing rates by the Lime Kiln and delivery receipts from the supplier or other records indicating the percent sulfur by weight of fuel oil fired, as applicable.

2. Pursuant to 40 C.F.R. § 63.866(c)(2), Sappi shall maintain records of Lime Kiln CaO production rates in units of Mg/d or ton/d. [40 C.F.R. § 63.866(c)(2)]

F. Parameter Monitors

1. Sappi shall monitor and record the following parameters for the Lime Kiln Scrubber:

Lime Kiln Scrubber		
Parameter	**Monitor**	**Record**
Scrubber liquid flowrate	Continuously	3-hour block average
Scrubber pressure drop	Continuously	3-hour block average

[40 C.F.R. Part 63, Subpart MM § 63.864]

2. The CPMS range shall be determined or modified as necessary according to the procedures as specified in 40 C.F.R. § 63.864(j). [40 C.F.R. Part 63, Subpart MM]

G. CEMS

Sappi shall operate and maintain and operate the following CEMS to monitor emissions from the Lime Kiln:

Lime Kiln		
Pollutant	**Unit of Measure**	**Origin and Authority**
TRS CEMS measured as H_2S	ppmdv	06-096 C.M.R. ch. 124
O_2 CEMS	%	06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 124

H. Recordkeeping

1. Sappi shall comply with the recordkeeping and reporting requirements of 40 C.F.R. Part 63, Subpart MM and the applicable provisions of Subpart A for the Lime Kiln. [40 C.F.R. Part 63, Subpart MM]

2. Sappi shall implement corrective action when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(1)(ii)]

3. Sappi shall not exceed 6 or more 3-hour MACT CMS values within any 6-month reporting period which are outside the range of values established pursuant to 40 C.F.R. Part 63.864(j). [40 C.F.R. Part 63, Subpart MM § 63.864(k)(2)(iii)]

(21) **PCC Plant**

A. Emission Limits

1. BPT establishes an applicable PM limit of 0.01 grains/dscf for each PCC silo baghouse and 1 ton per year total from all PCC silo baghouses. [A-19-71-AA-M (6/23/98)]
2. The combined PM emission rate from the PCC carbonators and the lime kiln shall not exceed the licensed Lime Kiln PM lb/hr limit. [A-19-71-AA-M (6/23/98)]
3. Visible emissions from each PCC silo baghouse shall not exceed an opacity of 10% opacity on a six-minute average basis. The PCC Plant shall take correction action if visible emissions from the baghouses exceed an opacity of 5 percent on a six (6) minute average basis. [06-096 C.M.R. ch. 101]

B. Emission Limit Compliance Methods

1. Compliance with the visible emission limit for the PCC silo baghouse limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B, Method 9 upon request by the Department. [A-19-70-A-I (12/2/04)]

2. Compliance with the combined PM emission limit for the PCC carbonators and Lime Kiln shall be demonstrated by stack testing upon request by the Department. In order to demonstrate compliance with the combined PM limit, Sappi may perform stack testing of the total Lime Kiln exhaust prior to PCC plant gas extraction and testing of the PCC plant gas return line to the Main Stack and then ratio the results to calculate the combined PM emissions. [A-19-70-A-I (12/2/04)]

C. Control Equipment

While operating the carbonators, the PCC plant shall operate the corresponding two stage demisters with water spray cleaning for particulate matter emissions. [A-19-71-AA-M (6/23/98)]

While operating the two lime silos, the PCC plant shall operate the corresponding two baghouses for control of particulate matter emissions. [A-19-71-AA-M (6/23/98)]

D. Periodic monitoring shall include a maintenance log recording the date of all routine and non-routine maintenance of the two stage demisters with water spray cleaning and the two lime silo baghouses. [A-19-71-AA-M (6/23/98)]

E. Emissions from the PCC carbonators shall vent through the Main Stack. [A-19-71-AA-M (6/23/98)]

(22) **Lime Slakers #1 & #2**

A. Emission Limits

Visible emissions from each lime slaker shall not exceed 20 percent opacity on a six (6) minute block average basis. [06-096 C.M.R. ch. 101]

B. Emission Limit Compliance Methods

Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B, Method 9 upon request by the Department. [A-19-70-A-I (12/2/04)]

C. Control Equipment

While operating Lime Slakers #1 or #2, Sappi shall operate the corresponding wetted fan scrubber for the control of particulate matter emissions. Each wetted fan scrubber may be operated with water, a green liquor solution, or both as the scrubbing media. [A-19-70-A-I (12/2/04)]

D. Periodic Monitoring

Periodic Monitoring for the Lime Slaker Scrubbers #1 & #2 shall consist of the following: [A-19-70-A-I (12/2/04)]

Monitor	Units of Measure	Record
Total scrubber media flow rate	gallons/minute	Once every 12-hour shift

(23) **Bleaching System**

A. Emission Limits

1. Emissions from the Bleaching System Central Scrubber or Back-up Scrubber shall not exceed the following limits. Unless otherwise specified, the averaging times for the emission limits in this table are based on the specified averaging time of the applicable test method for each pollutant.

