

**S.D. Warren Company  
Somerset County  
Skowhegan, Maine  
A-19-70-A-I**

**Departmental  
Findings of Fact and Order  
Part 70 Air Emission License**

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

A. Introduction

FACILITY	S.D. Warren Company (SDW or the Mill)
LICENSE NUMBER	A-19-70-A-I
LICENSE TYPE	Initial Part 70 License
NAICS CODES	322121
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	Skowhegan, Maine
DATE OF LICENSE ISSUANCE	December 2, 2004
LICENSE EXPIRATION DATE	December 2, 2009

B. Emission Equipment

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

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
Package Boiler	70.6 MMBtu/hr	Fuel Burning
Power Boiler #1	848 MMBtu/hr	Fuel Burning
Power Boiler #2	1300 MMBtu/hr	Fuel Burning
Recovery Boiler	5.1 MMlbs BLS/day	Process Equipment
Smelt Tanks #1 and #2	N/A	Process Equipment
Lime Kiln	92.1 MMBtu/hr	Process Equipment
PCC Plant	90,000 dry ton/day	Process Equipment
Lime Slakers #1 and #2	N/A	Process Equipment
Bleaching System	N/A	Process Equipment
Digester System	N/A	Process Equipment
Pulp Washing System	N/A	Process Equipment
Evaporator System	N/A	Process Equipment
Condensate Collection System	N/A	Process Equipment
LVHC and HVLC System	N/A	Process Equipment

Paper Machine #1 & online coater	N/A	Process Equipment
After Dryers #1 and #2	20 MMBtu/hr / 28 MMBtu/hr	Fuel Burning
IR Heaters #1 and #2	9 MMBtu/hr each	Fuel Burning
Paper Machine #2 & online coater	N/A	Process Equipment
Paper Machine #3 & online coater	N/A	Process Equipment
Landfill Flare	N/A	Fuel Burning
Emergency Diesel #1 (Paper Mill Fire Pump)	< 3 MMBtu/hr	Fuel Burning
Emergency Diesel #2 (Utilities/Recovery)	< 3 MMBtu/hr	Fuel Burning
Emergency Diesel #3 (River Pump House)	< 3 MMBtu/hr	Fuel Burning
Paper Machine Oil Storage Tank	15,000 gallons	Tank
#2 Fuel Oil Storage Tank	40,000 gallons	Tank
#6 Fuel Oil Storage Tank	2.3 million gallons	Tank
Bulk Handling Systems	N/A	Process Equipment
Solvent Cleaners	N/A	Process Equipment
Waste Water Treatment Plant	N/A	Process Equipment

Production capacities within the Findings of Fact of this license are referenced for the purpose of description only. Capacities that are determined to be a license limit are listed as such within the Order of the license.

SDW has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

**C. Application Classification**

The application for SDW does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

**D. Definitions / Acronyms**

#2 oil – includes #2 fuel oil and diesel fuel

BACT – Best Available Control Technology

biomass – includes purchased or mill generated biomass such as bark, woodroom rejects, wood chips, fines, rocks, sand

CEMS – Continuous Emission Monitoring System

CMS – Continuous Monitoring System

COMS – Continuous Opacity Monitoring System

HVLC gases – High Volume Low Concentration Gases (see Section II.P. for a list of sources which are required to be collected by this system)

kraft condensates – includes Steam Stripper condensed products, HVLC and LVHC condensate drains, turpentine decanter top products, pulping liquors, water

LVHC gases – Low Volume High Concentration Gases (see Section II.P. for a list of sources which are required to be collected by this system)

MACT – Maximum Achievable Control Technology

MMlbs BLS/day – Million pounds of Black Liquor Solids per Day

NSR – New Source Review

PCC – Precipitated Calcium Carbonate

sludge – includes onsite waste treatment plant primary and secondary sludge, 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. Solid oily waste also includes oil samples and the plastic bottles they were collected in.

TDF – Tire Derived Fuel

used oil – includes specification and non-specification recycled or waste oil

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

## II. EMISSION UNIT DESCRIPTION

### A. Process Description

SDW is an integrated 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 chips are stored in piles and then conveyed to the chip bin, chip steaming vessel, and then the digester. SDW 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 to supply the mill with steam. SDW 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 a chemical solution of sodium hydroxide and sodium sulfide called white liquor 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, the pulp is bleached to a desired brightness and then sent to the paper production area. In the paper production area, the bleached pulp is then used in the paper machines to make paper or is dewatered on one of the two pulp machines and stored for in-house use or sold as market 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 the 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, primarily sodium and sulfur compounds, left over after combustion of black liquor in the recovery boiler 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 tank flows to the causticizing/lime kiln area, where chemicals reclaimed from the recovery boiler and smelt tanks are further processed into the white liquor used in the digester system to cook the wood. 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 ( $\text{CaCO}_3$ ) is precipitated out as mud.

The lime mud is then washed, filtered, and sent to the lime kiln where the  $\text{CaCO}_3$  is reclaimed (carbon dioxide,  $\text{CO}_2$ , is driven off), and the recovered lime ( $\text{CaO}$ ) 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  $\text{CO}_2$ . The PCC plant reacts the flue gas  $\text{CO}_2$  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 the lime is mixed with water in the green liquor to convert the lime into hydrated lime ( $\text{Ca}(\text{OH})_2$ ).

The hydrated lime produced in the lime slakers discharge 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, sludge presses, pulp and paper production labs, environmental labs, roll wrapping, shipping and receiving operations, and a landfill.

**B. PSD/BACT Review**

An air license permitting construction of the facility was first issued by Maine DEP on November 14, 1973. Construction of the pulp mill began shortly thereafter and pulping operations began in December 1976. In the 1973 air license, as amended, 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 NSPS. On January 26, 1983 the facility's air license was renewed. The license renewal (License #2152) permitted installation of Paper Machine #1.

On July 9, 1986 Air License Amendment #1 (A-19-71-A-A) was issued which permitted 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  $\text{SO}_2$  from fossil fuel. Amendment #1 included a PSD and BACT review for Power Boiler #1. Installation of the wood pellet system on Power Boiler #1, improvements to the ESP and low  $\text{NO}_x$  burners

allowed the boiler to achieve its maximum production capacity without increasing PM or NO<sub>x</sub> emissions.

On August 23, 1989 the Maine DEP 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 air impact modeling was performed. Both of the air impact modeling analyses demonstrated that potential emissions from the Recovery Boiler, Lime Kiln, Power Boiler #1, Package Boiler, and Power Boiler #2 would meet State and Federal Ambient Air Quality Standards and increments.

**C. Package Boiler**

The Package Boiler was manufactured by Babcock & Wilcox and has with a heat input of 70.6 MMBtu/hr. The boiler is licensed to fire #2 oil, used oil, propane, or kerosene. The fuel, including used oil, shall not exceed a maximum sulfur content of 0.7% by weight. When the stub stack is used, the sulfur content of any fuel shall not exceed a maximum of 0.15% by weight.

The Package Boiler was installed in the spring of 1989, prior to the applicability date of New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Dc.

Emission limits were established for this boiler in license amendment #A-19-71-F-A. The conditions, set forth in that amendment, were determined to meet BACT and are therefore federally enforceable per minor NSR.

The Package Boiler is located at a major source of Hazardous Air Pollutants (HAPs) and will therefore be subject to the forthcoming National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD).

The Package Boiler is equipped with low NO<sub>x</sub> burners. Emissions from the Package Boiler exit through the 275 foot combined Main Stack. Based on previous modeling SDW is permitted to vent emissions from the Package Boiler through a stub stack when performing maintenance on the Main Stack provided only fuel with a sulfur content not to exceed 0.15% by weight is fired in the boiler at such times. 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 and 1994.

The Package Boiler is considered "operating" or "in operation" if any fuel is being combusted in it and steam is being produced.

Streamlining

1. Opacity
  - a. MEDEP Chapter 101, Section 2(B)(5) and Section 3 contains the only applicable opacity standards when emissions exit through the Main stack.
  - b. MEDEP Chapter 101, Section 2(B)(1)(b) contains the only applicable opacity standard when emissions exit through the Stub stack.  
**No streamlining requested.**
  
2. PM
  - a. MEDEP Chapter 103, Section 2(B)(1)(b) contains an applicable PM lb/MMBtu emission standard.
  - b. 40 CFR Part 63, Subpart DDDDD does not contain an applicable PM lb/MMBtu emission standard.  
**No streamlining requested.**
  
  - c. Best Practical Treatment (BPT) establishes the only applicable PM lb/hr emission limit. **No streamlining requested.**
  
3. PM<sub>10</sub>

BPT establishes the only applicable PM<sub>10</sub> lb/hr emission limit.  
**No streamlining requested.**
  
4. Sulfur Dioxide (SO<sub>2</sub>)
  - a. MEDEP Chapter 106, Section 2(A)(2) contains an applicable fossil fuel sulfur content standard.
  - b. BPT also establishes applicable fossil fuel sulfur content limits.  
  
SDW accepts streamlining for the fossil fuel sulfur content limits. The BPT limits are more stringent and therefore only the BPT fossil fuel sulfur content limits are included in this license.
  
  - c. BPT establishes the only applicable SO<sub>2</sub> lb/hr emission limit.  
**No streamlining requested.**
  
5. Nitrogen Oxides (NO<sub>x</sub>)
  - a. The Package Boiler is equipped with a low NO<sub>x</sub> Burner for control of NO<sub>x</sub> emissions. The low NO<sub>x</sub> Burner meets the requirement in MEDEP Chapter 138 Section 3(B)(1) to operate a low NO<sub>x</sub> burner or equivalent strategy. Therefore, the lb/MMBtu standard in MEDEP Chapter 138 does not apply to this boiler.

- b. BPT establishes the only applicable NO<sub>x</sub> lb/hr and lb/MMBtu emission limit.

**No streamlining requested.**

6. Carbon Monoxide (CO)

BPT establishes the only applicable CO lb/hr emission limit.

**No streamlining requested.**

7. Volatile Organic Compounds (VOC)

BPT establishes the only applicable VOC lb/hr emission limit.

**No streamlining requested.**

#### Periodic Monitoring

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

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, NO<sub>x</sub>, CO, VOC, and opacity. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting SDW to perform testing and may take enforcement action for any violations discovered.

#### Parameter Monitors

There are no Parameter Monitors required for the Package Boiler.

#### COMS and CEMS

There are no COMS or CEMS required to be operated for the Package Boiler or for Stub Stack operation.

#### Control Equipment

Control equipment for the Package Boiler consists of the low NO<sub>x</sub> burner for NO<sub>x</sub> emissions.

#### D. Power Boiler #1 (PB#1)

PB#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. This boiler is licensed to fire #6 oil, #2 oil, used oil, TDF, wood pellets, biomass, waste paper, sludge, LVHC gases, HVLC gases, solid oily waste, non-hazardous waste solvent rags, and kraft condensates. The fuel oil including used oil shall not exceed a maximum sulfur content of 2.0% by weight.



Pursuant to an investigation by EPA, an Administrative Order was issued on June 8, 2004 addressing NSPS Subpart Db applicability of PB#1. The PB#1 first full year of operation was 1977. Since November 1977, PB#1 has been limited, by a computer control system, to firing less than 250 MMBtu/hr of fossil fuels. EPA has determined that such a system by itself was not sufficient to derate the boiler for the purposes of avoiding NSPS. Therefore, SDW was required to make the following changes:

1. Replace the oil line that supplies oil to both PB#1 and the Recovery Boiler with a dedicated line for PB#1.
2. 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.
3. The following set points are to be used 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; PB#1 pump  $\leq$  27.6 gal/min.

PB#1 is not an electric utility steam-generating unit and is therefore not subject to NSPS 40 CFR Part 60 Subpart Da.

PB#1 is located at a major source of HAPs and will therefore be subject to the forthcoming NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD).

PB#1 is equipped with multicyclones and an electrostatic precipitator (ESP) for control of particulate matter. The multicyclones and the ESP were installed in 1981. In 1986 low NO<sub>x</sub> burners were installed. SDW operates Continuous Emission Monitors (CEMS) for SO<sub>2</sub>, NO<sub>x</sub>, and O<sub>2</sub> on the exhaust of PB#1.

Emissions exit through the 275 ft. combined Main Stack. Maximum and average emissions from the PB#1 were modeled and compliance with ambient standards and increments was demonstrated as part of the three PSD/NSR licenses (Air License Amendments #1, #4 and #9) which were issued in 1986, 1989, and 1994.

On March 13, 2002, SDW was issued Air License Amendment #21 (A-19-71-AE-M) which permitted the replacement of the existing tangential overfire air (OFA) system in PB#1 with an opposed wall system as a pollution control project pursuant to MEDEP Chapter 115, Section 2(T) and (W).

PB#1 is considered “operating” or “in operation” if any fuel is being combusted in it and steam is being produced.

Streamlining

1. Opacity  
MEDEP Chapter 101, Section 2(B)(5) and Section 3 contains the only applicable opacity standard for the combined emissions from the Main Stack.  
**No streamlining requested.**
2. PM
  - a. MEDEP Chapter 103, Section 2(A)(3)(b) contains an applicable PM lb/MMBtu emission standard.
  - b. 40 CFR Part 63, Subpart DDDDD contains an applicable PM lb/MMBtu emission standard.  
**No streamlining requested.**
  - c. BPT establishes the only applicable PM lb/hr emissions limit.  
**No streamlining requested.**
3. PM<sub>10</sub>  
BPT establishes the only applicable PM<sub>10</sub> lb/hr emission limit.  
**No streamlining requested.**
4. SO<sub>2</sub>
  - a. MEDEP Chapter 106, Section 2(A)(2) contains the only applicable fossil fuel sulfur content standard. **No streamlining requested.**
  - b. BPT establishes the only applicable SO<sub>2</sub> lb/hr emission limit.  
**No streamlining requested.**
5. NO<sub>x</sub>
  - a. PB#1 is equipped with staged combustion control (burner out of service) and low NO<sub>x</sub> burners for control of NO<sub>x</sub> emissions. The staged combustion control and low NO<sub>x</sub> burners meet the requirements in MEDEP Chapter 138 Section 3(B)(1) to operate a low NO<sub>x</sub> burner or equivalent strategy. Therefore, the lb/MMBtu standard in MEDEP Chapter 138 does not apply to PB #1.
  - b. BPT establishes the only applicable NO<sub>x</sub> lb/hr and lb/MMBtu emission limit.  
**No streamlining requested.**
6. CO  
BPT establishes the only applicable CO lb/hr emission limit.  
**No streamlining requested.**

7. VOC

BPT establishes the only applicable VOC lb/hr emission limit.

