



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Rumford Paper Company
Oxford County
Rumford, Maine
A-214-77-11-O**

**Departmental
Findings of Fact and Order
Certification of Offset Credits**

After review of the application submitted by Rumford Paper Company, pursuant to 06-096 CMR 113 *Growth Offset Regulation*, the Department finds the following facts:

I. INTRODUCTION

Rumford Paper Company (Rumford) has submitted an application for certification of Nitrogen Oxide (NO_x) emission offset credits resulting from the permanent shutdown of Power Boiler #5 at the Rumford facility. Power Boiler #5 began operation in 1972 and ceased operation in February of 2007.

II. OFFSET GENERATION DETAILS

Power Boiler #5, rated at 300 MMBtu/hr heat input, was operational at the mill as a steam generation unit. Over the last decade, the Rumford Mill has dramatically reduced its energy demand through the retirement of equipment, energy conservation projects and infrastructure projects. As a result, Power Boiler #5 has not operated since February of 2007. The proposed offset certification is for NO_x emissions licensed and emitted from the Power Boiler #5.

The following addresses the requirements for credit generation under Section 4 of 06-096 CMR 113, *Growth Offset Regulation*:

A. Base Case Quantification: 06-096 CMR 113 (4)(A)

The offset credits must be based on actual emissions occurring in a consecutive 24-month period after May 31, 1995. The credits sought by Rumford are based on actual NO_x emissions from the Power Boiler #5 during the 24-month period of January 1, 1997 through December 31, 1998 as shown in the table below:

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

BANGOR
106 HOGAN ROAD, SUITE 6
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

Calendar Year	06-096 CMR 137 Emissions Inventory (TPY)	Method of Measurement
1997	197.2	CEMS
1998	233.4	CEMS
2 yr average	215.3	

The information submitted as part of the 1997 and 1998 inventory for actual emissions per 06-096 CMR 137 can be found in the application dated August 31, 2012.

B. Allowable Emissions Compliance: 06-096 CMR 113 (4)(B)

Only those emission reductions below the licensed or otherwise allowable emissions for the existing source are credible as offset credits. NO_x emissions from Power Boiler #5 remained in compliance with all federal and state NO_x emission requirements and license limits in calendar years 1997 and 1998. Therefore, all NO_x emission reductions from the boiler qualify for use as offset credits.

C. Required Reductions: 06-096 CMR 113 (4)(C)

Offset credits are not allowed for reductions in emissions that were required by any federally enforceable license conditions, requirements of the Clean Air Act, or other applicable federal or state law or requirement. The emission reductions from the mill's Power Boiler #5 are the result of enforceable license conditions that have not changed substantially since license amendments in 1993 (A-214-71-0-M, dated February 12, 1993 and A-214-71-Q-M, dated December 22, 1993). No offset credits are the result of reductions from newly required license conditions or other requirements of the Clean Air Act. Therefore, all of the NO_x reductions resulting from the shutdown are eligible for certification as offset credits.

D. Existing or Reasonably Foreseeable Reduction Requirements: 06-096 CMR 113 (4)(F)

Emission reductions are eligible as offset credits only if they are in excess of any existing or foreseeable federal or state law reduction requirements. Discussed below are current or pending regulations that are foreseen to have any significant impact on the consideration of surplus emissions of NO_x from Power Boiler #5.

In 1995, Power Boiler #5 was subject to NO_x Reasonably Available Control Technology (RACT) requirements per 06-096 CMR 138. An amendment was

issued (A-214-71-U-A, dated December 1995) that determined that the boiler was already meeting NO_x RACT by employing low NO_x burner systems installed in addition to the flue gas recirculation capabilities which was considered BACT in a previous license amendment (A-214-71-O-A, dated February 1993). In addition, Power Boiler #5 currently has a Continuous Emission Monitoring (CEM) system which monitors NO_x emissions as a requirement of license amendment A-214-71-O-A. In 1997 and 1998, Power Boiler #5 met these conditions and therefore the emission reductions are eligible as offset credits.

In 1999, the Regional Haze Rule was promulgated by the Environmental Protection Agency (EPA); and in 2005, the final amendments to the Regional Haze rule were issued requiring Best Available Retrofit Technology (BART) eligibility and applicability determinations from each facility. Power Boiler #5 was subject to BART; however a minor revision was issued (A-214-77-9-M, dated January 2010) that established enforceable emission limits below the BART eligible threshold of 250 tons per year each for SO₂, NO_x and PM. Based on an analysis of emissions from Power Boiler #5, this enforceable limit would not reduce the actual emissions from the boiler since the highest 24-month period actual emissions are already less than 250 tons for each pollutant. Based on this assessment of BART requirements, all reductions of NO_x emissions from the offset baseline are considered surplus and are eligible for licensing as offset credits.

