



STATE OF MAINE

# DEPARTMENT OF ENVIRONMENTAL PROTECTION

ANGUS S. KING, JR.  
GOVERNOR

EDWARD O. SULLIVAN  
COMMISSIONER

S. D. Warren Company	)	Departmental
Cumberland County	)	Finding of Fact and Order
Westbrook, Maine	)	Air Emission License
A-29-71-Y-A	)	Amendment #13

After review of the air emissions license amendment 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

1. S.D. Warren Company of Westbrook, Maine was issued Air Emission License, A-29-71-C-A/R on March 23, 1988.
2. S.D. Warren's Air Emission License was subsequently amended on June 27, 1989, August 4, 1989, June 29, 1990, August 9, 1990, October 26, 1990, February 15, 1991, March 25, 1991, March 12, 1992, July 23, 1992, August 27, 1992, February 18, 1993, January 3, 1995, December 19, 1995, and February 7, 1996. All of S.D. Warren's licenses through the Department were transferred from S.D. Warren a Subsidiary of Scott Paper to S.D. Warren Company on December 14, 1994.
3. S. D. Warren has applied for a amendment to their air emission license to comply with Chapter 138 Reasonably Available Control Technology (RACT) for Facilities that Emit Nitrogen Oxides (NOx) of the Maine Air regulations.

### B. Emission Equipment

S.D. Warren is authorized to operate the following air emission units, which are subject to NOx RACT requirements:

Equipment	Maximum Capacity	Fuel Type, % Sulfur	Post Combustion Ctrl Eqpmnt	Stack #
Recovery Boiler #3	332 MMBTU/hr 375 MMBTU/hr	#2 oil, 0.50% Black liquor	ESP ESP	3 3
PB #17	232.7 MMBTU/hr <sup>a</sup>	#6 oil, 2.0%	none	2
PB #18	232.7 MMBTU/hr <sup>a</sup>	#6 oil, 2.0%	none	2

*Serving Maine People & Protecting Their Environment*

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7683 FAX: (207) 237-7826

PORTLAND  
312 CANCO ROAD  
PORTLAND, ME 04103  
(207) 822-6300 FAX: (207) 822-6303

BANGOR  
106 HOGAN ROAD  
BANGOR, ME 04401  
(207) 941-4570 FAX: (207) 941-4554

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, ME 04769  
(207) 764-0477 FAX: (207) 764-1337

S. D. Warren Company )  
Cumberland County )  
Westbrook, Maine )  
A-29-71-Y-A 11

Departmental  
Finding of Fact and Order  
Air Emission License  
Amendment #13

### ORDER

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

- ~~- will receive Best Practical Treatment,~~
- ~~- will not violate applicable emission standards, and~~
- ~~- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.~~

~~The Department hereby grants this amendment, A-29-71-Y-A, subject to the conditions found in Air Emission License A-29-71-C-A/R, in the following amendments:~~

~~A-29-71-G-M    A-29-71-K-M    A-29-71-R-M    A-29-71-Z-M  
A-29-71-H-A    A-29-71-L-M    A-29-71-S-A    A-29-71-AA-M  
A-29-71-I-A    A-29-71-M-M    A-29-71-T-A  
A-29-71-J-M    A-29-71-Q-M    A-29-71-W-M~~

~~and in the following conditions:~~

The following shall replace Condition's (k) 2 NO<sub>x</sub> emission limit of Air Emission License A-29-71-C-A/R:

2. a. Each of the #6 oil-fired Boilers #17, #18 and #20 shall not exceed 0.30 lb/MMBtu NO<sub>x</sub> emission limit:
- b. S.D. Warren shall limit the firing capacity for Boilers #17, #18, and #20 to 199 MMBtu/hour. SDW will assure compliance with the 199 MMBtu/hr firing limits by clamping the oil supply valves such that the oil fired to each of these boilers never exceeds 10,757 pounds per hour. SDW will measure the oil flow rate by the currently installed mass flow transmitters on Boilers #17 and #18 and through pneumatic fuel controls on the #20 Boiler. By October 1, 1996, SDW will install a mass flow transmitter on Boiler #20, similar to the fuel controls on Boilers #17 and #18, to demonstrate compliance. In addition, daily fuel use records will be kept for each of these boilers.
- c. S.D. Warren will perform NO<sub>x</sub> emission stack testing in accordance with 40 CFR Part 60 or other methods approved or required by the Department, to demonstrate their ability to meet the above lb/MMBtu NO<sub>x</sub> emission limit by May 31, 1996. SDW shall maintain fuel records which include type of fuel, amount of fuel, and fuel heat content.



S. D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-71-Y-A

)  
)  
)  
12

Departmental  
Finding of Fact and Order  
Air Emission License  
Amendment #13

- d. S.D. Warren shall continue to demonstrate NO<sub>x</sub> RACT compliance by stack tests every year thereafter. S.D. Warren shall submit a written report of the NO<sub>x</sub> emission demonstration by June 30, 1996 and every year thereafter. S.D. Warren may apply to amend the license to reduce the frequency of stack testing upon successful compliance demonstration of two consecutive annual stack tests.

The following shall replace Condition's (k) 3 NO<sub>x</sub> emission limit of Air Emission License A-29-71-C-A/R:

3. a. The #19 multi-fueled fired boiler shall not exceed the following NO<sub>x</sub> emission limit:

<u>Pollutant</u>	Oil or Wood or Combination of oil/wood - <u>lb/MMBtu</u>
NO <sub>x</sub>	0.30

- b. S.D. Warren will perform NO<sub>x</sub> emission stack testing in accordance with 40 CFR Part 60 or other methods approved or required by the Department, to demonstrate their ability to meet the 0.30 lb/MMBtu NO<sub>x</sub> emission limit by May 31, 1996 and every year thereafter. SDW shall maintain fuel records which include type of fuel, amount of fuel, and fuel heat content.
- c. S.D. Warren shall submit a written report of the NO<sub>x</sub> emission demonstration by June 30, 1996 and every year thereafter. S.D. Warren may apply to amend the license to reduce the frequency of stack testing upon successful compliance demonstration of two consecutive annual stack tests.