**No streamlining requested.**

Periodic Monitoring

Periodic monitoring shall consist of record keeping which demonstrates fuel use and firing rates by PB#1 and delivery receipt or other records from the supplier indicating the percent sulfur by weight of the fuel oil. Until the CMS for Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8(c)(3), periodic monitoring for PB#1 shall also consist of the following:

Item to be Monitored	Record
ESP Voltage	once per shift
ESP Amperage	once per shift

(Note that the periodic monitoring requirements in this license relating to the PB#1 ESPs will be superseded by the CMS requirements of 40 CFR Part 63, Subpart DDDDD.)

SDW shall stack test PB#1 for PM in accordance with 40 CFR Part 60, Appendix A, Method 5 by December 31, 2004 and every two years thereafter.

Based on best management practices and the type of fuel for which PB#1 was designed, it is unlikely that PB#1 will exceed the emission limit for CO and VOC. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting the Mill to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no Parameter Monitors required for the PB#1.

CEMS and COMS

- a. MEDEP Chapter 117 contains an applicable requirement to monitor opacity and nitrogen dioxide emissions. Emissions exit through the Main Stack which is monitored by a COMS. Therefore, monitoring of the Main Stack opacity meets the requirements of MEDEP Chapter 117 to monitor opacity of PB#1.
- b. MEDEP Chapter 138 contains an applicable requirement to monitor NO<sub>x</sub> lb/MMBtu emissions. Compliance with the NO<sub>x</sub>, 30 day rolling average limit shall be demonstrated according to 40 CFR 60.46b(e)(1).
- c. BPT establishes an applicable requirement to monitor SO<sub>2</sub> lb/hr emissions. Based on the above, SDW shall operate a CEMS which provides data to calculate NO<sub>x</sub> lb/MMBtu, SO<sub>2</sub> lb/hr and O<sub>2</sub> % from PB#1.

Control Equipment

Control Equipment for PB#1 consists of the multicyclones and an electrostatic precipitator (ESP) for particulate emissions and staged combustion control (burner out of service) and low NOx burners for NOx emissions.

E. Power Boiler #2 (PB#2)

PB#2 was manufactured by Combustion Engineering and has a maximum heat input capacity of 1300 MMBtu/hr. The boiler is licensed to fire #6 oil, #2 oil, used oil, TDF, biomass, bark, waste paper, sludge, LVHC gases, HVLC gases, solid oily waste, non-hazardous waste solvent rags, and kraft condensates. The fuel oil, including used oil, shall not exceed a maximum sulfur content of 2.5% by weight.

PB#2 was installed in 1989 and is subject to NSPS 40 CFR Part 60, Subpart Db and is therefore not subject to Subpart D. PB#2 is not an electric utility steam generating unit and is therefore not subject to NSPS 40 CFR Part 60 Subpart Da.

PB#2 is located at a major source of HAPs and will therefore be subject to the forthcoming NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD).

PB#2 is equipped with the following pollution control equipment: multicyclones, ESP, Selective Non-Catalytic Reduction (SNCR), and a wet scrubber.

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

On March 4, 2004, SDW was issued Air License Amendment #22 (A-19-71-AF-M) which permitted the replacement of the existing overfire air (OFA) system in PB#2 as a pollution control project pursuant to MEDEP Chapter 115, Section 2(T) and (W).

PB#2 is considered “operating” or “in operation” if any fuel is being combusted in it and steam is being produced.

Streamlining

1. Opacity
  - a. MEDEP Chapter 101, Section 2(B), and Section 3 contains an applicable opacity standard.
  - b. NSPS, 40 CFR Part 60.43b contains an applicable opacity standard.

SDW accepts streamlining for the opacity standard. The NSPS standard is more stringent and is therefore the only opacity standard included in this license.

2. PM
  - a. MEDEP Chapter 103, Section 2(B)(4)(d) contains an applicable PM lb/MMBtu emission standard.
  - b. A previous BACT analysis established an applicable PM lb/MMBtu emission limit.
  - c. NSPS, 40 CFR Part 60.43b contains an applicable PM lb/MMBtu emission standard.

SDW accepts streamlining for the PM lb/MMBtu standards of MEDEP Chapter 103, 40 CFR Part 60.43b, and BACT. The BACT limit is the most stringent and is therefore the only PM lb/MMBtu emission limit included in this license.

- d. 40 CFR Part 63, Subpart DDDDD contains an applicable PM lb/MMBtu emission standard.

**No streamlining requested.**

- e. A previous BACT analysis established an applicable PM lb/hr emission limit. **No streamlining requested.**

3. PM<sub>10</sub>

A previous BACT analysis established applicable PM<sub>10</sub> lb/MMBtu and lb/hr emission limits. **No streamlining requested.**

4. SO<sub>2</sub>
  - a. BPT establishes the only applicable fossil fuel sulfur content limit. **No streamlining requested.**
  - b. MEDEP Chapter 106, Section 4 contains an applicable SO<sub>2</sub> lb/MMBtu emission standard.
  - c. A previous BACT analysis established an applicable SO<sub>2</sub> lb/MMBtu emission limit.

- d. NSPS, 40 CFR Part 60.42b contains an applicable SO<sub>2</sub> lb/MMBtu emission standard.

SDW accepts streamlining for the SO<sub>2</sub> lb/MMBtu standard. The BACT limit is the most stringent and is therefore the only SO<sub>2</sub> lb/MMBtu emission limit included in this license.

- e. A previous BACT analysis established the only applicable SO<sub>2</sub> lb/hr emission limit. **No streamlining requested.**

5. NO<sub>x</sub>

- a. PB#2 is equipped with selective non catalytic reduction (SNCR) for control of NO<sub>x</sub> emissions. The SNCR system has been determined to meet the requirements of MEDEP Chapter 138 Section 3(B)(1) to operate a low NO<sub>x</sub> burner or equivalent strategy. Therefore, the lb/MMBtu standard in MEDEP Chapter 138 does not apply to PB#2.
- b. A previous BACT analysis established an applicable NO<sub>x</sub> lb/MMBtu emission limit.
- c. NSPS, 40 CFR Part 60.44b contains an applicable NO<sub>x</sub> lb/MMBtu emission standard.

SDW accepts streamlining for the NO<sub>x</sub> lb/MMBtu standard. The BACT limit is the most stringent and is therefore the only NO<sub>x</sub> lb/MMBtu emission limit included in this license.

- d. A previous BACT analysis established the only applicable NO<sub>x</sub> lb/hr emission limit. **No streamlining requested.**

6. CO

A previous BACT analysis established the only applicable CO lb/hr and lb/MMBtu emission limits. **No streamlining requested.**

7. VOC

A previous BACT analysis established the only applicable VOC lb/hr and lb/MMBtu emission limits. **No streamlining requested.**

Periodic Monitoring

Periodic monitoring shall consist of record keeping which demonstrates fuel use and firing rates by PB#2 and delivery receipts or other records from the fuel supplier indicating the percent sulfur by weight of the fuel oil. Until the CMS for Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8(c)(3), periodic monitoring for PB#2 shall also consist of the following:

Item to be monitored	Record
ESP voltage	once per 12 hr shift
ESP amperage	once per 12 hr shift

(Note that the periodic monitoring requirements in this license relating to the PB#2 ESPs will be superseded by the CMS requirements of 40 CFR Part 63, Subpart DDDDD.)

SDW shall stack test PB#2 for PM in accordance with 40 CFR Part 60, Appendix A, Method 5B by December 31, 2004 and every two years thereafter.

If SDW combusts fuel oil with a sulfur content greater than 2.0% within PB#2, SDW shall submit with the quarterly report the data specified pursuant to MEDEP Chapter 106 Section 3(A)(C).

Based on best management practices and the type of fuel for which PB#2 was designed, it is unlikely that PB#2 will exceed the emission limit for VOC. In addition, in light of the use of the wet scrubber, it is not feasible to monitor for opacity. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting the Mill to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no parameter monitors required for PB #2.

CEMS and COMS

- a. MEDEP Chapter 117 contains an applicable requirement to monitor sulfur dioxide, and nitrogen dioxide emissions. Opacity from the PB#2 is a wet plume and therefore not required to be monitored by COMS pursuant to MEDEP Chapter 117 Section 1(H).
- b. MEDEP Chapter 138 contains an applicable requirement to monitor NOx lb/MMBtu emissions.
- c. BACT establishes an applicable requirement to monitor SO<sub>2</sub> lb/hr and lb/MMBtu, NOx lb/hr and lb/MMBtu and CO lb/hr and lb/MMBtu emissions.
- d. NSPS, 40 CFR Part 60 Subpart Db contains an applicable requirement to monitor opacity, SO<sub>2</sub> lb/MMBtu and NOx lb/MMBtu emissions. Opacity

from the PB#2 is a wet plume and therefore not required to be monitored by COMS pursuant to NSPS 40 CFR Part 60.

Based on the above, SDW shall operate a CEMS which provides data to calculate NO<sub>x</sub> lb/hr and lb/MMBtu, SO<sub>2</sub> lb/hr and lb/MMBtu, CO lb/hr and lb/MMBtu and O<sub>2</sub> % emissions from the PB#2.

Compliance with the SO<sub>2</sub>, NO<sub>x</sub>, and CO lb/MMBtu 30 day rolling average limits, the SO<sub>2</sub> lb/MMBtu limit and the SO<sub>2</sub> 90% removal requirement shall be demonstrated according to the calculations of NSPS 40 CFR Part 60 Subpart Db.

MEDEP Chapter 117 defines a “valid hour” for the purpose of CEMS operation and subsequent data calculations. SDW accepts streamlining for the determination of a valid hour. MEDEP Chapter 117 is more stringent than NSPS and is therefore the specifications by which the PB#2 NO<sub>x</sub> and SO<sub>2</sub> CEMS data shall be reviewed for valid hour determinations and subsequent data calculations.

#### Control Equipment

Control Equipment for PB#2 consists of the multicyclones and an ESP for particulate emissions, SNCR for NO<sub>x</sub> emissions, and a wet scrubber for SO<sub>2</sub> emissions. The wet scrubber may utilize a soda ash solution or a caustic solution as the scrubbing media. The SNCR system may utilize an aqueous ammonia solution or a urea solution.

As provided for in NSPS, 40 CFR Part 60.42b(i), the PB#2 may be operated without the wet scrubber while firing very low sulfur oil or natural gas when the scrubber is not being operated because of malfunction or maintenance of the wet scrubber. During such times compliance with the SO<sub>2</sub> lb/MMBtu emission limits shall be demonstrated according to NSPS, 40 CFR Part 60 Subpart Db.

#### F. Recovery Boiler

The Recovery Boiler was manufactured by Combustion Engineering to recover pulping chemicals and produce steam and has a licensed firing rate of 5.14 MMBtu/day. The boiler is licensed to fire #6 oil, #2 oil, used oil, black liquor, LVHC gases, and HVLC gases. The fuel oil, including used oil, shall not exceed a maximum sulfur content of 2.0% by weight when there is no smelt in the boiler and 2.5% by weight where there is smelt in the boiler.

The Recovery Boiler was installed in 1975-1976, prior to the applicability date of NSPS 40 CFR Part 60 Subpart BB and Subpart Db. The Recovery Boiler is subject to 40 CFR Part 63, Subpart MM. The Recovery Boiler is not an electric utility steam generating unit and is therefore not subject to NSPS 40 CFR Part 60 Subpart Da. The Recovery Boiler is also not subject to 40 CFR Part 60, Subpart



D for fossil fuel fired steam generating units because its annual capacity factor for oil is less than 10 percent.

The particulate emissions from the Recovery Boiler are controlled by the operation of an ESP. Emissions of Total Reduced Sulfur (TRS) from the Recovery Boiler are to be controlled in accordance with MEDEP Chapter 124.

SDW operates a Continuous Opacity Monitor (COM) in the duct from the Recovery Boiler to the Main Stack. This COM is required per the CMS requirements of 40 CFR Part 63, Subpart MM only and is not subject to the requirements of MEDEP Chapter 117.

Emissions exit through the 275 ft. combined Main Stack. Maximum and average emissions from the Recovery Boiler were modeled as part of the three PSD/NSR licenses which were issued in 1986, 1989, and 1994. A tertiary air system was added to the boiler in 1992 as a pollution control project to reduce SO<sub>2</sub> emissions.

#### Streamlining

1. Opacity
  - a. MEDEP Chapter 101, Section 2(B)(5) and Section 3 contains an applicable opacity standard for the combined emissions from the Main Stack. **No streamlining requested.**
  - b. MACT, 40 CFR Part 63, Subpart MM contains an applicable opacity standard for emissions from the Recovery Boiler in the duct to the Main Stack. **No streamlining requested.**
2. PM
  - a. MEDEP Chapter 105, Section 2 contains an applicable PM emission standard on a lb/air dried ton of pulp basis.
  - b. MACT, 40 CFR Part 63, Subpart MM contains an applicable PM g/dscm (gr/dscf) emission standard. SDW 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). SDW may reestablish a different alternative PM limit by following the procedures required in 63.862(a)(1)(ii) and this will not be considered a modification.

SDW accepts streamlining for the PM standards of MEDEP Chapter 105 and 40 CFR Part 63, Subpart MM. The standard of Subpart MM is determined to be more stringent and is therefore the only PM concentration standard included in this license.

- c. BPT establishes the only applicable PM lb/hr emission limit.  
**No streamlining requested.**
3. PM<sub>10</sub>  
BPT establishes the only applicable PM<sub>10</sub> lb/hr emission limit.  
**No streamlining requested.**
4. SO<sub>2</sub>
  - a. MEDEP Chapter 106, Section 2(A) contains the only applicable fossil fuel sulfur content standard (this applies only when there is no smelt in the boiler). **No streamlining requested.**
5. NO<sub>x</sub>
  - c. MEDEP Chapter 106, Section 4 contains an applicable SO<sub>2</sub> lb/MMBtu emission standard (this applies when there is smelt in the boiler).  
**No streamlining requested.**
5. NO<sub>x</sub>
  - a. MEDEP Chapter 138, Section 3(C) contains the only applicable NO<sub>x</sub> ppm emission standard. The MEDEP Chapter 138 standard is on a wet basis. The limit contained in this license is the equivalent of that standard converted to a dry basis. **No streamlining requested.**
  - b. BPT establishes the only applicable NO<sub>x</sub> lb/hr emission limit.  
**No streamlining requested.**
6. CO  
BPT establishes the only applicable CO lb/hr emission limit.  
**No streamlining requested.**
7. VOC  
BPT establishes the only applicable VOC lb/hr emission limit.  
**No streamlining requested.**
8. Total Reduced Sulfur (TRS)  
MEDEP Chapter 124, Section 3(H) contains the only applicable TRS ppm emission standard. **No streamlining requested.**

Periodic Monitoring

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

SDW shall stack test the Recovery Boiler for PM in accordance with 40 CFR Part 60, Appendix A, Method 5 by December 31, 2004 and every two years thereafter.

If SDW combusts fuel oil with a sulfur content greater than 2.0% within the Recovery Boiler, SDW shall submit with the quarterly report the data specified pursuant to MEDEP Chapter 106 Section 3(A)(C).