Central Scrubber or Back-up Scrubber		
Pollutant	**Emission Limit**	**Origin and Authority**
Cl_2	9 ppmdv	A-19-77-13-M (2/24/20)
ClO_2	9 ppmdv	A-19-77-13-M (2/24/20)

Enforceable by State-only

2. The "Bleaching System" as defined by 40 C.F.R. 63.441 is subject to and shall comply with the requirements of 40 C.F.R. Part 63, Subpart S, § 63.445(c). To meet 40 C.F.R. Part 63, Subpart S § 63.445, Sappi shall comply with the following:
   a. reduce total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight; or
   b. achieve a treatment outlet mass concentration of 10 parts per million or less by volume of total chlorinated HAP; or
   c. achieve a treatment device outlet emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.

For purposes of complying with the Bleaching System requirements above, Sappi shall measure the total HAP concentration as the sum of all individual chlorinated HAPs or as chlorine, as provided in § 63.457(h) using NCASI Method 520 for sampling chlorine and chlorine dioxide or an alternative method approved by the Department.
[40 C.F.R. Part 63, Subpart S]

B. Control Equipment

1. While operating the Bleaching System, Sappi shall operate either the Central Scrubber or Back-Up Scrubber for the control of chlorine and chlorine dioxide

emissions. The scrubbers may be operated with water, a white liquor solution, or a caustic solution as the scrubbing media. [06-096 C.M.R. ch. 140, BPT]
Enforceable by State-only

2. The following process units are subject to collection and control under the 40 C.F.R. Part 63, Subpart S requirements:
   a. D1 and D2 towers (the D100 towers if vented)
   b. D100, D1, and D2 washer hoods
   c. D100, D1, and D2 seal tanks
   d. Blend Chest

[40 C.F.R. Part 63, Subpart S]

C. Emission Limit Compliance Methods

1. Sappi shall perform compliance testing for the Central Scrubber once every five calendar years in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide.

[06-096 C.M.R. ch. 140, A-19-70-F-A (12/9/09), and 38 M.R.S. 589, Subsection 2]

2. Sappi shall perform compliance testing while operating the Back-up Scrubber by once every five calendar years thereafter (to the extent that Sappi wishes to operate in this mode) in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide.

[06-096 C.M.R. ch. 140, A-19-70-F-A (12/9/09), & 38 M.R.S. 589, Subsection 2]

3. Sappi shall perform compliance testing while venting the S-10 tower to atmosphere once every five calendar years, to the extent Sappi wishes to operate in this mode, in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide.

[06-096 C.M.R. ch. 140, A-19-70-F-A (12/9/09), and 38 M.R.S. 589, Subsection 2]

D. Components of the Bleaching System subject to 40 C.F.R. Part 63, Subpart S, § 63.445 shall meet the standards for enclosure and closed-vent systems specified in 40 C.F.R. § 63.450.

E. Parameter Monitoring

1. Sappi shall monitor and record the following parameters for the Central Scrubber:

Central Scrubber		
Parameter	**Monitor**	**Record**
gas scrubber liquid influent flow rate	Continuously	3-hour block average
gas scrubber vent gas inlet or gas scrubber ID fan amps	Continuously	3-hour block average

Central Scrubber		
Parameter	**Monitor**	**Record**
pH or ORP of the gas scrubber effluent or pH ORP of the gas scrubber liquid recycle influent flow	Continuously	3-hour block average

2. Sappi shall monitor and record the following parameters for the Back-up Scrubber:

Parameter	Monitor	Record
gas scrubber liquid influent flow rate	Continuously	3-hour block average
gas scrubber FD fan ON/OFF status	Continuously	Fan status once every 15 minutes
pH or ORP of the gas scrubber effluent or pH or ORP of the gas scrubber liquid recycle influent flow	Continuously	3-hour block average

[06-096 C.M.R. ch. 140, 40 C.F.R. Part 63, Subpart S]

3. To establish or reestablish the value for each operating parameter required by Subpart S, Sappi shall use the procedures set forth in 40 C.F.R. Part 63, Subpart S, § 63.453 (n). [40 C.F.R. Part 63, Subpart S, § 63.453(n)]

