



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

**Bucksport Mill LLC
Hancock County
Bucksport, Maine
A-22-77-20-M**

**Departmental
Findings of Fact and Order
New Source Review
NSR #17**

FINDINGS OF FACT

After review of the NSR minor revision application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), Section 344 and Section 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Bucksport Mill LLC (Bucksport Mill)
LICENSE TYPE	06-096 CMR 115, Minor Modification
NAICS CODES	221112, Fossil Fuel Electric Power Generation
NATURE OF BUSINESS	Electric Services
FACILITY LOCATION	2 River Road, Bucksport, Maine

The Bucksport Mill LLC (Bucksport Mill) operates electric power generation equipment and is licensed as a major source through Part 70 license A-22-70-A-I, December 30, 2004 and subsequent Part 70 amendments and New Source Review licenses.

The Bucksport Mill submitted a New Source Review (NSR) minor revision application to add a gas heater located contiguous to the Bucksport Mill and formerly owned by Bangor Gas.

B. Amendment Description

As part of a new gas supply contract between Bucksport Mill and Bangor Gas, ownership of the gas heater will be transferred to the Bucksport Mill. As a stand-alone unit owned by Bangor Gas, the unit was below the Department's minor source licensing thresholds and was not licensed. Since the Bucksport Mill is a licensed facility, the gas heater is required to be included in the facility's air license.

C. Emission Equipment

The following equipment is addressed in this NSR air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type</u>
Gas Heater	4.8	4100	Natural gas

D. Application Classification

The application submitted by the Bucksport Mill does not violate any applicable federal or state requirements, does not reduce monitoring, reporting, testing or record keeping, and does not seek to modify a Best Available Control Technology (BACT) analysis.

The proposed revision will not result in an emissions increase of greater than 4 tons/year of a single pollutant or 8 tons/year total pollutants. Therefore, the amendment has been classified as a minor revision under *Minor and Major Source Air Emission License Regulations* 06-096 Code of Maine Rules (CMR) 115 (as amended). The procedures found in 06-096 CMR 115 (as amended) can be utilized to process this application since the proposed revision is not prohibited by the Part 70 air emission license. This minor revision shall be incorporated into the Part 70 air emission license renewal currently in process.

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 *Definitions Regulation*, 06-096 CMR 100 (as amended). 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. Gas Heater

The Gas Heater was installed in 2000 as part of the Bucksport Mill's gas turbine project and has a maximum heat input capacity of 4.1 MMBtu/hr. It is an indirect fired heater made by Total Energy Resources, Inc. (TERI reference #E-1131-D1). The unit fires natural gas to heat a water glycol mix that in turn heats the natural gas going to the facility.

The BPT emission limits for the Gas Heater were based on the following:

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.52 lb/MMscf based on the ratio of fuel and Acid Rain report SO₂ for the gas turbine
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Opacity – 06-096 CMR 101

The BPT emission limits for the gas heater are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Gas Heater	PM	0.05

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Gas Heater Natural gas	0.21	0.21	0.01	0.41	0.34	0.02

Visible emissions from the Gas Heater firing natural gas shall not exceed 10% opacity on a 6-minute block average basis.

C. Periodic Monitoring

Periodic monitoring for the Gas Heater shall include recordkeeping to document fuel use on a monthly and a calendar year basis.

D. 40 CFR Part 60, Subpart Dc

Due to the size, the Gas Heater is not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for*

Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

E. 40 CFR Part 63, Subpart JJJJJ

The Gas Heater is not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ) because it is a natural gas fired unit and does not meet the definition of an applicable boiler. A boiler is “an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water”. [40 CFR §63.11237].

F. Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 NSR license shall apply to the facility upon issuance. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended), Section 1(C)(8), for a modification that has undergone NSR requirements or been processed through 06-096 CMR 115, and shall be incorporated into the Part 70 air emission license renewal currently in process.

G. Annual Emissions

No licensed emission increases are occurring as a result of this NSR license.

III. AMBIENT AIR QUALITY ANALYSIS

Bucksport 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 for this NSR license.

ORDER

The Department hereby grants NSR Air Emission License A-22-77-20-M pursuant to the licensing requirements of 06-096 CMR 115 and subject to the specific 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.

SPECIFIC CONDITIONS

(1) Gas Heater

A. Fuel

The Gas Heater shall fire only natural gas. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type. Records of fuel use shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Gas Heater	PM	0.05	06-096 CMR 115, BPT

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Gas Heater	0.21	0.21	0.01	0.41	0.34	0.02

D. Visible Emissions

Visible emissions from the Gas Heater firing natural gas shall not exceed 10% opacity on a 6-minute block average basis. [06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 1 DAY OF March, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Corne for
PAUL MERCER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 1, 2016

Date of application acceptance: February 2, 2016

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