It is unlikely that additional BART control technologies would have been found technically and economically feasible for Power Boiler #5 NO_x emissions, since the unit had been subject to NO_x RACT requirements. Based on a review of the BART determinations from other Maine facilities and the boiler's existing NO_x RACT limits, Power Boiler #5 would not have been required to install additional NO_x control equipment or achieve further reductions as a result of BART requirements. Therefore, the Department has determined that all of the NO_x emissions reductions from the baseline years of 1997 and 1998 are eligible to qualify as offset credits.

On March 21, 2011 the EPA amended the Industrial Boiler Maximum Achievable Control Technology (MACT). The amended Industrial Boiler MACT rule included emissions limitations for CO, PM and other HAPs; however, there was no regulation requirements for NO_x emissions. Therefore, the proposed offset credits for NO_x from Power Boiler #5 are considered surplus to the Industrial Boiler MACT rule.

Power Boiler #5 is a fossil fuel fired unit that does not meet the applicability requirements of 06-096 CMR 156, *CO₂ Budget Trading Program*. Therefore, the proposed offset credits for NO_x from Power Boiler #5 are considered surplus of the requirements of 06-096 CMR 156.

As of the date of this certification of offset credits, final Federal Climate Change Regulations legislation does not exist regarding emissions of greenhouse gases, such as a national cap and trade program. The potential impact of such a program on a limited use, liquid/gas fossil fuel fired unit is not known at this time; however, it would be expected to be minimal. Power Boiler #5 is subject to the requirements of 40 CFR Part 98, *Mandatory Green House Gas* reporting rule; however, this does not impact the boiler's operation or emissions.

In 2010, EPA finalized the primary and secondary National Ambient Air Quality Standards (NAAQS). The level of the primary 1-hour NO_x standard is 100 parts per billion (ppb). Following in 2012, the EPA designated all areas of the country as unclassifiable/attainment for the 2010 NO₂ NAAQS; therefore, all reductions of NO_x emissions from the offset baseline are considered surplus and are eligible for licensing as offset credits.

E. Federally Enforceable Conditions: 06-096 CMR 113 (4)(G)

Emission reductions may qualify as offset credits only if they are made federally enforceable. Through this Certification of Offset Credits amendment, Rumford is requesting that the shutdown of Power Boiler #5 be made federally enforceable.

F. Licensed and Actually Operated: 06-096 CMR 113 (4)(H)

To qualify as offset credits, emission reductions must be generated by a source that has been licensed or otherwise allowed to emit and has been actually operating and emitting the pollutant for at least 2 years. Power Boiler #5 meets this requirement having been operational since 1972 as well as being licensed for the last 25 years.

G. Shutdown Conditions: 06-096 CMR 113 (4)(I)

To qualify as offset credits, shutdowns or curtailments of plant production resulting in reduced emissions must demonstrate that the demand for the services or products will not shift to other similar sources in the state causing a failure of the expected decrease in emissions to occur. The permanent retirement of Power Boiler #5 will not cause an emissions increase of NO_x due to other sources compensating for the shutdown if it is needed. However, reductions in overall energy demand from the mill has made the permanent shutdown of the boiler possible, without shifting demand to any other units at the mill, since there has not been a need for Power Boiler #5 to operate since February of 2007.

H. Ozone Season: 06-096 CMR 113 (4)(J)

The portion of the offset credits to be used during the ozone season must be generated primarily during the ozone season. Operation of Power Boiler #5 did not vary seasonally; therefore there is no fluctuation in NO_x emissions throughout the year.

I. Quantification: 06-096 CMR 113 (5)(A-D)

Quantification of offset credits for credit generators includes quantification of the base credit and adjustment of the base credit for compliance assurance. The compliance assurance multiplier for continuous emission monitoring (CEM) is 0.95. Therefore the certified offset NO_x credit from the Power Boiler #5 shut down is the following:

	Average Annual NO _x Emissions (tons)	Average Hourly Emission Rate (lbs.)
2 year average NO _x base credit	215.3	57.35
Compliance Assurance Multiplier (for CEM data)	0.95	0.95
Certified Power Boiler #5 NO_x Credits	204.5	54.48

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ORDER

Pursuant to the requirements in 06-096 CMR 113 and based on the above Findings, the Department hereby grants air emission license A-214-77-11-O subject to the following:

- (1) Rumford is granted certification of 204.5 tons of NOx Offset Credits under 06-096 CMR 113.
 - A. The credits generated are a direct result of the Power Boiler #5 shutdown at the facility.
 - B. Rumford shall not operate Power Boiler #5 upon issuance of this license. The facility shall physically decommission the boiler so as to render it inoperable.
- (2) Rumford shall notify the Department in writing of any sale or other transfer of these credits within 30 days of such sale or transfer.

DONE AND DATED IN AUGUSTA, MAINE THIS 27 DAY OF February, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Maic Allen Robert Cone for*
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 4, 2012

Date of application acceptance: September 19, 2012

Date filed with the Board of Environmental Protection:

This order prepared by Allison M. Hazard, Bureau of Air Quality.