4. Sappi shall operate the Cl_2 and ClO_2 Scrubbers in a manner consistent with the minimum or maximum (as appropriate) operating parameter values established as required in Subpart S. Operation of a control device below minimum operating parameter values or above maximum operating parameter values established under Subpart S or failure to perform procedures required by Subpart S shall constitute a violation of the applicable emission standard of Subpart S and shall be reported as a period of excess emissions. [40 C.F.R. Part 63, Subpart S, § 63.453 (o)]

5. Records shall be maintained demonstrating which monitoring option is being used at all times. [40 C.F.R. Part 63, Subpart S]

F. Sappi shall comply with applicable recordkeeping, reporting, and test methods and procedures requirements of Subpart S and as approved in alternative monitoring plans. [40 C.F.R. Part 63, Subpart S, § 63.454 (g); § 63.455 (b) and (e); § 63.457]

(24) **Digester System**

A. Emissions of TRS in excess of 0.75 lb/hr or 5 ppmdv on a 12-hour block average basis from the "Digester System" (excluding the chip bin), as defined by 06-096 C.M.R. ch. 124, shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Digester System. [06-096 C.M.R. ch. 124]

B. The "Digester System" as defined by 40 C.F.R. § 63.441 is subject to and shall comply with 40 C.F.R. Part 63 Subpart S. [40 C.F.R. Part 63, Subpart S]

(25) **Pulp Washing System**

A. Emissions of TRS greater than 0.75 lb/hr or 5 ppmdv on a 12-hour block average basis from the "Brownstock Washer System", as defined by 06-096 C.M.R. ch. 124, shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Brownstock Washer System. [06-096 C.M.R. ch. 124]

B. The "Pulp Washing System" as defined by 40 C.F.R. 63.441 is subject to and shall comply with 40 C.F.R. Part 63, Subpart S. [40 C.F.R. Part 63, Subpart S]

(26) **Evaporator System**

A. Emissions of TRS in excess of 0.75 lb/hr or 5 ppmdv on a 12-hour block average basis from the "Evaporator System", as defined by 06-096 C.M.R. ch. 124 shall be collected by the LVHC or HVLC system and controlled in accordance with 06-096 C.M.R. ch. 124. The venting allowances in 06-096 C.M.R. ch. 124 shall apply to the Evaporator System. [06-096 C.M.R. ch. 115 (BPT), 06-096 C.M.R. ch. 124, and 40 C.F.R. Part 60, Subpart BB]

B. The "Evaporator System" as defined by 40 C.F.R. § 63.441 is subject to and shall comply with 40 C.F.R. Part 63, Subpart S. [40 C.F.R. Part 63, Subpart S]

C. The "Evaporator System" as defined by 40 C.F.R. 60.280 is subject to and shall comply with 40 C.F.R. Part 60, Subpart BB. [40 C.F.R. Part 63, Subpart BB]

(27) **Condensate Collection System**

A. Compliance with 40 C.F.R. § 63.446(c)(3) (the collection of 11.1 lbs of HAP per ton of oven dry pulp) and 40 C.F.R. § 64.446(e)(5) (the treatment of 10.2 lbs of HAP per ton of oven dry pulp) shall be demonstrated utilizing any of the following condensate streams, or portions thereof: [40 C.F.R. Part 63, Subpart S]
   1. Digester system condensates from the Turpentine Decanter
   2. Kraft condensates from the Turpentine/Methanol storage tank
   3. Evaporator System condensates following the stage where the first weak black liquor is fed and vacuum system condensates, which may include the following:
      a. #5 and #6 Evaporator condensates
      b. #5 and #6 Evaporator preheater body condensates
      c. Main Surface Condenser condensates
      d. Auxiliary Surface Condenser condensates
      e. Steam Ejector Condenser condensates

4. HVLC condensates from the High-Volume Cooler Condenser
5. Other HVLC and LVHC Condensate streams as necessary

B. As provided for in 40 C.F.R. 63.457(g), Sappi shall measure the total HAP concentration as methanol for purposes of complying with 40 C.F.R. § 63.446. [40 C.F.R. Part 63, Subpart S]

C. Sappi shall send enough recycled condensate to the Brownstock Rewasher to achieve, in combination with condensates treated per Condition 27 (E), the removal of 10.2 lbs of HAP per ton of oven dry pulp as specified in 40 C.F.R. § 63.446(e). While receiving recycled condensates, the Brownstock Rewasher shall meet the equipment system requirements of 40 C.F.R. § 63.443(c) and (d). [40 C.F.R. Part 63, Subpart S]

D. Recycled condensates sent to the Brownstock Rewasher meeting the requirements of 63.443(c) and (d) shall be considered to be receiving 98% treatment. [40 C.F.R. Part 63, Subpart S]