Based on best management practices and the type of fuel for which the Recovery Boiler was designed, it is unlikely that the Recovery Boiler will exceed the emission limits for CO and VOC. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting the Mill to perform testing and may take enforcement action for any violations discovered.

#### Parameter Monitors

There are no Parameter Monitors required for the Recovery Boiler.

#### MACT CMS

MACT, 40 CFR Part 63, Subpart MM contains an applicable requirement to operate a COMS to monitor opacity from the Recovery Boiler in the duct to the Main Stack. SDW shall comply with the requirements of 40 CFR Part 63 Subpart MM. The COMS to monitor opacity from the Recovery Boiler in the duct to the Main Stack is not subject to Chapter 117.

#### CEMS and COMS

- a. MEDEP Chapter 117 contains an applicable requirement to monitor opacity and nitrogen dioxide emissions. Emissions exit through the Main Stack which is monitored by a COMS. Therefore, monitoring of the Main Stack opacity meets the requirements of MEDEP Chapter 117 to monitor opacity of the Recovery Boiler.
- b. MEDEP Chapter 138 contains an applicable requirement to monitor NO<sub>x</sub> ppm emissions.
- c. MEDEP Chapter 124 contains an applicable requirement to monitor TRS ppm emissions
- d. BPT establishes an applicable requirement to monitor SO<sub>2</sub> lb/hr emissions in accordance with the protocol submitted and approved by the Department.

Based on the above, SDW shall operate a CEMS which provides data to calculate NO<sub>x</sub> ppm, TRS ppm, SO<sub>2</sub> lb/hr, and O<sub>2</sub> % emissions from the Recovery Boiler.

#### Control Equipment

Control Equipment for Recovery Boiler consists of an ESP for particulate emissions.

G. Smelt Tanks #1 and #2

The Smelt Tanks #1 and #2 were installed in 1976, prior to the applicability date of NSPS 40 CFR Part 60 Subpart BB. The Smelt Tanks #1 and #2 are subject to 40 CFR Part 63, Subpart MM.

Each Smelt Tanks #1 and #2 are equipped with a wetted fan scrubber for control of particulate emissions. Emissions exit through the 275 ft. combined main stack.

The Smelt Tanks shall be considered “operating” or “in operation” if any smelt is being fed into the tanks.

Streamlining

1. PM

- a. MEDEP Chapter 105, Section 2 contains an applicable PM emission standard on a lb/air dried ton of pulp basis.
- b. 40 CFR Part 63, Subpart MM contains applicable PM g/dscm (gr/dscf) emission limits. SDW 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). SDW may reestablish a different alternative PM limit by following the procedures required in 63.862(a)(1)(ii) and this will not be considered a modification.

SDW accepts streamlining for the PM standards of MEDEP Chapter 105 and 40 CFR Part 63, Subpart MM. The standard of Subpart MM is determined to be more stringent than the Chapter 105 limit and therefore the only PM concentration standard included in this license.

- c. BPT establishes the only applicable PM lb/hr emission limit.  
**No streamlining requested.**

2. SO<sub>2</sub>

BPT establishes the only applicable SO<sub>2</sub> lb/hr emission limit.  
**No streamlining requested.**

3. TRS

MEDEP Chapter 124, Section 3(J) contains the only applicable TRS lb/ton black liquor solids, measured as H<sub>2</sub>S emission standard. **No streamlining requested.**

4. VOC

This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**

Periodic Monitoring

There are no parameter monitors required for the Smelt Tanks.

SDW shall stack test the Smelt Tanks for PM in accordance with 40 CFR Part 60, Appendix A, Method 5 by December 31, 2004 and every two years thereafter.

SDW shall stack test the smelt tanks for TRS in accordance with 40 CFR Part 60, Appendix A by December 31, 2004 and every two years thereafter.

MACT CMS

MACT, 40 CFR Part 63, Subpart MM contains an applicable requirement to operate a CMS for the Smelt Tank Scrubbers #1 and #2. SDW shall comply with the requirements of 40 CFR Part 63 Subpart MM.

The MACT CMS for each of the Smelt Tank Scrubbers #1 and #2 shall consist of the following in accordance with 40 CFR Part 63, Subpart MM:

<b>Item to be monitored</b>	<b>Record</b>
total scrubber media flowrate	3 hr block ave once every 3 hours
scrubber pressure drop or fan amperage	3 hr block ave once every 3 hours

The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.864(j). One CMS range for media flowrate and pressure drop or fan amperage shall be determined for both scrubbers.

Approval to use the alternative monitoring approaches for fan amps from the specifications of 40 CFR 63.864(a)(2) was approved in a letter from EPA Region 1 to SDW dated December 12, 2002. Records shall be maintained demonstrating which monitoring option (pressure drop or fan amperage) is being used at all times.

CEMS and COMS

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

Control Equipment

Each Smelt Tanks #1 and #2 are equipped with a wetted fan scrubber for particulate emissions. Each wetted fan scrubber may be operated with water or weak wash as the scrubbing media.

H. Lime Kiln

The Lime Kiln has a #6 oil firing rate of 92.1 MMBtu/hr. The #6 fuel oil is fired to aid in the recalcination of the lime, which is then returned to the slaker. The Lime Kiln is licensed to fire #6 oil, #2 oil, used oil, propane, LVHC, and kraft condensates. The fuel oil, including used oil, shall not exceed a maximum sulfur content of 2.5% by weight.

The Lime Kiln was installed in 1976, prior to the applicability date of NSPS 40 CFR Part 60 Subpart BB. The Lime Kiln is subject to 40 CFR Part 63, Subpart MM.

Emissions from the Lime Kiln are controlled by a Variable Throat Venturi Scrubber. Emissions from the Lime Kiln are also used in the precipitated calcium carbonate (PCC) manufacturing process. The lime mud itself is also an effective media to scrub SO<sub>2</sub> emissions generated from the incineration of Total Reduced Sulfur Compounds (TRS). Emissions exit through the 275 ft. combined Main Stack.

SDW has evaluated the option of installing a white liquor scrubber on the LVHC system prior to being combusted in the kiln and the installation of a new precoat filter. Because the scrubber will reduce TRS emissions to the kiln and the precoat filter will allow for more efficient washing of the mud and thereby reduce the potential to form kiln rings, the projects have been determined by the Department to be pollution control projects pursuant to MEDEP Chapter 115, Section 2(T) and (W) (see Air License Amendment #24 (A-19-71-AH-M) which was issued on August 23, 2004 and Air License Amendment #25 (A-19-71-AI-M) which was issued on September 29, 2004). Therefore, SDW is permitted to install a white liquor scrubber and/or precoat filter at any time during the term of this license.

The Lime Kiln shall be considered “operating” or “in operation” if fuel oil is being combusted in it.

Streamlining

1. PM

- a. MEDEP Chapter 105, Section 2 contains an applicable PM emission standard on a lb/air dried ton of pulp basis.
- b. MACT, 40 CFR Part 63, Subpart MM contains an applicable PM g/dscm (gr/dscf) emission standard. SDW 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). SDW may reestablish a different

alternative PM limit by following the procedures required in 63.862(a)(1)(ii) and this will not be considered a modification.

SDW accepts streamlining for the PM standards of MEDEP Chapter 105 and 40 CFR Part 63, Subpart MM. The standard of Subpart MM is determined to be more stringent and is therefore the only PM concentration standard included in this license.

- c. BPT establishes the only applicable PM lb/hr emission limit.  
**No streamlining requested.**
2. PM<sub>10</sub>  
BPT establishes the only applicable PM<sub>10</sub> lb/hr emission limit.  
**No streamlining requested.**
3. SO<sub>2</sub>
  - a. BPT establishes the only applicable fossil fuel sulfur content limit.  
**No streamlining requested.**
  - b. MEDEP Chapter 106, Section 4 contains the only applicable SO<sub>2</sub> lb/MMBtu emission standard. **No streamlining requested.**
  - c. BPT establishes the only applicable SO<sub>2</sub> lb/hr emission limit.  
**No streamlining requested.**
4. NO<sub>x</sub>
  - a. MEDEP Chapter 138, Section 3(E) contains the only applicable NO<sub>x</sub> ppm emission standard. **No streamlining requested.**
  - b. BPT establishes the only applicable NO<sub>x</sub> lb/hr emission limit.  
**No streamlining requested.**
5. CO  
BPT establishes the only applicable CO lb/hr emission limit.  
**No streamlining requested.**
6. TRS  
MEDEP Chapter 124, Section 3(K) establishes the only applicable TRS ppm emission limit. **No streamlining requested.**
7. VOC
  - a. This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
  - b. BPT establishes the only applicable VOC lb/hr emission limit.  
**No streamlining requested.**

Periodic Monitoring

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

SDW shall stack test the Lime Kiln for PM in accordance with 40 CFR Part 60, Appendix A, Method 5 by December 31, 2004 and every two years thereafter.

SDW shall stack test the Lime Kiln for NO<sub>x</sub> in accordance with 40 CFR Part 60, Appendix A, Method 7E by December 31, 2004 and every five years thereafter.

If SDW combusts fuel oil with a sulfur content greater than 2.0% within the Lime Kiln, SDW shall submit with the quarterly report the data specified pursuant to MEDEP Chapter 106 Section 3(A)(C).

Based on best management practices and the type of fuel for which the Lime Kiln was designed, it is unlikely that the Lime Kiln will exceed the emission limits for SO<sub>2</sub>, CO and VOC. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting the Mill to perform testing and may take enforcement action for any violations discovered.

MACT CMS

MACT, 40 CFR Part 63, Subpart MM contains an applicable requirement to operate a CMS for the Lime Kiln Scrubber. SDW shall comply with the requirements of 40 CFR Part 63 Subpart MM.

The MACT CMS for the Lime Kiln Scrubber shall consist of the following in accordance with 40 CFR Part 63, Subpart MM:

<b>Item to be monitored</b>	<b>Record</b>
scrubber pressure drop	3 hr block ave once every 3 hours
scrubbing liquid flowrate	3 hr block ave once every 3 hours

The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.864(j).



CEMS and COMS

- a. MEDEP Chapter 124 contains an applicable requirement to monitor TRS ppm emissions.
- b. A CEMS is not required to monitor SO<sub>2</sub> emissions pursuant to MEDEP Chapter 117 Section 1(F). However, if SDW combusts fuel oil with a sulfur content greater than 2.0% within the Lime Kiln, SDW shall install an SO<sub>2</sub> CEMS pursuant to MEDEP Chapter 106 Section 6(A) and monitor SO<sub>2</sub> lb/MMbtu emissions.

There are no COMS required to be operated for the Lime Kiln. Based on the above, SDW shall operate a CEMS which provides data to calculate TRS ppm and O<sub>2</sub> % emissions from the Lime Kiln.

Control Equipment

Control Equipment for Lime Kiln consists of the Variable Throat Venturi Scrubber for particulate emissions. The scrubber may be operated with water, a weak wash solution or a caustic solution as the scrubbing media.

I. Precipitated Calcium Carbonate (PCC) Plant

The PCC plant was installed in 1998. The primary source of the carbon dioxide (CO<sub>2</sub>) used in the PCC plant process is the flue gas from SDW's Lime Kiln. When flue gas from the Lime Kiln is not available liquid CO<sub>2</sub> from a storage tank is utilized in the process.

The flue gas is reacted with calcium hydroxide to form calcium carbonate in the seven carbonator reactors. The carbonator reactors do not generate any new emissions. The quantity of NO<sub>x</sub>, CO, and VOC in the Lime Kiln flue gas does not increase and quantities of CO<sub>2</sub>, PM, SO<sub>2</sub>, and TRS are reduced as a result of the scrubbing action of the process. The carbonators are equipped with two stage packed bed scrubbers 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 90,000 dry tons of PCC/year.

Streamlining

1. Opacity  
MEDEP Chapter 101, Section 2(B)(3)(c) contains the only applicable opacity standard for the PCC silo baghouses. **No streamlining requested.**

2. PM
  - a. MEDEP Chapter 105, Section contains an applicable PM lb/hr emission standard for the PCC process.
  - b. BPT establishes an applicable combined PM lb/hr emission limit for the PCC carbonators and the Lime Kiln.
  - c. 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.

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

#### Periodic Monitoring

See Bulk Handling Systems (Section II.U) for PCC silo baghouses. Periodic monitoring shall also include a maintenance log recording the date and location of all routine and non-routine maintenance of the two stage demisters.

#### Parameter Monitors

There are no parameter monitors required for the PCC plant.

#### CEMS

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

#### J. Lime Slakers

SDW 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.

Lime slakers are not addressed by NSPS 40 CFR Part 60, Subpart BB nor 40 CFR, Part 63.

#### Streamlining

- a. MEDEP Chapter 101, Section 2(B)(3)(d) contains the only applicable opacity standard for the lime slakers.
- b. MEDEP Chapter 105 contains an applicable PM emission limit.

SDW 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.

Periodic Monitoring

Periodic monitoring for the Lime Slaker Scrubber #1 and #2 shall consist of the following:

Item to be monitored	Record
total scrubber media flow rate	once every 12 hr shift

Control Equipment

Control equipment for each Lime Slaker consists of the Wetted Fan Scrubber for particulate emissions. Each wetted fan scrubber may be operated with water, a green liquor solution, or both as the scrubbing media.

K. Bleaching System

The SDW Bleach Plant consists of a single Bleaching Line, the Central Absorber Scrubber System, the Backup Scrubber System, and the ClO<sub>2</sub> Generation System. The Bleaching Line and the Backup Scrubber were original Bleach Plant components installed in 1976. In 1992, SDW installed the Central Absorber Scrubber and the older scrubber was kept in service as a Backup Scrubber. In order to meet the requirements of EPA's Cluster Rule and Maine's air and water discharge requirements, SDW converted the original R-3 ClO<sub>2</sub> Generation System to a larger R-10 ClO<sub>2</sub> Generation System in 1997. This pollution control project enabled the mill to have an elemental chlorine free (ECF) bleach plant.

The "Bleaching System" as defined by 40 CFR 63.441 is subject to 40 CFR Part 63 Subpart S. Pursuant to 40 CFR Section 63.445(b), SDW 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.