~~The following shall replace Condition's (k) 5 NO<sub>x</sub> emission limit of Air Emission License A-29-71-C-A/R:~~

- ~~5. NO<sub>x</sub> emissions from the #21 Boiler shall not exceed the following :~~

<u>Pollutant</u>	When firing oil or a combination of oil and biomass (lb/MMBtu)	When firing coal and/or biomass (lb/MMBtu)
NO <sub>x</sub>	0.30	0.38

S. D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-71-Y-A

)  
)  
)  
13

Departmental  
Finding of Fact and Order  
Air Emission License  
Amendment #13

~~Compliance with the NO<sub>x</sub> lb/MMBtu CEMS monitored pollutant emission limit shall be determined on a 24 hour block average basis. A 24 hour block average basis shall be defined as midnight to midnight. S.D. Warren shall maintain records of when firing oil or a combination of oil and biomass and correspond it to the appropriate NO<sub>x</sub> CEM emission limit. The same applies when firing coal and biomass.~~

The following NO<sub>x</sub> emission limits meet Chapter 138 NO<sub>x</sub> RACT requirements and shall be included in Condition 1 of Air emission License Amendment #11, A-29-71-T-A and be included in Condition (q) 8 of Air Emission License A-29-71-C-A/R:

1. The NO<sub>x</sub> emissions from the Recovery Boiler shall not exceed the following limits:

NO <sub>x</sub>	110 ppm WB	corrected to 12% CO <sub>2</sub> 24-hr block average basis
	95 ppm WB	corrected to 12% CO <sub>2</sub> , 30 day rolling average

2. Compliance with the NO<sub>x</sub> ppmv emission limit shall be determined by the existing NO<sub>x</sub> CEM on a 24 hour block average basis. A 24 hour block average basis shall be defined as midnight to midnight.

3. When fuel oil is being fired during startup and shutdown of the recovery boiler, only the mass emission limits shall apply, the ppm limits shall not.

The following NO<sub>x</sub> emission limit and conditions for the lime kiln shall be included in Condition (p) of Air Emission License A-29-71-C-A/R:

1. The lime kiln shall not exceed the following NO<sub>x</sub> emission limits:

<u>Pollutant</u>	<u>ppmv</u>
NO <sub>x</sub>	120 ppmv wet basis

2. Compliance with the Lime Kiln NO<sub>x</sub> emission limit of 120 ppmv shall be based on a stack test conducted in accordance with the appropriate EPA test methods (40 CFR, Part 60, Appendix A) as specified in this license by May 31, 1996 and every year thereafter.

S. D. Warren Company )  
 Cumberland County )  
 Westbrook, Maine )  
 A-29-71-Y-A 14

Departmental  
 Finding of Fact and Order  
 Air Emission License  
 Amendment #13

3. S.D. Warren shall submit a written report of the NOx emission demonstration by June 30, 1996 and every year thereafter. The licensee may apply to amend the license to reduce the frequency of stack testing upon successful compliance demonstration of two consecutive annual stack tests.

~~The following are new Conditions:~~

- 1) ~~The diesel units shall not exceed the following hour limitations on a 12-month, rolling total basis. In the event the hour meters are not functioning, documentation shall be determined by fuel use records:~~

Source	Fuel Type	Operating Hours Cap (< 10 tpy)
760 HP Engine	Diesel	851 hours/year
750 HP Engine	Diesel	862 hours/year
750 HP Engine	Diesel	862 hours/year
265 HP Engine	Diesel	2,441 hours/year
165 HP Engine	Diesel	3,920 hours/year
192 HP Engine	Diesel	3,369 hours/year
70 HP Engine	Gasoline	None

- (2) ~~The following gas burning equipment shall be included in S.D. Warren's Air Emissions License:~~

Source	Location	Maximum Capacity	Fuel Type
Gas Burner #1	#2 Solvent Coater	6 MMBtu/hr	Natural Gas
Gas Burner #2	Research Boiler	6.7 MMBtu/hr	Natural Gas
Gas Burner #3	#35 Coater at research	13 MMBtu/hr	Natural Gas
Gas Burner #4	#44 Coater at research	0.22 MMBtu/hr	Natural Gas
Gas Burner #5	#46 Coater at Research	3.2 MMBtu/hr	Natural Gas
Gas Burner #6	#7 Lusterkoter	0.94 MMBtu/hr	Propane



S. D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-71-Y-A

)  
)  
)  
15

Departmental  
Finding of Fact and Order  
Air Emission License  
Amendment #13

(3) This amendment shall be reviewed for renewal concurrent with air emission license A-29-71-C-A/R.

DONE AND DATED IN AUGUSTA, MAINE THIS 12th DAY OF June 1996.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

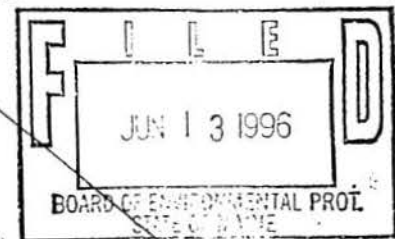
BY: James P. Brooks  
Edward O. Sullivan, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 6, 1995

Date of application acceptance: February 6, 1995

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



This Order prepared by Edwin L. Cousins, Bureau of Air Quality