E. The kraft condensates generated by the Steam Stripper System that are stored within the Turpentine/Methanol Storage Tank that are fired within Power Boiler #1 or #2, or the Lime Kiln shall be considered to be receiving 100% treatment. [40 C.F.R. Part 63, Subpart S]

F. Pursuant to 40 C.F.R. § 63.453(i), Sappi shall operate level indicators on the following sources to indicate overflows or condensate loss as an approved CMS to demonstrate compliance with 63.446(c): [40 C.F.R. Part 63, Subpart S]

1. Stripped Condensate Tank
2. Turpentine/Methanol Storage Tank
3. Contaminated Condensate Surge Tank
4. #1 Evaporator Seal Tank
5. #2 Evaporator Seal Tank
6. High Volume Cooler Condensor
7. Air Stripper
8. Steam Stripper

G. The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 C.F.R. § 63.453(n). Any overflow shall be recorded and documented to demonstrate compliance with the collection standard. [40 C.F.R. § 63.453(n)]

H. Pursuant to 40 C.F.R. § 63.446(g), for the recycled condensates sent to the Brownstock Rewasher, periods of excess emissions reported under 40 C.F.R. § 63.455 shall not be a violation of 40 C.F.R. § 63.446(d) and (e)(5) provided that such excess emissions

(including periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 10%.
[40 C.F.R. § 63.446(g)]

(28) **LVHC and HVLC System**

A. Pursuant to 06-096 C.M.R. ch. 124, Sappi shall not allow venting of TRS from the LVHC system or associated equipment that is required to be controlled which:
   1. exceeds 40 minutes in duration; or
   2. contributes to an aggregate TRS venting of more than 1.0% of quarterly operation time.

   Venting within these parameters are not violations of 06-096 C.M.R. ch. 124.
   [06-096 C.M.R. ch. 124]

B. Pursuant to 06-096 C.M.R. ch. 124, Sappi shall submit with the quarterly report specified in Condition (42) all events of venting of TRS from the LVHC system of greater than fifteen (15) minutes when the aggregate TRS venting exceeds 0.5% of quarterly operating time. Pursuant to Chapter 124, Sappi shall also submit these reports with the quarterly report all venting of TRS from the LVHC system or associated equipment for greater than one (1) minute which contributes to an aggregate TRS venting from the LVHC system of more than one (1)% of quarterly operating time. [06-096 C.M.R. ch. 124]

C. Pursuant to 06-096 C.M.R. ch. 124, any TRS venting from the LVHC system or steam stripper collection system greater than 15 minutes shall be reported to the Department by the end of the next State working day. Sappi shall submit with the quarterly reports specified in Condition (42) the applicable reports outlined in Section 5(B) & (C) of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 124]

D. Pursuant to 06-096 C.M.R. ch. 124, any TRS venting from the HVLC system greater than 4 hours shall be reported to the Department by the end of the next State working day pursuant to 06-096 C.M.R. ch. 124. Sappi shall submit with the quarterly reports specified in Condition (41) the applicable reports outlined in Section 5(B) & (C) of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 124]

E. LVHC gases shall be combusted in Power Boiler #1 less than 1,314 hours in a calendar year. Compliance with the condition is based on the summation of hours that either the digester system, or multi-effect evaporator system is operating and being collected by the LVHC system and combusted in Power Boiler #1. [A-19-70-A-I (12/2/04)]

F. HVLC gases shall be combusted in Power Boiler #1 less than 1,314 hours in a calendar year. Compliance with the condition is based on hours that the brownstock rewasher is operating and being collected by the HVLC system and combusted in Power Boiler #1. Time when the HVLC system is used for the sole purpose of

conveying the LVHC gases for treatment in Power Boiler #1 shall not be counted towards the HVLC 1,314-hour limit. [A-19-70-A-I (12/2/04)]

G. The "LVHC System" and "HVLC System" as defined by 40 C.F.R. 63.441 are to be controlled in accordance with 40 C.F.R. Part 63 Subpart S. The venting allowances in 40 C.F.R. Part 63, Subpart S shall apply to the LVHC System and HVLC System. [40 C.F.R. Part 63, Subpart S]

H. As an approved alternative to 40 C.F.R. § 63.450(d)(1) of Subpart S, Sappi shall, on each bypass line in the LVHC and HVLC system, install, calibrate, maintain, and operate, according to manufacturer's specifications, a computer monitored valve position indicator that provides a record of the valve position (i.e., open or closed) on the bypass line at least once every 15 minutes. [40 C.F.R. Part 63, Subpart S]