To meet Subpart S, SDW 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:

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

Streamlining

1. Cl<sub>2</sub> and ClO<sub>2</sub>  
MEDEP Chapter 122, Section (3) contains an applicable Cl<sub>2</sub> and ClO<sub>2</sub> lb/hr emission standards. **No streamlining requested.**

2. VOC  
This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
3. HAPs  
MACT, 40 CFR Part 63 Subpart S contains applicable compliance options at 63.445(c) for emissions of chlorinated HAPs. **No streamlining requested.**

Periodic Monitoring

MEDEP Chapter 122 contains an applicable monitoring requirement. In a letter dated July 9, 2004, SDW requested the operational flexibility to monitor either ORP or pH for demonstrating compliance with MEDEP Chapter 122. This request was approved by the Department. Periodic monitoring shall consist of the following for the Central Absorber Scrubber:

Item to be monitored	Record
scrubber recycle flow	once every 12 hr shift
scrubber pressure drop	once every 12 hr shift
scrubber influent ORP or pH	once every 12 hr shift

Periodic monitoring shall consist of the following when operating the Back-up Scrubber:

Item to be monitored	Record
scrubber recycle flow	once every 12 hr shift
scrubber fluid pH or ORP or conductivity	once every 12 hr shift

SDW shall stack test the Central Absorber Scrubber every year for Cl<sub>2</sub> and ClO<sub>2</sub> emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide.

SDW shall stack test the Backup Scrubber every two years for Cl<sub>2</sub> and ClO<sub>2</sub> emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide to the extent that SDW wishes to operate in this mode.

SDW shall stack test while venting the S-10 tower to atmosphere every two years for Cl<sub>2</sub> and ClO<sub>2</sub> emissions in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide to the extent that SDW wishes to operate in this mode.

MACT CMS

MACT, 40 CFR Part 63, Subpart S contains an applicable requirement to operate a CMS for the Central Absorber Scrubber.

The MACT CMS for the Central Absorber Scrubber or the Backup Scrubber (when installed) shall consist of the following:

<b>Item to be monitored</b>	<b>Record</b>
gas scrubber liquid influent recycle flow rate	3 hr block ave once every 3 hours
gas scrubber ID fan amps (FD fan amps for Backup Scrubber)	3 hr block ave once every 3 hours
pH or ORP of the gas scrubber liquid recycle influent flow	3 hr block ave once every 3 hours

The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.453(n).

Approval to use the alternative monitoring approaches for fan amps and influent pH or ORP above from the specifications of 40 CFR 63.453(c)(1) and (2) was approved in a letter from EPA Region 1 to SDW dated March 14, 2001.

Control Equipment

Control equipment for the Bleaching System consists of the Central Absorber Scrubber or the Backup Scrubber for chlorine and chlorine dioxide emissions. The scrubber may be operated with water, a white liquor solution, or a caustic solution as the scrubbing media.

SDW may utilize the Backup Scrubber during periods of startup, shutdown, or malfunction of the Central Absorber Scrubber, during Bleach Plant, Central Absorber Scrubber, and ClO<sub>2</sub> generation system maintenance activities, and to perform emission testing.

For the purpose of 40 CFR Part 63 Subpart S, periods of time when the MACT CMS is not installed or not operational on the Backup Scrubber and the Bleaching System is operating and being collected by the Backup Scrubber, shall be deemed periods of CMS downtime and shall not be considered an excess emission pursuant to 63.10(e)(3).

L. Digester System

SDW operates one Kamyr continuous digester which pulps hardwood, softwood, or combinations thereof. The digester was installed in 1976, prior to the applicability date of NSPS 40 CFR Part 60 Subpart BB for "Digester Systems".

The “Digester System” as defined by 40 CFR 63.441 is subject to 40 CFR Part 63 Subpart S.

SDW 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. SDW has the ability to convey the pocket purge steam either to the top or bottom of the chip bin. 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 CFR 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 SDW 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 MEDEP Chapter 124. Under MEDEP Chapter 124, the chip bin is considered a miscellaneous source for which SDW is required to submit to DEP by January 1, 2004 a BPT analysis for certain “miscellaneous sources” of TRS, including the chip bin, and implement BPT by July 1, 2007. (Note that BPT for miscellaneous sources may or may not require control.)

#### Streamlining

1. TRS  
MEDEP Chapter 124 contains applicable TRS emission standards.  
**No streamlining requested.**
2. VOC  
This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
3. HAPs  
MACT, 40 CFR Part 63, Subpart S contains applicable HAP standards.  
**No streamlining requested.**

#### M. Pulp Washing System

SDW operates one pressure diffuser washer followed by one two-stage atmospheric washer, followed by one enclosed brown stock rewasher. Each washer may be shutdown or bypassed individually without shutting down the system. The atmospheric washer and the brownstock rewasher were installed in 1976, prior to the applicability date of NSPS for “brown stock washer systems” in 40 CFR Part 60 Subpart BB. The pressure diffuser washer was installed in 1988 but is not subject to NSPS because diffusion washers are excluded from the definition of “brown stock washer systems” in 40 CFR Part 60 Subpart BB.

The “Pulp Washing System” as defined by 40 CFR 63.441 is subject to 40 CFR Part 63 Subpart S.

Streamlining

1. TRS  
MEDEP Chapter 124 contains applicable TRS emission standards.  
**No streamlining requested.**
2. VOC  
This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
3. HAPs  
MACT, 40 CFR Part 63, Subpart S contains applicable HAP standards.  
**No streamlining requested.**

N. Evaporator System

The multiple effect evaporators were designed and manufactured by Birmingham and Goslin and have six effects, two liquor concentrators, and 3 liquor preheaters, 2 surface condensers, steam ejectors, hog steam ejector, and are non-contact systems. One or more of the effects, concentrators, or preheaters may be shutdown or bypassed without shutting down the entire system. The “multiple effect evaporator system” was installed in 1976, prior to the applicability date of NSPS 40 CFR Part 60 Subpart BB.

The “Evaporator System” as defined by 40 CFR 63.441 is subject to 40 CFR Part 63 Subpart S.

Streamlining

1. TRS  
MEDEP Chapter 124 contains applicable TRS emission standards.  
**No streamlining requested.**
2. VOC  
This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
3. HAPs  
40 CFR Part 63, Subpart S contains applicable HAP standards.  
**No streamlining requested.**

O. Condensate Collection System

SDW handles various kraft pulping condensate streams within the mill.

VOC

SDW has two Condensate Stripping Systems: an air stripping and a steam stripping system. The air stripper is usually used to strip a portion of the foul evaporator condensates. The steam stripper is usually used to strip the digester relief condensates. Gaseous compounds which are stripped from these condensate streams are either condensed as part of the kraft condensates which are incinerated in either the PB#1, PB#2, or the Lime Kiln or collected as gaseous emissions within the LVHC or HVLC system. However, if the air stripper and steam stripper are not in operation, the digester and evaporator condensates continue to be recycled along with the stripped condensate liquids and used as wash water in the enclosed brownstock washer. As a result VOC emissions are collected and incinerated and determined to meet VOC RACT.

HAPs

SDW proposed to meet the condensate collection requirements in 40 CFR Section 63.446(c) by demonstrating that it collects for treatment at least 11.1 lbs of methanol/ton of oven dried brownstock pulp (ODP) (see 40 CFR Section 63.446(c)(3)) from the named sources. SDW proposed to meet the treatment requirements in 40 CFR Section 63.446(e)(4) by demonstrating that it recycles at least 10.2 lbs of methanol/ton of oven dried brownstock pulp (ODP) to an enclosed equipment system specified in 63.443(a) meeting the requirements of 63.443(c) and (d).

The following kraft pulping process condensates are conveyed in a closed collection system, pursuant to 40 CFR 63.446(b), (c), and (d):

1. Digester system condensates from the Turpentine Decanter
2. Methanol/Turpentine condensates from the Methanol/Turpentine storage tank
3. Evaporator System condensates following the stage where the first weak black liquor is fed and vacuum system condensates. The weak black liquor is fed to the #4 effect and the vapors are condensed in the #5 and #6 evaporators and the vacuum systems and exit the system as follows:
4. #5 and #6 evaporator condensates
5. #5 and #6 evaporator preheater condensates
6. Main Surface Condenser condensates
7. Auxiliary Surface Condenser condensates
8. Steam Ejector Condenser condensates
9. HVLC condensates from the High Volume Cooler Condenser

The condensates collected in the #1 Seal Tank are usually sent through the Air Stripper. However, should the Air Stripper be down (malfunction, repair, etc.) the



condensates go directly to the Stripped Condensate Tank for collection. SDW and the Department have concluded that the operation of the Air Stripper is not required by 40 CFR 63.446. Emissions from the Air Stripper are collected by the HVLC System.

The condensates collected in the #2 Seal Tank are 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 are usually sent to the Steam Stripper System. The top products from the Steam Stripper are condensed and stored in the Methanol/Turpentine Storage Tank until they are fired in PB#1, PB#2, or the Lime Kiln. Should the Steam Stripper be down (malfunction, repair, etc.), all condensates will 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. SDW 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 CFR 63.446.

The Methanol/Turpentine Storage Tank was installed in 2001 with a design capacity of 19,675 gallons. Therefore, the provisions of 40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels apply. Specifically, the requirements of 40 CFR Sections 60.116b (a) and (b) are applicable as required by 40 CFR 63.116b(b).

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 is enclosed and vented into the HVLC system.

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, SDW utilized EPA's guidance, which specifies that condensate sent to an enclosed system meeting 40 CFR Section 63.450 achieves 98% treatment. Thus, SDW uses 100% of the condensate sent to PB#1, PB#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 SDW wants to use a longer averaging period, justification to the Department for the increase will be required.

Streamlining

1. VOC

This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**

2. HAPs

40 CFR Part 63, Subpart S contains applicable HAP standards for this source. **No streamlining requested.**

MACT CMS

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

1. Stripped Condensate Tank
2. Methanol/Turpentine 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

The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.453(n).

A CMS is not required to demonstrate compliance with the treatment standards of 40 CFR Part 63.446(e)(4).

P. LVHC and HVLC System

The SDW facility was originally constructed with both a HVLC and LVHC System. At the time of license issuance SDW had systems installed which permitted the HVLC gases to be incinerated in PB#1 or the Recovery Boiler and the LVHC gases to be incinerated in the Lime Kiln or to be put into and mixed with the HVLC system. The LVHC System is licensed to be incinerated in either the Lime Kiln, Recovery Boiler, PB#1 or PB#2. The HVLC System is licensed to be incinerated in the Recovery Boiler, PB#1 or PB#2. Therefore, the installation of an LVHC piping system (dedicated or mixed with the HVLC) to PB#1, PB#2, or the Recovery Boiler, or the installation of an HVLC piping system to PB#2 would be considered pollution control projects pursuant to MEDEP Chapter 115, Section 2(T) and (W) and shall not be a modification nor require an amendment of this License (see Air License Amendment #24 (A-19-71-AG-M) which was issued on August 23, 2004).

MEDEP Chapter 124

The following sources are enclosed and vented into the LVHC system as required by MEDEP Chapter 124. The LVHC system shall be considered to begin at the following designated locations:

1. Digester System at the Secondary Relief Condenser
2. Evaporator System at the Second Steam Ejector Condenser and the #1 and #2 Seal Tanks
3. Steam Stripper System at the Secondary Reflux Condenser and the Contaminated Condensate Surge Tank

Beginning April 17, 2007, or such other date as may be established by MEDEP Chapter 124, the following sources, as applicable, shall be enclosed and vented into the HVLC system as required by MEDEP Chapter 124. The HVLC system shall be considered to begin at the following designated locations:

1. Atmospheric Diffuser Washer and filtrate tanks at the atmospheric washer
2. Brownstock Rewasher and seal tank at the brownstock rewasher hood
3. Pressure Diffuser Washer filtrate tank at the #3 Flash tank
4. The tertiary digester flash tank at the #3 Flash tank
5. The alternative TRS control system (Air Stripper System) at the air stripper outlet. Pursuant to MEDEP Chapter 124, the Air stripper is collected by the HVLC system and is therefore not subject to the 99% collection and control requirement specified in Section 3(F).

To be consistent with 40 CFR Part 60 Subpart S, the introduction of the LVHC and HVLC systems with the primary fuel into the flame zone or with the combustion air meets the requirements of Section 3(A) of MEDEP Chapter 124.

BPT for the LVHC system has been determined to include incineration of the LVHC gases in the Lime Kiln, Recovery Boiler or PB#2 greater than 85% of the system operating time.

BPT for the HVLC system has been determined to include incineration of the HVLC gases in the Recovery Boiler or PB#2 greater than 85% of the system operating time.

40 CFR Part 60 Subpart S

The following source vents are enclosed and collected by the LVHC or HVLC system pursuant to 40 CFR 63.443(a)(1)(i). The LVHC or HVLC system shall be considered to begin at the following designated locations:

1. Digester System at the Secondary Relief Condenser by the LVHC System
2. Digester System at the #3 Flash Tank 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

The following condensate storage tanks are enclosed and collected pursuant to 40 CFR 63.446(d)(2)(i):

1. Contaminated Condensate Surge Tank by the LVHC System
2. The Methanol/Turpentine Storage Tank by the LVHC System
3. The stripped condensate tank by the HVLC system

The following sources do not require collection as required by Section 63.443(a)(1)(ii) for Knotter and Screen Systems.

1. The Mill operates three pressurized knotters and one three-stage pressurized screening system which are enclosed and therefore do not emit. The knotters and screening system are therefore not subject to control requirements specified in 40 CFR Subpart S.
2. 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 set forth in 40 CFR 63.443(a)(1)(ii).
3. 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.

Pursuant to 40 CFR Part 63.443(a)(1)(iii), the following sources are enclosed and vented into the HVLC collection system:

1. Atmospheric Diffuser Washer and filtrate tanks
2. Brownstock Rewasher and seal tank
3. Pressure Diffuser Washer filtrate tank

Pursuant to 40 CFR 63.443(c) the equipment listed are enclosed and vented into a closed vent system and routed to a control device as specified above. The introduction of the LVHC and HVLC systems with the primary fuel into the flame zone or with the combustion air meets the requirements of 63.443(d)(4)(i) and (ii). Both the LVHC and HVLC collection systems meet the requirements of 40 CFR 63.450.

Subpart S requires that a flow indicator be installed and operated on each bypass line that is computer controlled. SDW 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 CFR Part 63 Subpart A and shall not be defined as such.

Streamlining

1. VOC  
This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**
2. HAPs  
40 CFR Part 63, Subpart S contains applicable HAP standards for this source. **No streamlining requested.**
3. TRS  
MEDEP Chapter 124 contains applicable TRS emission standards. **No streamlining requested.**

Periodic Monitoring

SDW shall maintain records to demonstrate compliance with MEDEP Chapter 124.

Parameter Monitors

There are no parameter monitors required for the LVHC or HVLC Systems.

CEMS

There are no CEMS or COMS required for the LVHC or HVLC Systems.

MACT CMS

There is no MACT CMS required for the LVHC or HVLC Systems.

Q. Paper Machines and On-Line Coaters

SDW operates three paper machines, each equipped with an on-line aqueous coater. The on-line coaters are subject to MEDEP Chapter 123. SDW has certified that all of the coatings used on the paper machines have an as applied VOC content less than 2.9 pounds per gallon of coating (excluding water and exempt compounds). SDW may change coating ingredients provided the VOC content of the applied coating remains less than the 2.9 pounds per gallon of coating (excluding water and exempt compounds). Such a change in coating ingredients does not require notification to or approval from the Department. The on-line coaters are not subject to 40 CFR Part 63, Subpart JJJJ per an EPA

guidance letter to the American Forest & Paper Association dated November 19, 2003.

