



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

**Rumford Paper Company  
Oxford County  
Rumford, Maine  
A-214-77-8-M**

**Departmental  
Findings of Fact and Order  
New Source Review  
Amendment #7**

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

FACILITY	Rumford Paper Company (The Mill)
PART 70 LICENSE NUMBER	A-214-70-A-I
LICENSE TYPE	Chapter 115 Minor Revision
NAICS CODES	322121
NATURE OF BUSINESS	Pulp & Paper Manufacturer
FACILITY LOCATION	Rumford, Maine
NSR AMENDMENT ISSUANCE DATE	<b>August 24, 2009</b>

B. Amendment Description

The Mill has requested a minor revision in order to:

1. Align the frequency of stack testing with State statute;
2. Adjust the Relative Accuracy Test Audit (RATA) frequency when the equipment has reduced operating hours; and
3. License a flexible operating scenario for the Cogen Boilers #6 & #7 sulfur dioxide limitations.

C. Application Classification

The application for The Mill does not violate any applicable federal or state requirements. This application seeks to modify a Best Available Control Technology (BACT) analysis performed per New Source Review.

This modification is determined to be a minor revision under *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005) and has been processed as such.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

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

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-0477 FAX: (207) 760-3143

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

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

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

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

### B. Adjusting Stack Test Frequency

The Mill has requested that the stack testing frequency listed in the license be adjusted to reflect recent changes in Maine Statute. Specifically, 38 MRSA 589 Subsection 2 states that facilities shall not be required to stack test for chlorine or chlorine dioxide more than once every five years. In addition, facilities monitored by a Continuous Opacity Monitor (COM) or appropriate surrogate parameters as required by the commissioner shall not be required to stack test for PM more than once every five years. If visible emissions, operating parameters, federal requirements, or other information indicates that the source may be operating out of compliance, additional testing may be required upon request of the Department.

### C. Adjusting the RATA frequency for Boilers #3 and #5

Boilers #3 and #5 have Continuous Emission Monitoring Systems (CEMS) for NO<sub>x</sub> and SO<sub>2</sub>. The actual operating hours of these boilers have been reduced substantially and they are operated only when absolutely necessary to meet the steam demand for the mill. Due to the reduced operating hours, scheduling RATAs every four calendar quarters has become infeasible because the source is often not planned to be in operation around the time the RATA is due. Occasionally, these boilers are called upon to operate for short periods of time when another boiler is offline for repairs. Performing RATAs during these short-term unplanned operating periods is not feasible due to required notification periods and the time required to schedule stack testing company resources. Therefore, The Mill has requested flexibility in determining when a RATA needs to be performed on Boilers #3 and #5.

D. SO<sub>2</sub> Emission Limits for Cogen Boilers #6 and #7

Boilers #6 and #7 were modified in 2004 to accept pulp mill and evaporator gases as a fuel source. These gases include high volume low concentration (HVLC) gases collected from tank vents and equipment hoods, non-condensable gases (NCGs) from digester relief, blow tank, and evaporator sources, and stripper off gases (SOGs) that originate from the steam stripper that treats foul kraft condensates.

Pulp mill gases have a sulfur content that varies with the operating conditions. The Mill operates batch digesters which typically release gases intermittently. These pulp mill gases can cause a high level of short-term variability in the sulfur load to the boilers. Long-term average emissions are less affected.

The Mill has requested flexibility in the short-term SO<sub>2</sub> emission limit for Boilers #6 and #7. The Mill's current license allows for a higher SO<sub>2</sub> emission limit when the Cogen Boilers are firing only fuel oil or performing a gravimetric calibration. This condition also requires a simultaneous decrease in the emission limits for Boilers #3 and #5. Previous modeling has demonstrated that these alternative emission limitations do not violate ambient air quality standards.

E. Annual Emissions

The Mill shall be restricted to the following annual emissions:

**Total Licensed Annual Emissions for the Facility (Tons/year)**  
(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	Cl <sub>2</sub>	ClO <sub>2</sub>
Power Boiler #3	65.7	65.7	341.6	525.6	262.8	19.7	-	-
Power Boiler #5	65.7	65.7	341.6	525.6	262.8	19.7	-	-
Power Boiler #6	82.8	82.8	772.6	1,655.6	1,090.0	22.1	-	-
Power Boiler #7	82.8	82.8	772.6	1,655.6	1,090.0	22.1	-	-
Lime Kiln	105.1	105.1	100.7	227.8	170.8	8.8	-	-
Recovery Boiler	379.7	284.7	903.6	941.7	972.4	16.2	-	-
Smelt Tank C	70.1	69.2	24.1	-	-	-	-	-
Dryers	15.2	15.2	0.1	19.6	2.7	0.7	-	-
Air Heaters	2.0	2.0	0.1	40.6	40.6	2.2	-	-
Cogen Emerg Gen	0.1	0.1	0.1	1.6	0.4	0.1	-	-
R15 Emerg Gen	0.1	0.1	0.1	1.4	0.3	0.1	-	-
Mill Emerg Gen	0.2	0.2	0.1	4.4	1.2	0.1	-	-
Fire Pump	0.1	0.1	0.1	2.5	0.5	0.2	-	-
Lift Pump Engine	0.1	0.1	0.1	2.1	1.1	2.1	-	-
Bleach Plant	-	-	-	-	-	-	13.1	13.1
<b>Total TPY</b>	<b>869.7</b>	<b>773.8</b>	<b>3,257.5</b>	<b>5,577.1</b>	<b>3895.6</b>	<b>114.1</b>	<b>13.1</b>	<b>13.1</b>

### III. AMBIENT AIR QUALITY ANALYSIS

The Mill 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. An additional ambient air quality analysis is not required at this time.