I. The following source vents shall be collected by the LVHC or HVLC system pursuant to 40 C.F.R. § 63.443(a)(1)(i). The LVHC or HVLC system shall be considered to begin at the locations designated: [40 C.F.R. Part 63, Subpart S]
   1. Digester System at the Secondary Relief Condenser by the LVHC System
   2. Digester System at the #3 Flash Tank and Chip Bin by the HVLC System
   3. Turpentine System at the Turpentine Decanter by the LVHC System
   4. Evaporator System at the Second Steam Ejector Condenser and the #1 and #2 Seal Tanks by the LVHC System
   5. Steam Stripper System at the Secondary Reflux Condenser by the LVHC System

J. The following condensate storage tanks shall be collected by the LVHC or HVLC system pursuant to 40 C.F.R. § 63.446(d)(2)(i):
   1. Contaminated Condensate Surge Tank by the LVHC System
   2. The Turpentine/Methanol Storage Tank by the LVHC System
   3. The Stripped Condensate Tank by the HVLC system

   [40 C.F.R. Part 63, Subpart S]

K. The following sources shall be enclosed and vented into the HVLC collection system pursuant to 40 C.F.R. § 63.443(a)(1)(iii):
   1. Atmospheric Diffusion Washer and filtrate tanks
   2. Brownstock Rewasher and seal tank
   3. Pressure Diffusion Washer filtrate tank

   [40 C.F.R. Part 63, Subpart S]

L. Any leaks which are found during the Site Inspections as required by 40 C.F.R. § 63.453(k) and 40 C.F.R. § 63.454(b) shall not be a violation of § 63.446 and 40 C.F.R. § 63.450 or this License, provided the steps as specified by 40 C.F.R. § 63.453(k)(6) are taken. [40 C.F.R. Part 63, Subpart S]

M. 06-096 C.M.R. ch. 124 defines which sources are to be collected by the HVLC System. Pursuant to 06-096 C.M.R. ch. 124, the HVLC system shall maintain a 96% collection and control uptime based on quarterly brownstock washer system operating time on a total mass weighted basis, pursuant to Chapter 124. [06-096 C.M.R. ch. 124]

N. Pursuant to 40 C.F.R. Part § 63.443(e), excess emissions reported under § 63.455 shall not be a violation of § 63.443(c) and (d), or this License, provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed one percent for control devices used to reduce the total HAP emission from the LVHC system; four percent for control devices used to reduce the total HAP emissions from the HVLC system; and four percent for control devices used to reduce the total HAP emission from both the LVHC and HVLC systems.
[40 C.F.R. Part 63, Subpart S, § 63.443(e)]

(29) **Closed Collection and Vent System Monitoring**

As approved by EPA in response to an alternative monitoring request dated March 25, 2002:

A. For equipment required to be inspected per 40 C.F.R. § 63.453(k) and (l), Sappi shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an or potential danger, or the equipment could not be inspected without elevating the inspection personnel more than 6 feet above a supported surface. The site-specific monitoring plan must identify exempted equipment and describe how the equipment will be inspected and/or repaired during periods determined safe which must be at least once during each permit term. [40 C.F.R. Part 63, Subpart S, § 63.453(k) and (l)]

B. Sappi shall perform inspections in accordance with 40 C.F.R. § 63.453(k) and (l) once during each calendar month with at least 21 days elapsed time between inspections. [40 C.F.R. Part 63, Subpart S, § 63.453(k) and (l)]

(30) **Paper Machines and On-Machine Coaters**

No.1 Paper Machine [A-19-77-11-A (4/20/17)]

A. The maximum heat input of the No.1 Paper Machine size press dryer and coating dryers equipped with natural gas-fired burners shall not exceed the following:

No.1 Paper Machine Size Press and Coating Natural Gas Dryers	
Equipment	**Maximum Capacity (MMBtu/hr)**
Size Press Dryer	18.5
High Intensity Coating Dryer #1	10.2
Opti Dry Coating Dryer #1	11.6
High Intensity Coating Dryer #2	10.2
Opti Dry Coating Dryer #2	11.6
High Intensity Coating Dryer #3	10.2
Opti Dry Coating Dryer #3	11.6

B. Emission Limits

1. The combined emissions from the combustion of natural gas in the No.1 Paper Machine size press dryer and coating dryers shall not exceed the following:

No.1 Paper Machine Size Press and Coating Natural Gas Dryers	
Pollutant	**Emission Limit**
PM	0.16 lb/hr
PM_{10}	0.63 lb/hr
$PM_{2.5}$	0.63 lb/hr
SO_2	0.084 lb/hr
NO_x	6.3 lb/hr
CO	6.7 lb/hr
VOC	0.46 lb/hr

2. Visible Emissions from each of the size press natural gas dryer exhausts and each of the coating natural gas dryer exhausts shall not exceed an opacity of 10 percent on a six (6) minute block average basis.