Streamlining

VOC

MEDEP Chapter 123 contains applicable VOC standards.

**No streamlining requested.**

Periodic Monitoring

SDW shall maintain records to demonstrate compliance with MEDEP Chapter 123. VOC content for each coating or coating ingredient may be demonstrated by EPA Method 24 of Appendix A of 40 CFR Part 60, by the VOC content specified in the MSDS, or other information from the manufacturer indicating the VOC content. VOC emissions may be calculated from emission test results, emission factors, or by conservatively assuming all VOC content is released as VOC emission.

R. Paper Machine No. 1 Dryers

SDW is permitted to operate four (4) propane/natural gas fired dryers on the No. 1 Paper Machine (After Dryer #1, After Dryer #2, IR Heater #1, and IR Heater #2).

A previous analysis determined that BACT for these units was good combustion control, the use of propane or natural gas fuel, and the emission limitations listed in the Order section of this license.

Streamlining

1. Opacity

- a. MEDEP Chapter 101, Section 2(B)(1)(f) contains an applicable opacity standard.
- b. A previous BACT analysis established an applicable opacity limit.

SDW accepts streamlining for the opacity standard. The BACT limit is more stringent and is therefore the only opacity standard included in this license.

2. PM

- a. MEDEP Chapter 103, Section 2(B)(1)(a) contains an applicable PM lb/MMBtu emission standard.

- b. A previous BACT analysis established an applicable PM lb/MMBtu emission limit.

SDW accepts streamlining for the PM lb/MMBtu limit. The BACT limit is the most stringent and is therefore the only PM lb/MMBtu emission limit included in this license.

- c. A previous BACT analysis established the only applicable PM lb/hr emission limit. **No streamlining requested.**

3. PM<sub>10</sub>

A previous BACT analysis established the only applicable PM<sub>10</sub> lb/hr emission limit. **No streamlining requested.**

4. SO<sub>2</sub>

A previous BACT analysis established the only applicable SO<sub>2</sub> lb/hr emission limit. **No streamlining requested.**

5. NO<sub>x</sub>

A previous BACT analysis established the only applicable NO<sub>x</sub> lb/hr emission limit. **No streamlining requested.**

6. CO

A previous BACT analysis established the only applicable CO lb/hr emission limit. **No streamlining requested.**

7. VOC

A previous BACT analysis established the only applicable VOC lb/hr emission limit. **No streamlining requested.**

Periodic Monitoring

Periodic monitoring shall consist of record keeping which demonstrates fuel use.

S. Landfill Flare

SDW operates a flare incineration system as part of a gas collection system at their onsite landfill cells #1, #2, #3, and #4. The flare incinerates methane and other gases that are generated by the decomposition of the landfill materials, and oxidizes entrained sulfur compounds.

The gases are collected from the gas collection system by a fan and then ignited by a propane fuel pilot. The flare is an enclosed flare system such that the flame is totally enclosed at the base of a cylindrical chimney. The operation of the flare is currently on an intermittent basis activated manually by the landfill operators.

Streamlining

Opacity

MEDEP Chapter 101, Section 2(B)(1)(f) contains the only applicable opacity standard. **No streamlining requested.**

T. Emergency Diesels

SDW operates the following emergency diesel units:

Unit Name (Location)	Capacity
Diesel #1 (Paper Mill Fire Pump)	< 3 MMBtu/hr
Diesel #2 (Utilities & Recovery Fire Pump)	< 3 MMBtu/hr
Diesel #3 (Water Pump)	< 3 MMBtu/hr

The emergency diesel units fire #2 fuel oil or diesel with a maximum sulfur content not to exceed 0.05% by weight, therefore the units are insignificant activities and are listed in this Findings of Fact for inventory purposes.

Diesels #1, #2, and #3 each have a heat input capacity of less than 3.0 MMBtu/hr and are therefore not subject to MEDEP Chapter 103.

U. Fuel Oil Storage

SDW operates a 40,000 gallon #2 Fuel Oil Storage Tank, and a 2.3 million gallon #6 Fuel Oil Storage Tank. SDW also has onsite a 15,000 gallon Paper Machine fuel oil tank. All three tanks were installed prior to July 23, 1984 and are therefore not subject to NSPS 40 CFR Part 60, Subpart Kb.

V. Bulk Handling Systems

SDW operates the following bulk handling systems:

Bulk Handling Systems	Control Equipment
4 Paper Mill Starch Silos	1 Baghouse for each silo
Paper Mill CaCO <sub>3</sub> 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

In order to minimize fugitive emissions, SDW will 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, SDW 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. SDW shall take corrective action if visible emissions from the baghouses exceed 5 percent 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.

SDW 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 bulk handling requirements of this license shall not apply.

#### Streamlining

##### Opacity

MEDEP Chapter 101, Section 2(B)(3)(c) and (d) contains an applicable opacity standard. **No Streamlining requested.**

##### Periodic Monitoring

SDW shall maintain a BMP Plan for the specified bulk handling systems.

##### Control Equipment

The control equipment for the bulk handling systems is noted in the table above for particulate 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.

#### W. Solvent Cleaners

SDW operates various cold cleaning machines which are subject to MEDEP Chapter 130.

##### Periodic Monitoring

SDW shall maintain records to demonstrate compliance with MEDEP Chapter 130.

#### X. Waste Water Treatment Plant (WTP)

SDW 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). Maintenance of a valid National Pollution Discharge Elimination System (NPDES) Permit and/or MEPDES Permit was previously determined to meet the requirements of VOC RACT.

Streamlining

VOC

This source is subject to and has been evaluated for VOC RACT per MEDEP Chapter 134. **No streamlining requested.**

### III. FACILITY EMISSIONS

**Total Licensed Annual Emission for the Facility**  
(used to calculate the annual license fee)

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Package Boiler	4.5	4.5	224.3	44.7	11.4	0.4
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 Tanks #1 &2	113.9	--	113.9	--	--	--
Lime Kiln	254.0	254.0	328.5	254.0	254.0	43.8
<b>Total TPY</b>	<b>2,413.5</b>	<b>2,413.5</b>	<b>14,113.2</b>	<b>6,032.1</b>	<b>26,120.6</b>	<b>209.8</b>

- \* PM<sub>10</sub> and CO are not used in calculating the annual fee but are included for completeness.
- \* PM and VOC emissions do not include process 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.

### IV. AIR QUALITY ANALYSIS

SDW 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 (A-19-71-K-A) in 1994. An additional ambient air quality analysis is not required for this Initial Part 70 License.

## ORDER

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

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- 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-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to SDW pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP 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 supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in MEDEP Chapter 115 for making such changes and pursuant to the applicable requirements in MEDEP Chapter 140.

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

### 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;
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

- (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;
- (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.
- (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 effect 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 October 24, 1996.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
A	PB#2	40 CFR Part 60 Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	PB#2 is subject to Subpart Db and construction commenced after June 19, 1986
B	PB#1 & PB#2	40 CFR Part 60, Subpart Da	NSPS for Electric Utility Units	Boilers are not electric utility units
C	Package Boiler	40 CFR Part 60, Subpart D and Db	NSPS for Steam Generating Units	Heat input less than 100 MMBtu/hr
D	PB#2	MEDEP Chapter 117 and 40 CFR Part 60, Subpart Db	Requirements to operate COM	Units is not required to operate COM because of wet scrubber

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
E	PB#1 & PB#2	40 CFR Part 60, Subpart Dc	NSPS for Steam Generating Units	Heat input is greater than 100 MMBtu/hr
F	Pressure Diffuser Washer	40 CFR Part 60, Subpart BB and MEDEP Chapter 124	NSPS for Kraft Pulp Mills and TRS Control from Kraft Pulp Mills	Definition of brownstock washer systems excludes diffusion washer systems
G	Facility	40 CFR Part 60, Subparts C, Ca, Cb	Emission Guidelines and Compliance times for Municipal Waste Combustors and Incinerators	No applicable sources at this facility
H	Facility	40 CFR Part 60, Subpart E, Ea	NSPS for Incinerators.	Facility does not operate an incinerator
I	#2 & #6 Fuel Oil Storage Tanks	40 CFR 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)
J	PB#1 & PB#2	40 CFR Part 61, Subpart E	NESHAPs for Mercury	PB#1 & #2 are not incinerators
K	Facility	40 CFR 60 Subpart RR	Pressure Sensitive Tape and Label Surface Coating	No applicable sources at this facility
L	PB#1 & PB#2	40 CFR Parts 72 thru 78	EPA Acid Rain Program	SDW is not an electric utility unit.
M	Recovery Boiler & Lime Kiln	MEDEP Chapter 103	Fuel Burning Particulate Standard	These units are specifically covered under MEDEP Chapter 105
N	Facility	MEDEP Chapter 104	Incinerator Particulate Emission Standard	Facility does not operate an incinerator
O	Paper Machines	MEDEP Chapter 105	General Process Source Particulate Emission Standard	Paper machines do not emit measurable particulate matter
P	Facility	MEDEP Chapter 107	Sulfur Dioxide Standards for Sulfite Pulp Mills	SDW is not a sulfite pulp mill
Q	Facility	MEDEP Chapter 111	Petroleum Liquid Vapor Storage Control	Fuel oil stored at the facility has a vapor pressure below threshold limits
R	PB#1 & PB#2	MEDEP Chapter 121	Emission testing of resource recovery facilities	PB#1 & #2 are not resource recovery facilities
S	Facility	MEDEP Chapter 132	Graphic Arts-Rotogravure and Flexography	No rotogravure or flexography printing presses
T	Recovery Boiler, Lime Kiln, & Paper Machines	MEDEP Chapter 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)
U	PB#1 & PB#2	MEDEP Chapter 135	Hexavalent Chromium Particulate Emission Standard	PB#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
V	Facility	MEDEP Chapter 145	NOx Control Program	No units subject to this

- (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 Chapter 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.

- (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.

#### **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 (Title 38 MRSA §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.

- (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; **Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (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; **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;
- (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.
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR 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:
    - (i) 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;
    - (ii) to demonstrate compliance with the applicable emission standards; or

(iii) 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 CFR 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.

**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 CFR 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.

**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 in emission standards 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 MRSA § 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.
- (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.
  - (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.
  - (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;

**SPECIAL CONDITIONS**

(14) **Package Boiler**

- A. The Package Boiler is licensed to fire #2 fuel oil, used oil, propane, or kerosene. [MEDEP Chapter 140, BPT]
- B. The sulfur content of the fuel including used oil shall not exceed 0.7% by weight. The sulfur content of the fuel shall not exceed 0.15% by weight when venting emissions through the Stub stack. [MEDEP Chapter 140, BPT]
- C. Emissions from the Package Boiler shall not exceed the following:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.08	MEDEP Chapter 103	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	1.02	MEDEP Chapter 140, BPT	Federally Enforceable
PM <sub>10</sub>	1.02	MEDEP Chapter 140, BPT	Federally Enforceable
SO <sub>2</sub>	51.2	MEDEP Chapter 140, BPT	Federally Enforceable
NO <sub>x</sub>	10.2	MEDEP Chapter 140, BPT	Federally Enforceable
CO	2.6	MEDEP Chapter 140, BPT	Federally Enforceable
VOC	0.1	MEDEP Chapter 140, BPT	Enforceable by State Only

- D. Compliance with the emission limits in (C) above shall be demonstrated by stack testing upon request by the Department. Compliance with the visible emissions limit in (E) below shall be demonstrated by testing in accordance with 40 C.F.R. Part 60, App. B, Method 9 upon request by the Department. [MEDEP Chapter 140, BPT]
- E. When emissions vent through the Stub stack, visible emissions from the Package Boiler shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]
- F. While operating the Package Boiler, SDW shall operate the Low NO<sub>x</sub> Burner for NO<sub>x</sub> emissions. [MEDEP Chapter 138]

(15) **Power Boiler #1 (PB#1)**

- A. PB#1 is licensed to fire #6 fuel oil, #2 fuel oil, used oil, biomass, TDF, wood pellets, waste paper, kraft condensates, LVHC gases, HVLC gases, solid oily

- waste, non-hazardous waste solvent rags, and sludge. [MEDEP Chapter 140, BPT]
- B. The sulfur content of the fuel oil fired, including used oil, shall not exceed 2.0% by weight. [MEDEP Chapter 106]
- C. PB#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  $\leq$  13,400 lb/hr and PB#1 pump  $\leq$  27.6 gal/min. SDW shall maintain records of hourly oil firing rates computed through the computer control system. [MEDEP Chapter 140, BPT]
- D. SDW shall operate and maintain a single dedicated oil supply line and associated heater to PB#1. [MEDEP Chapter 140, BPT]
- E. SDW 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. [MEDEP Chapter 140, BPT]
- F. Emissions from PB#1 shall not exceed the following:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.26	BACT, 1986 PSD Permit	Federally Enforceable
NO <sub>x</sub>	0.40	MEDEP Chapter 140, BPT	Enforceable by State-only

Pollutant	lb/hr	Origin	Enforceability
PM	220	BACT, 1986 PSD Permit	Federally Enforceable
PM <sub>10</sub>	220	MEDEP Chapter 140, BPT	Enforceable by State-only
SO <sub>2</sub>	744 <sup>a</sup>	BACT, 1986 PSD Permit	Federally Enforceable
NO <sub>x</sub>	299	BACT, 1986 PSD Permit	Federally Enforceable
CO	2270	BACT, 1986 PSD Permit	Federally Enforceable
VOC	13.7	MEDEP Chapter 140, BPT	Enforceable by State-only

<sup>a</sup> When LVHC and/or HVLC gases are fired in PB#1, and the SO<sub>2</sub> emissions are greater than 744 lb/hr on a 24-hour block average basis (midnight to midnight), SDW shall report to the MEDEP on a quarterly basis the SO<sub>2</sub> lb/hr 24-hour block emissions according to Condition (16)(C) of this license. [MEDEP Chapter 140, BPT]

- G. Compliance with the PM lb/MMBtu and lb/hr limits shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. [MEDEP Chapter 140, BPT]