### 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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-214-77-8-M pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

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

The following NSR condition will replace Condition (25)(C) of Air Emission License A-214-70-A-I when amended:

C. Boilers #6 and #7 shall each not exceed the following emission limits:

Pollutant	lb/MMBtu (each boiler)	Fuel	Ave Time	Compliance Determined By
PM	0.03	any combination	--	Stack Testing Every Five Years
PM <sub>10</sub>	0.03	any combination	--	Stack Testing Upon Request
SO <sub>2</sub>	0.28 <sup>a</sup>	any combination	24-hr block	CEMS
	0.32 <sup>a</sup>	for coal, DPC, or TDF contribution		
NO <sub>x</sub>	0.60	any combination	24-hr block	CEMS
	0.10	natural gas only		
	0.30	oil only		
CO	0.15	coal, DPC, or TDF; or	--	Stack Testing Upon Request
	0.50	biomass, or natural gas;		
	0.03	oil		
VOC	0.008	any combination	--	Stack Testing Upon Request

- a. When Boiler #6 and/or #7 is firing only fuel oil or performing a gravimetric calibration, the monitored SO<sub>2</sub> lb/MMBtu emissions during that period shall not be included in determining the 24-hr block average SO<sub>2</sub> lb/MMBtu emission rate. The Mill shall keep records of the dates and times of all gravimetric calibrations and the date and time of any firing of only fuel oil in Boilers #6 and #7.

Pollutant	lb/hour (each boiler)	Ave Time	Compliance Determined By
PM	18.9	--	Stack Testing Every Five Years
PM <sub>10</sub>	18.9	--	Stack Testing Upon Request
SO <sub>2</sub>	176.4 <sup>b,c,d</sup>	3-hr block	CEMS
NO <sub>x</sub>	378.0	24-hr block	CEMS
CO	248.85	--	Stack Testing Upon Request
VOC	5.04	--	Stack Testing Upon Request

- b. When Boiler #6 and/or #7 is firing only fuel oil or performing a gravimetric calibration, SO<sub>2</sub> emissions from the common stack for Boilers #6 and #7 shall be limited to a total of 500.0 lb/hr. The Mill shall keep records of the dates and times of all gravimetric calibrations and the date and time of any firing of only fuel oil in Boilers #6 and #7.
- c. When the Recovery Boiler C is firing only fuel oil and emissions are above 206.3 lb/hr, SO<sub>2</sub> emissions from the common stack for Boilers #6 and #7 shall be limited to a total of 250.0 lb/hr. The Mill shall keep records of the date and time of any firing of only fuel oil in Recovery Boiler C.
- d. In addition to the limitations listed above, The Mill shall be determined to be in compliance when Boilers #6 or #7 exceed the 176.4 lb/hr (352.8 lb/hr combined) SO<sub>2</sub> limit provided all of the following conditions are met:
  - i. Either Boiler #6 or #7 is firing any of the following gas streams: SOGs, NCGs, or HVLCs;
  - ii. SO<sub>2</sub> emissions from Boilers #6 and #7 combined do not exceed 500 lb/hr on a 3-hour block average basis;
  - iii. SO<sub>2</sub> emissions from Recovery Boiler C do not exceed 206.3 lb/hr on a 3-hour block average basis;
  - iv. SO<sub>2</sub> emissions from Boilers #3 and #5 combined do not exceed 60 lb/hr on a 3-hour block average basis;
  - v. The Mill shall report the dates, times, and average SO<sub>2</sub> emissions for each 3-hour block when Boilers #6 and/or #7 utilize these alternative limits.

- e. The alternative SO<sub>2</sub> limits in (d) above shall not account for more than 4.0 ton/year of actual SO<sub>2</sub> emissions.

[06-096 CMR 115, BACT]

**The following NSR condition will replace Condition (25)(F) of Air Emission License A-214-70-A-I when amended:**

- F. Compliance with the lb/MMBtu particulate matter limits for Boilers #6 and #7 shall be demonstrated by stack testing performed once every five years. [06-096 CMR 115, BACT and 38 M.R.S.A 589, Subsection 2]

**The following NSR condition will replace Condition (28)(D) of Air Emission License A-214-70-A-I when amended:**

- D. Compliance with the particulate matter limits for Recovery Boiler C shall be demonstrated by stack testing performed once every five years. [06-096 CMR 115, BACT and 38 M.R.S.A 589, Subsection 2]

**The following NSR condition will replace Condition (29)(B) of Air Emission License A-214-70-A-I when amended:**

- B. Compliance with the particulate matter limits for Smelt Tank C shall be demonstrated by stack testing performed once every five years. [06-096 CMR 115, BACT and 38 M.R.S.A 589, Subsection 2]

**The following NSR condition will replace Condition (31)(E) of Air Emission License A-214-70-A-I when amended:**

- E. The Mill shall operate the Bleach Plant Scrubber System, when the Bleach Plant is in operation, in accordance with the requirements of 40 CFR 63, §63.445(c). [40 CFR 63, §63.445(b), 06-096 CMR 122 (except for stack testing frequency), 06-096, 06-096 CMR 115, BACT and 38 M.R.S.A 589, Subsection 2]

The following are new NSR Conditions:

- (10) Relative Accuracy Test Audits (RATAs) shall be performed on the monitoring equipment for Boilers #3 and #5 in accordance with 06-096 CMR 117 unless the unit has not had 168 operating hours in a quarter, in which case that quarter shall be excluded in determining the deadline for the next RATA. If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, a RATA must be completed within 720 operating hours following the end of the eighth successive elapsed calendar quarter. [06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 24<sup>th</sup> DAY OF August 2009.  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *David P. Littell*  
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/22/09

Date of application acceptance: 6/2/09

Date filed with the Board of Environmental Protection:

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