3. Control Equipment

   Sappi shall use good combustion practices, fire natural gas, and use Low NO_x burners on the No.1 Paper Machine size press and coating dryers.

4. Sappi shall maintain records of production and of coating additives and ingredients used in the paper or substrate formation associated with the on-machine coaters. Annual production and VOC emissions based on site specific and industry emission

factors are to be reported in the annual emissions reporting required by 06-096 C.M.R. ch. 137. [06-096 C.M.R. ch. 140, BPT]

(31) **Woodroom Debarker** [A-19-77-10-A (11/10/16)]

A. Sappi shall operate the Debarker exhaust system cyclone separator when the Debarker is in operation.

B. Visible emissions from the Debarker exhaust system cyclone separator shall not exceed an opacity of 20 percent on a six (6) minute block average basis.

(32) **Lime Kiln Diesel and Emergency Diesels #1, #2, and #3**

A. Fuels

1. The Lime Kiln Diesel and the Emergency Diesels #1, #2, and #3 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]

2. The distillate fuel sulfur content for the Lime Kiln Diesel and the Emergency Diesels #1, #2, and #3 shall be limited to 0.0015% sulfur, by weight. [06-096 C.M.R. ch. 140, BPT]

B. Emissions Limits

1. Emissions from the engines shall not exceed the following limits:

Lime Kiln Diesel and Emergency Diesels #1, #2, and #3						
Emission Unit	**PM (lb/hr)**	**PM_{10} (lb/hr)** Note (1)	**SO_2 (lb/hr)**	**NOx (lb/hr)**	**CO (lb/hr)**	**VOC (lb/hr)**
Emergency Diesel #1 Paper Mill Fire Pump (2.63 MMBtu/hr)	0.32	0.32	0.14	11.58	2.49	0.92
Emergency Diesel #2 Pulp Mill Fire Pump (2.32 MMBtu/hr)	0.28	0.28	0.12	10.24	2.2	0.81
Emergency Diesel #3 River Pump House (2.98 MMBtu/hr)	0.36	0.36	0.15	13.12	2.83	1.04
Lime Kiln Diesel (0.15 MMBtu/hr)	0.02	0.02	0.01	0.66	0.14	0.05

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.
[06-096 C.M.R. ch. 140, BPT], **Enforceable by State-only**

2. Visible emissions from each diesel engine shall not exceed an opacity of 20 percent on a six (6) minute block average basis. [06-096 C.M.R. ch. 101, § 3 (A)(4)(a)]

   During periods of startup, in lieu of visible emissions standards, Sappi may elect to comply with the following work practice standards:

   a. Maintain a log (written or electronic) of the date, time, and duration of all unit startups which result in Sappi electing to comply with this section.

   b. Operate the unit in accordance with the manufacturer's emission-related operating instructions.

   c. 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, after which time the non-startup emission limitations shall apply.

   d. Operate the unit, 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.
   [06-096 C.M.R. ch. 101, § 4 (B)]

C. The Lime Kiln Diesel and the Emergency Diesels #1, #2, and #3 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. Sappi shall meet the following operational limitations for each of the units annually or otherwise in accordance with 40 C.F.R. Part 63, Subpart ZZZZ:
   a. Change the oil and filter,
   b. Inspect the air cleaner, and
   c. Inspect the hoses and belts and replace as necessary.
   [40 C.F.R. § 63.6602 and Table 2(c)]

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

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

4. Maintenance, Testing, and Non-Emergency Operating Situations for the Emergency Diesels #1, #2, and #3:
   a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency 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 unless the conditions in § 63.6640(f)(3)(ii) are met). These limits are based on a calendar year. [40 C.F.R. § 63.6640(f)]
   b. Sappi shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Documentation shall include how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 C.F.R. § 63.6655(f)]

5. Operation and Maintenance
   The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Sappi shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Sappi shall keep records of the maintenance conducted on the engine. [40 C.F.R. § 63.6625(e) and § 63.6655(e)]

6. Startup Idle and Startup Time Minimization
   During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 C.F.R. § 63.6625(h) and Table 2c]

(33) **No. 2 Power Boiler Scrubber Diesel**

A. Fuels

The No. 2 Power Boiler Scrubber Diesel is licensed to fire distillate fuel. [A-19-77-3-A (7/16/08)]

B. Emission Limits

1. Emissions from the No. 2 Power Boiler Scrubber Diesel shall not exceed the following limits:

No. 2 Power Boiler Scrubber Diesel		
Pollutant	**Emission Limit**	**Origin and Authority**
PM	0.08 lb/MMBtu	A-19-77-3-A (7/16/08)
	0.2 g/kW-hr	40 C.F.R. § 60.4205(b)
	0.25 lb/hr	A-19-77-3-A (7/16/08)
PM_{10} Note (1)	0.25 lb/hr	A-19-77-3-A (7/16/08)
SO_2	0.17 lb/hr	A-19-77-3-A (7/16/08)
NOx + VOC	6.4 g/kW-hr	40 C.F.R. § 60.4205(b)
	7.94 lb/hr	A-19-77-3-A (7/16/08)
CO	3.5 g/kW-hr	40 C.F.R. § 60.4205(b)
	4.34 lb/hr	A-19-77-3-A (7/16/08)

Note (1): The PM_{10} limits are based on filterable particulate matter only and do not include condensables.