- H. Compliance stack testing for PM shall be performed once by December 31, 2004, and once every two calendar years thereafter. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- I. Compliance with the NO<sub>x</sub> lb/MMBtu emission limit shall be on a 30 day rolling average basis demonstrated by means of a CEMS. Periods of startup, shutdown, and equipment malfunctions shall not be included in determining the 30 day rolling averages. [MEDEP Chapter 138 and 140, BPT] **Enforceable by State-only**
- J. Compliance with the NO<sub>x</sub> lb/hr emission limit shall be demonstrated by stack testing upon request by the Department in accordance with 40 CFR Part 60, Appendix A, Method 7E. [MEDEP Chapter 140, BPT]
- K. Compliance with the SO<sub>2</sub> lb/hr emission limit shall be on a 24-hour block average basis demonstrated by means of a CEMS. [MEDEP Chapter 117 and 140, BPT]
- L. Except as provided in (O) below, while operating PB#1, SDW shall operate the multicyclones and the electrostatic precipitator (ESP) for particulate emissions as well as the staged combustion control (burner out of service) and low NO<sub>x</sub> burners for NO<sub>x</sub> emissions. [MEDEP Chapter 138, and 140, BPT]
- M. PB#1 is subject to and shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD. [40 CFR Part 63, Subpart DDDDD]
- N. Until the CMS for Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8(c)(3), periodic monitoring for PB#1 shall consist of the following:

<b>Item to be Monitored</b>	<b>Record</b>
ESP Voltage	Once per 12 hr shift
ESP Amperage	Once per 12 hr shift

[MEDEP Chapter 140, BPT]

- O. Except during startups or shutdowns, SDW shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate 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, SDW may perform additional particulate emission testing to demonstrate compliance with this license condition under alternative operating scenarios. [MEDEP Chapter 140, BPT]

- P. Compliance with the CO and VOC limit shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]
- (16) **Main Stack**
- A. Pursuant to Chapter 101, Section 2(B)(5), visible emissions from the 275-foot Main Stack shall not exceed 30 percent opacity on a six (6) minute block average basis for 98 percent of all six (6) minute block averages on a quarterly basis. In addition, the Main Stack opacity shall not exceed 40 percent opacity on a six (6) minute block average basis for 99.5 percent of all six (6) minute block averages on a quarterly basis. [MEDEP Chapter 101]
- B. Compliance with the opacity limit shall be demonstrated by means of a COMS on the Main Stack. [MEDEP Chapter 117]
- C. SDW shall not exceed a SO<sub>2</sub> emission limit of 2871 lb/hr from the Main Stack on a 24-hour block average basis (midnight to midnight). [MEDEP Chapter 140, BPT]
- D. Compliance with the SO<sub>2</sub> lb/hr emission limit shall be demonstrated by the total SO<sub>2</sub> lb/hr 24-hour block emissions from the PB#1, Recovery Boiler, Lime Kiln, and Package Boiler. In order to calculate the total SO<sub>2</sub> lb/hr 24-hour block emissions, SDW may utilize the SO<sub>2</sub> license limit for the Lime Kiln and Package Boiler or may calculate SO<sub>2</sub> emissions from the average firing rate and the sulfur content of the fuel fired during the 24-hour block period (midnight to midnight). [MEDEP Chapter 140, BPT]
- (17) **Power Boiler #2 (PB#2)**
- A. PB#2 is licensed to fire #6 fuel oil, #2 fuel oil, used oil, TDF, biomass, waste paper, kraft condensates, LVHC gases, HVLC gases, solid oily waste, non-hazardous waste solvent rags, and sludge. [BACT, 1989 and 1994 PSD Permits]
- B. The sulfur content of the fuel oil fired including used oil shall not exceed 2.5% by weight. [MEDEP Chapter 106]
- C. PB#2 is subject to and shall comply with the requirements of 40 CFR Part 60, Subparts A and Db for PB#2. [40 CFR Part 60, Subpart A and Db]

D. Emissions from PB#2 shall not exceed the following:

Pollutant	lb/MMBtu	Origin
PM	0.03	BACT, 1989 and 1994 PSD Permits
PM <sub>10</sub>	0.03	BACT, 1989 and 1994 PSD Permits
SO <sub>2</sub>	0.27	BACT, 1989 and 1994 PSD Permits
NO <sub>x</sub>	0.20	BACT, 1989 and 1994 PSD Permits
CO	0.40	BACT, 1989 and 1994 PSD Permits
VOC	0.007	BACT, 1989 and 1994 PSD Permits

Pollutant	lb/hr	Origin
PM	39.0	BACT, 1989 and 1994 PSD Permits
PM <sub>10</sub>	39.0	BACT, 1989 and 1994 PSD Permits
SO <sub>2</sub>	351.0 <sup>a</sup> 975.0 <sup>b</sup>	BACT, 1989 and 1994 PSD Permits
NO <sub>x</sub>	260.0	BACT, 1989 and 1994 PSD Permits
CO	520.0	BACT, 1989 and 1994 PSD Permits
VOC	9.1	BACT, 1989 and 1994 PSD Permits

<sup>a</sup> 24-hour block average basis

<sup>b</sup> 3-hour block average basis

- E. Compliance with the PM lb/MMBtu and lb/hr limits shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5B. [MEDEP Chapter 140, BPT]
- F. Compliance stack testing for PM shall be performed once by December 31, 2004, and once every two calendar years thereafter. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- G. Compliance with the VOC lb/MMBtu and lb/hr limits shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 25A upon request by the Department. [MEDEP Chapter 140, BPT]
- H. Compliance with the NO<sub>x</sub> and SO<sub>2</sub> lb/MMBtu emission limits shall be on a 30-day rolling average basis as described in 40 CFR Part 60, Subpart Db and demonstrated by means of NO<sub>x</sub> and SO<sub>2</sub> CEMS. [40 CFR Part 60, Subpart Db and MEDEP Chapter 117]
- I. Compliance with the CO lb/MMBtu emission limits shall be on a 30-day rolling average basis as described in 40 CFR Part 60, Subpart Db and

demonstrated by means of CO CEMS. [BACT, 1989 and 1994 PSD Permits and MEDEP Chapter 117]

- J. Compliance with the NO<sub>x</sub> and CO lb/hr emission limits shall be on a 24-hour block average basis demonstrated by means of a CEMS. Periods of startup, shutdown, and equipment malfunctions shall not be included in determining the 24-hour block averages. [BACT, 1989 and 1994 PSD Permits and MEDEP Chapter 117]
- K. Compliance with the SO<sub>2</sub> lb/hr emission limits shall be on a 3-hour block and 24-hour block average basis demonstrated by means of a CEMS. Periods of startup, shutdown, and equipment malfunctions shall not be included in determining the 3-hour and 24-hour block averages. [BACT, 1989 and 1994 PSD Permits and MEDEP Chapter 117]
- L. A fossil fuel SO<sub>2</sub> removal efficiency of 90% or greater 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 percent reduction standard for mixed fuel boilers in 40 CFR Part 60, Subpart Db §60.45b shall be followed for compliance purposes. [40 CFR Part 60, Subpart Db]
- M. PB#2 is subject to and shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD. [40 CFR Part 63, Subpart DDDDD]
- N. Until the CMS for Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8(c)(3), periodic monitoring for PB#2 shall consist of the following:

<b>Item to be monitored</b>	<b>Record</b>
ESP voltage	once per 12 hr shift
ESP amperage	once per 12 hr shift

[BACT, 1989 and 1994 PSD Permits]

- O. Except as provided in (P), and (Q) below, while operating PB#2, SDW shall operate the multicyclones and the ESP for particulate emissions and SNCR for NO<sub>x</sub> emissions. [MEDEP Chapter 138 and BACT, 1989 and 1994 PSD Permits]
- P. Except during startups or shutdowns, SDW shall operate, at a minimum, the number of ESP chambers for which compliance with its licensed particulate 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, SDW may perform additional particulate emission

testing to demonstrate compliance with this license condition under alternative operating scenarios. [MEDEP Chapter 140, BPT]

- Q. SNCR downtime caused by equipment malfunction shall not constitute a violation provided NO<sub>x</sub> emissions are below applicable limits based on CEMS data required by (H) and (J). [MEDEP Chapter 140, BPT]
- R. Visible emissions from PB#2 shall not exceed 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 CFR Part 60 Subpart Db]
- S. 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. [Chapter 140, BPT]

(18) **Recovery Boiler**

- A. The Recovery Boiler is licensed to fire #6 fuel oil, #2 fuel oil, used oil, black liquor, LVHC gases, and HVLC gases. [MEDEP Chapter 140, BPT]
- B. The sulfur content of the fuel oil fired including used oil shall not exceed 2.0% by weight when there is no smelt in the boiler and 2.5% by weight when there is smelt in the boiler. [MEDEP Chapter 106]
- C. Emissions from the Recovery Boiler shall not exceed the following:

Pollutant	ppm	Origin	Enforceability
NO <sub>x</sub>	196 ppmvd @ 8% O <sub>2</sub>	MEDEP Chapter 138	Federally Enforceable
TRS	5 ppmvd @ 8% O <sub>2</sub>	MEDEP Chapter 124	Federally Enforceable

Pollutant	lb/MMBtu	Origin	Enforceability
SO <sub>2</sub>	1.92	MEDEP Chapter 106	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	207 <sup>a</sup>	MEDEP Chapter 140, BPT	Enforceable by State Only
PM <sub>10</sub>	207 <sup>a</sup>	MEDEP Chapter 140, BPT	Enforceable by State Only
SO <sub>2</sub>	1975	MEDEP Chapter 140, BPT	Enforceable by State Only
NO <sub>x</sub>	750	MEDEP Chapter 140, BPT	Enforceable by State Only
CO	3113	MEDEP Chapter 140, BPT	Enforceable by State Only
VOC	15	MEDEP Chapter 140, BPT	Enforceable by State Only

<sup>a</sup> When fuel oil is fired within the Recovery Boiler PM and PM<sub>10</sub> emissions shall not exceed 283 lb/hr. The limit of 207 lb/hr does not apply during such times. [MEDEP Chapter 140, BPT]



- D. SDW shall comply with the applicable requirements of 40 CFR Part 63, Subpart A and Subpart MM for the Recovery Boiler. [40 CFR Part 63, Subpart MM]
- E. SDW shall not exceed a PM emission rate, from the Recovery Boiler, of 0.038 gr/dscf corrected to 8% O<sub>2</sub>. The emission limit was established pursuant to 63.862(a)(1)(ii) submitted as part of the notification of compliance status required under Subpart A of Part 63, pursuant to Section 63.867(b)(1). [40 CFR Part 63, Subpart MM]
- F. Compliance with the NO<sub>x</sub> ppmv emission limit shall be on a 24-hr block average basis, demonstrated by means of a CEMS. Pursuant to MEDEP Chapter 138, Section 3(O), periods of startup, shutdown, equipment malfunction, and fuel switching shall not be included in determining 24-hour daily block arithmetic average emission rates. SDW shall maintain operating records to demonstrate that the facility was being operated to minimize emissions during such events. [MEDEP Chapter 138 and 117]
- G. Compliance with the SO<sub>2</sub> lb/hr emission limit shall be on a 24-hr block demonstrated by means of a CEMS. [MEDEP Chapter 140, BPT and 117]  
**Enforceable by State-only**
- H. Compliance with the PM lb/hr limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. [MEDEP Chapter 140, BPT]
- I. Compliance stack testing for PM while firing black liquor shall be performed once by December 31, 2004, and once every two calendar years thereafter. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- J. Compliance with the TRS ppmv emission limit shall be determined on a 12-hr block average basis demonstrated by means of a CEMS, measured as H<sub>2</sub>S. Pursuant to MEDEP Chapter 124, Section 5(C)(1), the first two 12-hour block averages in a quarter which exceed either license limits or emission standards in MEDEP Chapter 124 are exempt and are not considered a violation. [MEDEP Chapter 124 and 117]
- K. Except as provided in (O) below, while operating the Recovery Boiler, SDW shall operate the ESP for particulate emissions. [MEDEP Chapter 140, BPT]
- L. The MACT CMS for the Recovery Boiler shall consist of a COMS to monitor opacity from the Recovery Boiler in the duct to the Main Stack in accordance

with 40 CFR Part 63, Subpart MM. [40 CFR Part 63, Subpart MM §63.864(d)]

- M. Pursuant to 40 CFR Part 63.864(k)(1)(i), SDW shall implement corrective action, as specified in the SSM plan, prepared under 40 CFR Part 63.866(a), when the average of ten consecutive 6-minute averages result in a measurement by the MACT CMS greater than 20% opacity. [40 CFR Part 63, Subpart MM §63.864(k)(1)(i)]
- N. Pursuant to 40 CFR Part 63.864(k)(2)(i), SDW shall not exceed a measurement by the MACT CMS greater than 35 percent opacity for 6 percent or more of the operating time within a quarterly period. [40 CFR Part 63, Subpart MM §63.864(k)(2)(i)]
- O. Compliance with the PM limit while firing fuel oil and with the CO and VOC limit shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]

(19) **Smelt Tanks #1 and #2**

- A. Combined emissions from the Smelt Tanks #1 and #2 shall not exceed the following:

<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin</b>	<b>Enforceability</b>
PM	26	MEDEP Chapter 140, BPT	Enforceable by State Only
SO <sub>2</sub>	26	MEDEP Chapter 140, BPT	Enforceable by State Only

- B. SDW shall comply with the applicable requirements of 40 CFR Part 63, Subpart A and Subpart MM for Smelt Tanks #1 and #2. [40 CFR Part 63, Subpart A and MM]
- C. SDW shall not exceed a total PM emission rate from the Smelt Tanks #1 and #2 of 0.20 lb/ton black liquor solids (BLS). The 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 Section 63.867(b)(1). [40 CFR Part 63, Subpart MM]
- D. Smelt Tanks #1 and #2 shall exceed a total TRS emission limit of 0.033 lb/ton black liquor solids, measured as H<sub>2</sub>S. [MEDEP Chapter 124]
- E. Compliance with the TRS emission limit shall be based upon stack testing in accordance with 40 CFR Part 60, Appendix A Method 16. The test may be performed on the combined exhaust from Smelt Tanks #1 and #2. The test

shall be performed once by December 31, 2004 and once every two calendar years thereafter. [MEDEP Chapter 140, BPT]

- F. While operating either Smelt Tank #1 or #2, SDW shall operate the corresponding wetted fan scrubber for particulate emissions. [MEDEP Chapter 140, BPT]
- G. As approved by EPA in response to an alternative monitoring request or in accordance with 40 CFR Part 63, Subpart MM, the MACT CMS for each of the Smelt Tank Scrubbers #1 and #2 shall consist of the following:

Item to be monitored	Record
total scrubber media flowrate	3 hr block ave once every 3 hours
scrubber pressure drop or fan amperage	3 hr block ave once every 3 hours

[40 CFR Part 63, Subpart MM §63.864(a)(2)]

- H. SDW shall maintain records demonstrating which monitoring option (fan amperage or pressure drop) is being used for all operating times. [MEDEP Chapter 140]
- I. The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(j)]
- J. Pursuant to 40 CFR Part 63.864(k)(1)(ii), SDW shall implement corrective action, as specified in the SSM plan, prepared under 40 CFR Part 63.866(a), when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(k)(1)(ii)]
- K. Pursuant to 40 CFR Part 63.864(k)(2)(iii), SDW 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 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(k)(2)(iii)]
- L. Compliance with the PM and SO<sub>2</sub> limit shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]

