



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

DARRYL N. BROWN
COMMISSIONER

Roy Hill Corporation
Androscoggin County
Lewiston, Maine
A-518-71-G-A

Departmental
Findings of Fact and Order
Air Emission License
Amendment #1

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., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Roy Hill Corporation (RHC) was issued Air Emission License A-518-71-F-R on March 13, 2007, permitting the operation of emission sources associated with their manufacturing and warehousing facility.
2. The equipment addressed in this license is located at 41 Canal Street Lewiston, Maine.
3. RHC has requested an amendment to their license in order to replace the burners and fire only natural gas.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler 1	11	10,680	Natural gas, negligible	1

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by the maximum future license allowed emissions, as follows:

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 04679-2094
(207) 764-0477 FAX: (207) 760-3143

<u>Pollutant</u>	<u>Max. Future License (TPY)</u>	<u>Sig. Level</u>
PM	2.41	100
PM ₁₀	2.41	100
SO ₂	0.03	100
NO _x	4.68	100
CO	3.93	100
VOC	0.26	50

This modification is determined to be a minor modification and has been processed as such.

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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boiler 1

Boiler 1 was manufactured and installed in August 1989 and has a maximum design capacity of 11.0 MMBtu/hr.

The boiler was installed in 1989, and is therefore 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. In addition, gas-fired boilers are not subject to the proposed *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

A summary of the BACT analysis for Boiler 1 (11.0 MMBtu/hr) is the following:

1. Boiler 1 shall fire natural gas.

2. Fuel sulfur content is regulated by 06-096 CMR 106. However, the firing of natural gas is more stringent and shall be considered BACT.
3. The PM and PM₁₀ limits for units larger than 3 MMBtu/hr are derived from 06-096 CMR 103 (as amended). However, the PM emission limit of 0.05 lb/MMBtu is more stringent and shall be considered BACT. The PM₁₀ emission limit is derived from the PM limit.
4. NO_x, CO and VOC emission limits are based upon AP-42 data dated 7/98 for the combustion of natural gas.
5. Visible emissions from the boiler shall 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.

C. Annual Emissions

RHC shall be restricted to the following annual emissions, based on a calendar year:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler 1	2.41	2.41	0.03	4.68	3.93	0.26

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

Pollutant	Tons/Year
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, RHC is below the emissions level required for modeling and monitoring.

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-518-71-G-A subject to the conditions found in Air Emission License A-518-71-F-R and in the following conditions.

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

(16) **Condition 16 from license A-518-71-F-R is no longer valid and shall be replaced with the following:**

- A. Boiler 1 shall fire natural gas. RHC shall maintain monthly records of fuel combusted (40 CFR Part 60 Subpart Dc). In addition, records of annual fuel use shall be kept on a calendar year basis. [06-096 CMR 115, BACT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler 1	PM	0.05	06-096 CMR 103(2)(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 1	0.55	0.55	0.01	1.07	0.90	0.06

- D. Visible emissions from Boiler 1 shall 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. [06-096 CMR 101]

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(17) Condition 17 from license A-518-71-F-R is no longer valid.

DONE AND DATED IN AUGUSTA, MAINE THIS 11th DAY OF March, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Darryl N. Brown*
DARRYL N. BROWN, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-518-71-F-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/25/2010

Date of application acceptance: 9/15/2010

Date filed with the Board of Environmental Protection:

This Order prepared by Amanda L. Gray, Bureau of Air Quality.