[40 C.F.R. § 60.4205(b)]

2. Visible emissions from the No.2 Power Boiler Scrubber Diesel shall not exceed an opacity of:
   a. 20 percent during the acceleration mode;
   b. 15 percent during the lugging mode; and
   c. 50 percent during the peaks in either the acceleration or lugging modes.
   [50 C.F.R. § 60.4205(b)]

C. No.2 Power Boiler Scrubber Diesel shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

1. Manufacturer Certification
   The engine shall be certified by the manufacturer as meeting the emission standards for new non-road compression ignition engines found in § 60.4202.
   [40 C.F.R. § 60.4210(b)]

2. Ultra-Low Sulfur Diesel Fuel
   The diesel fuel fired in the engine shall not exceed 15 ppm sulfur by weight (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

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

4. Annual Time Limit for Maintenance and Testing
   a. The engine shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency 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 unless the conditions in § 60.4211(f)(3)(i) are met). These limits are based on a calendar year. [40 C.F.R. § 60.4211(f)]
   b. Sappi shall keep records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Documentation shall include the time of operation of the engine and the reason the engine was in operation during that time. [40 C.F.R. § 60.4214(b)]

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

(34) **Organic Liquids Bulk Storage Tanks**

The Woodyard Diesel Fuel Storage Tank, Turpentine/Methanol Storage Tank, Turpentine Decantor, Methanol Bulk Storage Tank, and No.2 Fuel Oil Storage Tank are subject to NSPS 40 C.F.R. Part 60, Subpart Kb. Sappi shall keep records showing the dimension and an analysis showing the capacity of these storage tanks for the life of the tank. [40 C.F.R. § 60.116b (a) and (b)]

(35) **Bulk Handling Systems** [A-19-70-A-I (12/2/04)]

A. Sappi shall maintain a Best Management Practice (BMP) Plan for the following bulk handling systems:

Bulk Handling Systems	Control Equipment
4 Paper Mill Starch Silos	1 Baghouse for each silo
Paper Mill $CaCO_3$ or Starch Silo	1 Baghouse
Power Boiler #2 Soda Ash Handling	Wetted baffles
Power Boiler #2 Fly Ash Handling	1 Baghouse
Wood Pellet Silo Systems #1 & #2 and Conveyor System	1 Baghouse for all three sources
Reburned and Fresh Lime Silo	1 Baghouse for both silos
Talc Silo	1 Baghouse
2 PCC Plant Silos	1 Baghouse for each silo

B. For the bulk handling systems, Sappi shall:
   1. Maintain all baghouses and wetted baffles to achieve visible emissions no greater than 10% opacity on a six (6) minute average basis except for no more than one (1) six (6) minute average in a one-hour period.
   2. Take corrective action if visible emissions from the baghouses exceed 5% opacity.
   3. Start the clean-up of all spills within 24 hours of the occurrence of each spill.
   4. The BMP Plan shall describe the process to inspect all unloading systems for leaks and malfunctions.
   5. Discontinue unloading from trucks and/or rail cars until leaks and/or malfunctions are eliminated.
   6. Maintain records of the dates of all maintenance performed on the baghouses.
   7. Maintain documentation that Sappi is maintaining a BMP Plan for the bulk handling systems.

   Sappi may change any of the systems above in order to vent the control equipment inside of a building. For those units which are vented inside a building, the requirements of this Condition shall not apply.
   [06-096 C.M.R. ch. 140, BPT]

C. Compliance with the visible emissions limit shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B, Method 9 upon request by the Department. [A-19-70-A-I (12/2/04)]

(36) **Waste Water Treatment Plant System**

Sappi shall operate the waste water treatment plant system as required by effluent discharge license restrictions issued pursuant to its NPDES Permit and/or MEPDES Permit.
[06-096 C.M.R. ch. 134]