(20) **Lime Kiln**

- A. The Lime Kiln is licensed to fire #6 fuel oil, #2 oil, used oil, propane, LVHC gases and kraft condensates. [MEDEP Chapter 140, BPT]

- B. The sulfur content of the fuel oil fired including used oil shall not exceed 2.5% by weight. [MEDEP Chapter 106]
- C. Emissions from the Lime Kiln shall not exceed the following:

Pollutant	Ppm	Origin	Enforceability
NO <sub>x</sub>	120 ppmvw @ 10% O <sub>2</sub>	MEDEP Chapter 138	Federally Enforceable
TRS	20 ppmvd @ 10% O <sub>2</sub>	MEDEP Chapter 124	Federally Enforceable

Pollutant	lb/MMBtu	Origin	Enforceability
SO <sub>2</sub>	1.92	MEDEP Chapter 106	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	58	MEDEP Chapter 140, BPT	Enforceable by State Only
PM <sub>10</sub>	58	MEDEP Chapter 140, BPT	Enforceable by State Only
SO <sub>2</sub>	75	MEDEP Chapter 140, BPT	Enforceable by State Only
NO <sub>x</sub>	58	MEDEP Chapter 140, BPT	Enforceable by State Only
CO	58	MEDEP Chapter 140, BPT	Enforceable by State Only
VOC	10	MEDEP Chapter 140, BPT	Enforceable by State Only

- D. Compliance with the PM limits shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. [MEDEP Chapter 140, BPT]
- E. Compliance stack testing for PM shall be performed once by December 31, 2004 and once every two calendar years thereafter. The compliance tests shall be performed on the Lime Kiln emissions prior to gas extraction by the PCC Plant. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- F. Compliance with the SO<sub>2</sub>, CO and VOC emission limits shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]
- G. Compliance with the NO<sub>x</sub> ppm limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A. The test shall be performed once by December 31, 2004 and once every five calendar years thereafter. [MEDEP Chapter 140, BPT]
- H. Compliance with the TRS ppmv emission limit shall be determined on a 12-hour block average basis demonstrated by means of a CEMS, measured as H<sub>2</sub>S. Pursuant to MEDEP Chapter 124, Section 5(C)(2), the first four 12-hour block averages in a quarter which exceed either license limits or emission standards in MEDEP Chapter 124 are exempt and are not considered a violation. [MEDEP Chapter 124 and 117]

- I. While operating the Lime Kiln, SDW shall operate the Venturi Scrubber for particulate emissions. [MEDEP Chapter 140, BPT]
- J. SDW shall comply with the applicable requirements of 40 CFR Part 63, Subpart A and Subpart MM for the Lime Kiln. [40 CFR Part 63, Subpart MM]
- K. SDW shall not exceed a PM emission rate of 0.100 gr/dscf corrected to 10% O<sub>2</sub>, from the Lime Kiln. The 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 Section 63.867(b)(1). Compliance with the Subpart MM PM limit shall be based on Lime Kiln emissions prior to gas extraction by the PCC Plant. [40 CFR Part 63, Subpart MM]
- L. The MACT CMS for the Lime Kiln Scrubber shall consist of the following in accordance with 40 CFR Part 63, Subpart MM:

<b>Item to be monitored</b>	<b>Record</b>
scrubber pressure drop	3 hr block ave once every 3 hours
scrubbing liquid flowrate	3 hr block ave once every 3 hours

[40 CFR Part 63, Subpart MM §63.864(a)(2)]

- M. The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(j)]
- N. Pursuant to 40 CFR Part 63.864(k)(1)(ii), SDW shall implement corrective action, as specified in the SSM plan, prepared under 40 CFR Part 63.866(a), when any 3-hour average MACT CMS value is outside the range of values established pursuant to 40 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(k)(1)(ii)]
- O. Pursuant to 40 CFR Part 63.864(k)(2)(iii), SDW 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 CFR Part 63.864(j). [40 CFR Part 63, Subpart MM §63.864(k)(2)(iii)]

(21) **PCC Plant**

- A. Visible emissions from each PCC silo baghouse shall not exceed 10% opacity on a six minute average basis except for no more than one 6-minute block average in a 1-hour period. [MEDEP Chapter 101]
- B. 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. [Chapter 140, BPT]
- C. Emissions from the PCC carbonators shall vent through the Main Stack. [MEDEP Chapter 140, BPT]
- D. The combined PM emission rate from the PCC carbonators and the lime kiln shall not exceed the licensed Lime Kiln PM limit of 58 lb/hr. [MEDEP Chapter 140, BPT]
- E. Periodic monitoring shall include a maintenance log recording the date and location of all routine and non-routine maintenance of the two stage packed bed demisters. [MEDEP Chapter 140, BPT]
- F. While operating the carbonators, the PCC plant shall operate the corresponding two stage packed bed demisters with water spray cleaning for particulate emissions. [MEDEP Chapter 140, BPT]
- G. 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. SDW 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 demonstrate compliance with the PM limit. [MEDEP Chapter 140, BPT]

(22) **Lime Slakers**

- A. Periodic monitoring for the Lime Slaker Scrubber #1 and #2 shall consist of the following: [MEDEP Chapter 140, BPT]

Item to be monitored	Record
total scrubber media flowrate	once every 12 hr shift

- B. While operating the Slaker #1 or #2, SDW shall continue to operate the corresponding Wetted Fan Scrubber for particulate emissions. [MEDEP Chapter 140, BPT]

- C. Visible emissions from each lime slaker shall not exceed 20% opacity on a six (6) minute average basis except for no more than one(1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101]
- D. 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. [Chapter 140, BPT]

(23) **Bleaching System**

- A. Emissions from the Bleach Plant shall not exceed the following:

<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin</b>	<b>Enforceability</b>
Cl <sub>2</sub>	3.0	MEDEP Chapter 122	Enforceable by State-only
ClO <sub>2</sub>	3.0	MEDEP Chapter 122	Enforceable by State-only

- B. SDW shall perform annual compliance testing pursuant to the requirements of MEDEP Chapter 122 for the Central Absorber Scrubber in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide. [MEDEP Chapter 122] **Enforceable by State-only**
- C. SDW shall perform compliance testing pursuant to MEDEP Chapter 122 while operating the Back-up Scrubber once every other calendar year to the extent that SDW wishes to operate in this mode in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- D. SDW shall perform compliance testing pursuant to MEDEP Chapter 122 while venting the S-10 tower to atmosphere once every other calendar year to the extent SDW wishes to operate in this mode in accordance with NCASI Method 520 for sampling chlorine and chlorine dioxide. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- E. Periodic monitoring shall consist of the following for the Central Absorber Scrubber:

<b>Item to be monitored</b>	<b>Record</b>
scrubber recycle flow	once every 12 hr shift
scrubber pressure drop	once every 12 hr shift
scrubber influent ORP or pH	once every 12 hr shift

[MEDEP Chapter 122] **Enforceable by State-only**

- F. Periodic monitoring shall consist of the following when operating the Back-up Scrubber:

Item to be monitored	Record
scrubber recycle flow	once every 12 hr shift
scrubber fluid pH or ORP or conductivity	once every 12 hr shift

[MEDEP Chapter 122] **Enforceable by State-only**

- G. As approved by EPA in response to an alternative monitoring request, the MACT CMS for the Central Absorber Scrubber or the Backup Scrubber (when installed) shall consist of the following in accordance with 40 CFR Part 63, Subpart S:

Item to be monitored	Record
gas scrubber liquid influent recycle flow rate	3 hr block ave once every 3 hours
gas scrubber ID fan amps (FD fan amps for Backup Scrubber)	3 hr block ave once every 3 hours
pH or ORP of the gas scrubber liquid recycle influent flow	3 hr block ave once every 3 hours

[40 CFR Part 63, Subpart S §63.453(c) and (m)]

- H. The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.453(n). [40 CFR Part 63, Subpart S §63.453(n)]
- I. The “Bleaching System” as defined by 40 CFR 63.441 is subject to and shall comply with the requirements of 40 CFR Part 63 Subpart S, §63.445(c). To meet 40 CFR Part 63, Subpart S §63.445, SDW shall comply with the following:
1. reduce total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight; or
  2. achieve a treatment outlet mass concentration of 10 parts per million or less by volume of total chlorinated HAP; or
  3. 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, SDW 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 CFR Part 63, Subpart S]



- J. The following process units are subject to collection and control under the 40 CFR Part 63, Subpart S MACT requirements:
1. D1 and D2 towers (the D100 towers if vented)
  2. D100, D1, and D2 washer hoods
  3. D100, D1, and D2 seal tanks
  4. Blend Chest
- [40 CFR Part 63, Subpart S]
- K. While operating the Bleach Plant, SDW shall operate either the Central Absorber Scrubber or Back-up Scrubber for chlorine and chlorine dioxide emissions. [MEDEP Chapter 122] **Enforceable by State-only**
- (24) **Digester System**
- A. Emissions of TRS from the “Digester System” as defined by MEDEP Chapter 124 are to be collected by the LVHC or HVLC system and controlled in accordance with MEDEP Chapter 124. The venting allowances in MEDEP Chapter 124 shall apply to the Digester System. [MEDEP Chapter 124]
- B. The “Digester System” as defined by 40 CFR 63.441 is subject to and shall comply with 40 CFR Part 63 Subpart S. [40 CFR Part 63, Subpart S]
- (25) **Pulp Washing Systems**
- A. Beginning April 17, 2007, or such other date as may be established by MEDEP Chapter 134, emissions of TRS greater than 0.75 lb/hr from the “Brownstock Washer System”, as defined by MEDEP Chapter 124, are to be collected by the LVHC or HVLC system and controlled in accordance with MEDEP Chapter 124. The venting allowances in MEDEP Chapter 124 shall apply to the Brownstock Washer System. [MEDEP Chapter 124]
- B. The “Pulp Washing System” as defined by 40 CFR 63.441 is subject to and shall comply with 40 CFR Part 63 Subpart S. [40 CFR Part 63, Subpart S]
- (26) **Evaporator System**
- A. Emissions of TRS from the “Evaporator System” as defined by MEDEP Chapter 124 are to be collected by the LVHC or HVLC system and controlled in accordance with MEDEP Chapter 124. The venting allowances in MEDEP Chapter 124 shall apply to the Evaporator System. [MEDEP Chapter 124]
- B. The “Evaporator System” as defined by 40 CFR 63.441 is subject to and shall comply with 40 CFR Part 63 Subpart S. [40 CFR Part 63, Subpart S]

**(27) Condensate Collection System**

- A. Compliance with 40 CFR 63.446(c)(3) (the collection of 11.1 lbs of HAP per ton of oven dry pulp) and 40 CFR 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:
1. Digester system condensates from the Turpentine Decanter
  2. Kraft condensates from the Methanol/Turpentine 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 condensates
    - b. #5 and #6 preheater 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  
[40 CFR Part 63, Subpart S]
- B. As provided for in 40 CFR 63.457(g), SDW shall measure the total HAP concentration as methanol for purposes of complying with 40 CFR 63.446. [40 CFR Part 63, Subpart S]
- C. SDW 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 CFR 63.446(e). While receiving recycled condensates, the Brownstock Rewasher shall meet the equipment system requirements of 40 CFR 63.443(c) and (d). [40 CFR 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 CFR Part 63, Subpart S]
- E. The kraft condensates generated by the Steam Stripper System that are stored within the Methanol/Turpentine Storage Tank that are fired within Power Boiler #1 or #2, or the Lime Kiln shall be considered to be receiving 100% treatment. [40 CFR Part 63, Subpart S]

- F. Pursuant to 40 CFR Part 63.453(i), SDW 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):
1. Stripped Condensate Tank
  2. Methanol/Turpentine 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
- [40 CFR Part 63, Subpart S]
- G. The CMS range shall be determined, or modified as necessary, according to the procedures as specified in 40 CFR Part 63.453(n). Any overflow shall be recorded and documented to demonstrate compliance with the collection standard. [40 CFR Part 63.453(n)]
- H. Pursuant to 40 CFR Part 63.446(g), for the recycled condensates sent to the Brownstock Rewasher, periods of excess emissions reported under 40 CFR Part 63.455 shall not be a violation of 40 CFR Part 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 CFR Part 63, Section 63.446(g)]
- I. For the Methanol/Turpentine storage tank SDW is subject to and shall comply with the requirements in Sections 60.116b (a) and (b) as required by 63.116b(b). [40 CFR Part 60, Subpart Kb]

**(28) LVHC and HVLC System**

- A. Pursuant to MEDEP Chapter 124, SDW 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 this license.  
[MEDEP Chapter 124]
- B. Pursuant to MEDEP Chapter 124, SDW shall submit with the quarterly report specified in Condition (35) 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, SDW 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. [MEDEP Chapter 124]

- C. Pursuant to MEDEP Chapter 124, any TRS venting from the LVHC system or steam stripper collection system greater than 15 minutes shall be reported to the Department on the next State working day. SDW shall submit with the quarterly reports specified in Condition (35) the applicable reports outlined in Section 5(B) & (C) of MEDEP Chapter 124. [MEDEP Chapter 124]
- D. Beginning April 17, 2007, or such other date as may be established by MEDEP Chapter 124, any TRS venting from the HVLC system greater than 4 hours shall be reported to the Department on the next State working day pursuant to MEDEP Chapter 124. SDW shall submit with the quarterly reports specified in Condition (35) the applicable reports outlined in Section 5(B) & (C) of MEDEP Chapter 124. [MEDEP Chapter 124]
- E. Beginning eight months from the date of license issuance, LVHC gases shall be incinerated in PB#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 incinerated in PB#1. [MEDEP Chapter 140, BPT]
- F. Beginning eight months from the date of license issuance, HVLC gases shall be incinerated in PB#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 incinerated in PB#1. [MEDEP Chapter 140, BPT]
- G. The “LVHC System” and “HVLC System” as defined by 40 CFR 63.441 are to be controlled in accordance with 40 CFR Part 63 Subpart S. The venting allowances in 40 CFR Part 63, Subpart S shall apply to the LVHC System and HVLC System. [40 CFR Part 63, Subpart S]
- H. As an approved alternative to 40 CFR Section 63.450(d)(1) of Subpart S, SDW shall on each bypass line, 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 CFR Part 63, Subpart S]

- I. The following source vents shall be collected by the LVHC or HVLC system pursuant to 40 CFR 63.443(a)(1)(i). The LVHC or HVLC system shall be considered to begin at the locations designated:
  1. Digester System at the Secondary Relief Condenser by the LVHC System
  2. Digester System at the #3 Flash Tank 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[40 CFR Part 63, Subpart S]
  