(37) **Solvent Cleaners**

A. The following at Sappi are exempt from the requirements of 06-096 C.M.R. ch. 130:
   1. Solvent cleaners using less than two liters (68 ounces) 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. Cold cleaning machines that use more than 68 ounces of solvent containing greater than 5% VOC by weight at Sappi are subject to the requirements of *Solvent Cleaners*, 06-096 C.M.R. ch. 130, which include:

1. Sappi shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 130]
   a. Sappi shall not use any halogenated solvents in the solvent cleaners. [06-096 C.M.R. ch. 140, BPT]
   b. Sappi shall keep the degreasers' Safety Data Sheets (SDS) on file for those solvent cleaners exempt from 06-096 C.M.R. ch. 130 based on the use of solvents containing less than 5% VOC by weight. [06-096 C.M.R. ch. 140, BPT]
2. The cold cleaning machines 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. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover. [06-096 C.M.R. ch. 130]
3. Sappi shall attach a permanent conspicuous label to each unit summarizing the following operational standards
   a. Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;
   b. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;
   c. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);
   d. The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;
   e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;
   f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with 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 and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;

h. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and
i. The owner or operator shall ensure that the solvent level does not exceed the fill line.

(38) **Fugitive Emissions**

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

(39) **General Process Sources**

Visible emissions from any general process source not specifically addressed in this license shall not exceed an opacity of 20 percent on a six (6) minute block average basis.
[06-096 C.M.R. ch. 101 § 3 (B)(4)]

(40) **Parameter Monitor General Requirements**
[06-096 C.M.R. ch. 117, 06-096 C.M.R. ch. 140]]

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 or by applicable Subparts of 40 C.F.R. Part 60 or Part 63.

B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. Unless otherwise specified by the applicable 40 C.F.R. Part 60 Subpart or Part 63 Subpart, "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 constitutes a valid hour.

C. Each parameter monitor required by this license must record accurate and reliable data. Parameter monitors not already subject to monitor up-time requirements of 40 C.F.R. Part 60 or Part 63 shall record accurate and reliable data at least 98% of the associated emissions unit operating time within any quarter of the calendar year. If the monitor falls below this threshold, the Department may initiate enforcement action and 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 satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
[06-096 C.M.R. ch. 140] **Enforceable by State-only**

(41) **CEMS and Recordkeeping**

A. The licensee shall maintain records documenting that all CEMS and COMS required by this license 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

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]

(42) **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. [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 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.

(43) **Semiannual Reporting**

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

A. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date.
B. Each semiannual report shall include a summary of the periodic monitoring required by this license.
C. Each semiannual report shall include the annual capacity factor of the unit for each fuel.
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. [06-096 C.M.R. ch. 140]

(44) **Annual Compliance Certification**

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

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]

(45) **Submission of Reports**

All reports and other documents required to be submitted to the Department shall be deemed submitted on the date post marked or the date received by the Department, whichever is earlier.

(46) **Annual Emission Statements**

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. 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)]

C. Emissions from Organic Liquid Storage Tanks, Bulk Handling Systems, Waste Water Treatment Plant, Landfill, Woodroom, and Insignificant Activities shall not be included in annual emissions statements unless requested by the Department.

(47) **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	-
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. 118	Gasoline Dispensing Facilities Vapor Control	-
38 M.R.S. Section 3 §585-B, §§ 5	Standards for Mercury Use	Enforceable by State-only

(48) **Units Containing Ozone Depleting Substances**

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

(49) **Asbestos Abatement**

When undertaking asbestos abatement activities, Sappi shall comply with the applicable requirements of 40 C.F.R. Part 61, Subpart M, *National Emission Standard for Asbestos*.

(50) **Risk Management Plan**

When the total quantity of chlorine dioxide contained in the process exceeds the applicable threshold, Sappi shall comply with the applicable requirements of 40 C.F.R. Part 68, *Chemical Accident Prevention Provisions*. Pursuant to 40 C.F.R. Part 85.115(b)(1), chlorine dioxide that is present in a mixture below one percent by weight need not be considered when determining whether more than a threshold quantity is present.

(51) **Expiration of a Part 70 license**

A. Sappi shall submit a complete Part 70 renewal application at least six months but no more than 18 months prior to the expiration of this air emission 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 Part 70 license renewal application of the Part 70 license. An existing source which has submitted 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**

(52) **New Source Review**

Sappi is subject to all previous New Source Review (NSR) requirements as set forth in the Order section of this Part 70 air emissions license and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emissions License, A-19-70-E-R/A, expires and a timely and sufficient application is not filed.

DONE AND DATED IN AUGUSTA, MAINE THIS 9th DAY OF APRIL, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for _____
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 6 months prior to expiration but no earlier than 18 months, then pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/27/2009
Date of application acceptance: 5/28/2009

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

FILED

APR 09, 2021

State of Maine
Board of Environmental Protection