- J. The following condensate storage tanks shall be collected by the LVHC or HVLC system pursuant to 40 CFR 63.446(d)(2)(i):
  1. Contaminated Condensate Surge Tank by the LVHC System
  2. The Methanol/Turpentine Storage Tank by the LVHC System
  3. The stripped condensate tank by the HVLC system[40 CFR Part 63, Subpart S]
  
- K. The following sources shall be enclosed and vented into the HVLC collection system pursuant to 40 CFR Part 63.443(a)(1)(iii):
  1. Atmospheric Diffuser Washer and filtrate tanks
  2. Brownstock Rewasher and seal tank
  3. Pressure Diffuser Washer filtrate tank[40 CFR Part 63, Subpart S]
  
- L. Any leaks which are found during the Site Inspections as required by 40 CFR 63.453(k) and 40 CFR 63.454(b) shall not be a violation of Section 63.446 and 40 CFR 63.450 or this License, provided the steps as specified by 40 CFR 63.453(k)(6) are taken. [40 CFR Part 63, Subpart S]
  
- M. MEDEP Chapter 124 defines which sources are to be collected by the HVLC System. No later than April 17, 2007, or such other date as may be established by MEDEP Chapter 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. [MEDEP Chapter 124]
  
- N. Pursuant to 40 CFR Part 63.443(e), excess emissions reported under Section 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 CFR 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 CFR §63.453(k) and (l), SDW 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 imminent 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 CFR Part 63, Subpart S, §63.453(k) and (l)]
- B. SDW shall perform inspections in accordance with 40 CFR Part 63, §63.453(k) and (l) once during each calendar month with at least 21 days elapsed time between inspections. [40 CFR Part 63, Subpart S, §63.453(k) and (l)]

**(30) Startup, Shutdown, and Malfunction Plan**

- A. SDW shall develop and maintain on-site a startup, shutdown, and malfunction plan (SSM Plan) that complies with the requirements of 40 CFR Part 63 Subpart A and the applicable Part 63 Subpart. [40 CFR Part 63]
- B. Excess emissions which are covered by the SSM Plan shall not be a violation of 40 CFR Part 63, Subpart A, Subpart S, Subpart MM, the applicable Part 63 Subpart, or this license. [40 CFR Part 63]

**(31) On-line Paper Coaters**

For the online coater for Paper Machine #1, #2, and #3, SDW shall maintain records to demonstrate compliance with MEDEP Chapter 123, Section 5(D). [MEDEP Chapter 123]

(32) **Paper Machine No. 1 Dryers**

- A. After Dryer #1, After Dryer #2, IR Heater #1, and IR Heater #2 shall fire only propane or natural gas. [MEDEP Chapter 140, BPT]
- B. The fuel burning emissions from After Dryer #1 shall not exceed the following [MEDEP Chapter 140, BPT]:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.01	MEDEP Chapter 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	0.12	MEDEP Chapter 140, BPT	Federally Enforceable
PM <sub>10</sub>	0.12	MEDEP Chapter 140, BPT	Federally Enforceable
SO <sub>2</sub>	0.01	MEDEP Chapter 140, BPT	Federally Enforceable
NO <sub>x</sub>	2.21	MEDEP Chapter 140, BPT	Federally Enforceable
CO	8.84	MEDEP Chapter 140, BPT	Federally Enforceable
VOC	0.15	MEDEP Chapter 140, BPT	Federally Enforceable

- C. The fuel burning emissions from After Dryer #2 shall not exceed the following [MEDEP Chapter 140, BPT]:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.01	MEDEP Chapter 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	0.09	MEDEP Chapter 140, BPT	Federally Enforceable
PM <sub>10</sub>	0.09	MEDEP Chapter 140, BPT	Federally Enforceable
SO <sub>2</sub>	0.01	MEDEP Chapter 140, BPT	Federally Enforceable
NO <sub>x</sub>	1.58	MEDEP Chapter 140, BPT	Federally Enforceable
CO	6.32	MEDEP Chapter 140, BPT	Federally Enforceable
VOC	0.11	MEDEP Chapter 140, BPT	Federally Enforceable

- D. The fuel burning emissions from IR Heater #1 shall not exceed the following [MEDEP Chapter 140, BPT]:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.01	MEDEP Chapter 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	0.04	MEDEP Chapter 140, BPT	Federally Enforceable
PM <sub>10</sub>	0.04	MEDEP Chapter 140, BPT	Federally Enforceable
SO <sub>2</sub>	0.01	MEDEP Chapter 140, BPT	Federally Enforceable
NO <sub>x</sub>	0.54	MEDEP Chapter 140, BPT	Federally Enforceable
CO	0.18	MEDEP Chapter 140, BPT	Federally Enforceable
VOC	0.05	MEDEP Chapter 140, BPT	Federally Enforceable

- E. The fuel burning emissions from IR Heater #2 shall not exceed the following [MEDEP Chapter 140, BPT]:

Pollutant	lb/MMBtu	Origin	Enforceability
PM	0.01	MEDEP Chapter 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin	Enforceability
PM	0.04	MEDEP Chapter 140, BPT	Federally Enforceable
PM <sub>10</sub>	0.04	MEDEP Chapter 140, BPT	Federally Enforceable
SO <sub>2</sub>	0.01	MEDEP Chapter 140, BPT	Federally Enforceable
NO <sub>x</sub>	0.54	MEDEP Chapter 140, BPT	Federally Enforceable
CO	0.18	MEDEP Chapter 140, BPT	Federally Enforceable
VOC	0.05	MEDEP Chapter 140, BPT	Federally Enforceable

- F. Visible emissions from After Dryer #1, After Dryer #2, IR Heater #1, and IR Heater #2 shall each not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [MEDEP Chapter 140, BPT]

- G. 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. [Chapter 140, BPT]



(33) **Bulk Handling Systems**

A. SDW shall maintain a Best Management Practice (BMP) Plan for the following bulk handling systems: [MEDEP Chapter 140, BPT]

<b>Bulk Handling Systems</b>	<b>Control Equipment</b>
4 Paper Mill Starch Silos	1 Baghouse for each silo
Paper Mill CaCO <sub>3</sub> 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, SDW 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. SDW shall 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.

SDW 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.

[MEDEP Chapter 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. [Chapter 140, BPT]

**(34) Solvent Cleaners**

Applicable machines that use a solvent containing greater than 5% VOC are subject to the operational and record keeping requirements of MEDEP Chapter 130 which include, but are not limited to, the following:

- A. SDW shall keep records of the amount of solvent added to each parts washer. [MEDEP Chapter 130]
- B. 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. [MEDEP Chapter 130]:
- C. SDW shall attach a permanent conspicuous label to each cold cleaning machine summarizing the following operational standards [MEDEP Chapter 130]:
  1. 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;
  2. 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;
  3. 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);
  4. 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;
  5. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;
  6. 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;

7. 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;
  8. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and
  9. The owner or operator shall ensure that the solvent level does not exceed the fill line.
- D. SDW shall not use any halogenated solvents in the solvent cleaners. [MEDEP Chapter 140, BPT]
- E. SDW shall keep the degreasers' Material Safety Data Sheets (MSDS) on file for those solvent cleaners exempt from MEDEP Chapter 130 based on the use of solvents containing less than 5% VOC by weight. [MEDEP Chapter 140, BPT]

**(35) Monitoring and Recordkeeping Requirements**

- A. Periodic Monitoring shall consist of recordkeeping which demonstrates compliance with applicable Regulations or Special Conditions of this License. [MEDEP Chapter 140]
1. The following periodic monitoring is required by Special Condition of this License:
    - a. Fuel use records for the Package Boiler, PB#1, PB#2, the Recovery Boiler, Lime Kiln, After Dryers #1 & #2, and IR Heaters #1 & #2.
    - b. Fuel oil firing rates for the Package Boiler, PB#1, PB#2, the Recovery Boiler, and the Lime Kiln.
    - c. For PB#2, pursuant to 40 CFR Part 60.49b(d), SDW shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil (#2 fuel oil), residual oil (#6 fuel oil), wood (SDW may combine biomass 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.
    - d. Black Liquor firing rate for the Recovery Boiler.
    - e. For the Recovery Boiler, pursuant to 40 CFR Part 63.866(c)(1), SDW shall maintain records of black liquor solids firing rates in units of Mg/d or ton/d.

- f. Delivery receipts or other records from the supplier indicating the percent sulfur by weight of the fuel oil for the Package Boiler, PB#1, PB#2, the Recovery Boiler, and the Lime Kiln
  - g. For the Lime Kiln, pursuant to 40 CFR Part 63.866(c)(2), SDW shall maintain records of CaO production rates in units of Mg/d or ton/d.
  - h. Log of all maintenance on the PCC plant demisters.
  - i. Documentation that SDW is maintaining a BMP Plan for the bulk handling systems.
  - j. Records of the amount of solvent added to parts washers.
  - k. Documentation that the Mill is maintaining an NPDES and/or MEPDES permit.
- [MEDEP Chapter 140]
2. The following periodic monitoring shall be recorded as specified by the applicable Special Conditions of this License:
- a. ESP voltage and amperage for PB#1, and PB#2 until the CMS for Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8(c)(3)
  - b. Total media flow rate for each scrubber on Lime Slakers #1 and #2

The records generated for Condition (34)(A)(2) may be from monitors, devices, calculations or other engineering methods which provide accurate and reliable data. If SDW records accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that accurate and reliable data was not recorded during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of SDW to provide accurate and reliable data was due to quality assurance and quality control procedures or unavoidable malfunctions.

[MEDEP Chapter 140]

3. The following periodic monitoring shall be recorded as specified by the applicable Special Conditions of this License for the Bleach Plant:
- a. Recycle flow, pressure drop, influent pH or influent ORP for the Central Absorber Scrubber.
  - b. Recycle flow, fluid pH or ORP or conductivity for the Back-up Bleach Plant Scrubber

Bleach Plant monitors must record accurate and reliable data. If a Bleach Plant monitor allows the operating or recording of accurate and reliable data less than 90% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the monitor was

not providing 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 provide accurate and reliable data was due to the performance of the established quality assurance and quality control procedures or unavoidable malfunctions.  
[MEDEP Chapter 122 and 140]

- B. The following are identified as MACT CMS:
1. The CMS as required by 40 CFR Part 63, Subpart MM by the applicable deadline. [40 CFR Part 63, Subpart MM]
  2. The CMS as required by 40 CFR Part 63, Subpart S. [40 CFR Part 63, Subpart S]
  3. The specific performance requirements for the CMS identified above are listed in 40 CFR Part 63, Subpart A and the appropriate Subpart. If a CMS allows the recording of accurate and reliable data less than the designated amount of source operating time, the Department may initiate enforcement action. [40 CFR Part 63, Subpart A]
- C. For all CEMS and COMS record keeping shall include:
1. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with MEDEP Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F. A CEMS or COMS shall allow the recording of accurate and reliable data sufficient to meet the data recovery thresholds in Section 5 of MEDEP Chapter 117;
  2. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P;

**(36) Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Maine DEP Bureau of Air Quality and EPA within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, Bleach Plant monitors, CEMS or COMS required by this license. [MEDEP Chapter 117 and MEDEP Chapter 124]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All Bleach Plant 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. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
  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.

**(37) Stack Testing**

- A. Unless otherwise specified in this license, compliance with the emission limits shall be determined on the basis of stack testing conducted upon the request of the Department and in accordance with the methods in 40 CFR Part 60, or compliance with the emission limits shall be determined on the basis of such other method as may be approved by the Department.
- B. When stack testing for particulate matter is required, S.D. Warren Company shall use EPA Method 5, and may report all PM emissions measured by Method 5 as PM<sub>10</sub>. Testing using EPA Method 201, 201A or 202 is not required.
- C. 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. When stack testing for VOC is required, S.D. Warren Company shall use EPA Method 25A, and may report all VOC emissions measured by Method 25A as carbon.

**(38) Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and Jan 31st of each year with the initial semiannual report due July 31, 2005.

- A. MEDEP Chapter 140
  1. Each semiannual report shall include a summary of the periodic monitoring required by this license.
  2. 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. [MEDEP Chapter 140]
- B. MACT, 40 CFR Part 63

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality and to EPA which are required by 40 CFR Part 63 Subpart A, as specified by the applicable standard. The excess emission report pursuant to 63.868(c) may be required on a quarterly basis, according to the criteria specified in 63.868(c). [40 CFR Part 63, Subpart A]

C. NSPS, 40 CFR Part 60

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality and to EPA which are required by 40 CFR Part 60 Subpart A for PB#2. Pursuant to 40 CFR Part 60.49b(i) and (j), SDW shall submit the following relevant information for PB#2 when there has been an excess emission of NO<sub>x</sub> or SO<sub>2</sub> above the standard or when there has been insufficient NO<sub>x</sub> or SO<sub>2</sub> CEMS monitoring uptime, as applicable: 60.49b(g), 60.49b(k), and 60.49b(m). SDW shall submit the information as required by 60.49b(r) in the event of a malfunction as defined by 60.45b(i). [40 CFR Part 60, Subpart A]

**(39) Annual Compliance Certification**

SDW 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 with the initial annual certification due January 31, 2006. 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, applicable emission factors. Events which are exempt pursuant to Condition (10) of this License shall not be considered non-compliance for the purpose of the Annual Compliance Certification. [MEDEP Chapter 140]

**(40) 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.

**(41) Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
- or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017  
Phone: (207) 287-2437

The emission statement must be submitted as specified in MEDEP Chapter 137.

**(42) Toxic Air Pollutants Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall report the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017  
Phone: (207) 287-2437

(43) The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
MEDEP Chapter 102	Open Burning	-
MEDEP Chapter 109	Emergency Episode Regulation	-
MEDEP Chapter 110	Ambient Air Quality Standard	-
MEDEP Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

**(44) Units Containing Ozone Depleting Substances**

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



**(45) Operational Flexibility for Insignificant Units and Activities**

S.D. Warren Company may add or modify units and activities that are identified as “categorically exempt” insignificant units and activities under Appendix B, Section A of Chapter 140 of the Department’s regulations. Addition or modification of such units and activities does not require a license amendment or notice to the Department.

S.D. Warren Company may add or modify units and activities that are identified as “insignificant based on size or production rate” under Appendix B, Section B, Chapter 140 of the Department’s regulations. S.D. Warren Company shall provide notice to the Department within 30 days of such installation or modification. Addition or modification of such units and activities does not require a license amendment.

(46) The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(47) SDW shall pay the annual air emission license fee within 30 days of January 31<sup>st</sup> of each year. Pursuant to 38 M.R.S.A. Section 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 M.R.S.A. Section 341-D, Subsection 3.

**(48) Certification by a Responsible Official**

Semiannual reports and annual compliance certifications required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

DONE AND DATED IN AUGUSTA, MAINE THIS                    DAY OF                    2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
          DAWN R. GALLAGHER, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/24/96

Date of application acceptance: 10/28/96

Date filed with the Board of Environmental Protection: \_\_\_\_\_

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