



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

**ReEnergy Ashland LLC
Aroostook County
Ashland, Maine
A-577-70-F-A**

**Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the Part 70 License amendment 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.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	ReEnergy Ashland LLC (REA)
LICENSE TYPE	Part 70 Significant License Modification
NAICS CODES	221117
NATURE OF BUSINESS	Biomass Electrical Power Generation
FACILITY LOCATION	63 Realty Rd, Ashland, Maine

ReEnergy Ashland LLC (REA) is a wood/biomass-fired electric generating facility capable of generating approximately 36 net megawatts of electricity. The plant consists of one steam generating unit (Boiler #1) which fires primarily sawmill residues and whole tree chips. Fuel oil is used during startups, shutdowns, flame stabilization, and emergency situations only. Boiler #1 supplies steam to a steam turbine for the generation of electricity.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate	% sulfur	Install. Date
Boiler #1	586 (biomass) 106.7 (distillate fuel)	65.1 ton/hr 762.1 gal/hr	Negligible 0.5%	1992

C. Application Classification

REA has requested incorporation into their Part 70 Air License the relevant terms and conditions of 06-096 Code of Maine Rules (CMR) 115 New Source Review (NSR) license A-577-77-3-A. Therefore, the license is considered to be a Part 70 Significant License Modification under *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

II. AMENDMENT DESCRIPTION

A. NO_x Emissions from Boiler #1

Boiler #1 is a wood-fired boiler manufactured by Zurn Energy installed in 1992. It supplies steam to a General Electric steam turbine capable of producing approximately 39.6 gross megawatts of electrical power.

Prior to this amendment, REA's license included emission limits and the installation and operation of NO_x control equipment which allows them to sell energy in the New England renewable energy credit (REC) market.

These limits included the following:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
NO _x	0.15 (See Note 1&4)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	0.10 (See Note 2&4)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	0.075 (See Note 3)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
NO _x	87.9 (See Note 1&4)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	58.3 (See Note 2&4)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	43.8 (See Note 3)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable

Note 1: Emission limit is applicable at all times during plant operation based on a 24-hour block average.

Note 2: Emissions limit is applicable at all times the facility is generating power for distribution and sale as renewable energy in the New England renewable energy market, based on a 24-hour block average.

Note 3: Emissions limit is applicable at all times the facility is generating energy for distribution and sale as renewable energy in the New England renewable energy market, based on a quarterly average.

Note 4: A 24-hour block average shall be defined as midnight to midnight.

In NSR air emission license A-577-77-3-A, the Department agreed with REA's assessment that the emission limits that applied only when REA was generating power for the REC market were extraneous, irrelevant, and circular. This amendment incorporates these changes into REA's Part 70 license.

B. Facility Annual Emissions

This amendment does not affect permitted annual emissions of any regulated pollutant.

III. AMBIENT AIR QUALITY ANALYSIS

REA 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 (see licenses A-577-77-1-A issued on 11/30/07 and A-577-72-D-A/R issued on 1/24/97). An additional ambient air quality analysis is not required for this amendment.

ORDER

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

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License Amendment A-577-70-F-A pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115

and subject to the conditions found in Air Emission License A-577-70-E-R/A and the following conditions.

Federally enforceable conditions in this Part 70 license amendment must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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 shall replace Conditions (14)(G)(1) & (2) of Air Emission License A-577-70-E-R/A:

(14) **Boiler #1**

G. Boiler #1 Emission Limits

1. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.02	(A-577-72-A-N) 06-096 CMR 140, BPT	Federally Enforceable
PM ₁₀	0.02	(A-577-72-A-N) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	0.15 (See Note 1)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
CO	0.95 (See Note 1)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable

Note 1: Emission limit is applicable at all times during plant operation based on a 24-hour block average. A 24-hour block average shall be defined as midnight to midnight.

2. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	11.7	(A-577-72-A-N) 06-096 CMR 140, BPT	Federally Enforceable
PM ₁₀	11.7	(A-577-72-A-N) 06-096 CMR 140, BPT	Federally Enforceable
SO ₂	54.1	(A-577-70-A-I) 06-096 CMR 140, BPT	Federally Enforceable
NO _x	87.9 (See Note 1)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
CO	556.6 (See Note 1)	(A-577-77-1-A) 06-096 CMR 140, BPT	Federally Enforceable
VOC	9.4	(A-577-72-A-N) 06-096 CMR 140, BPT	Federally Enforceable
NH ₃	11.8	(A-577-70-B-A) 06-096 CMR 140, BPT	Federally Enforceable
Lead	0.062	(A-577-70-A-I) 06-096 CMR 140, BPT	Federally Enforceable

Note 1: Emission limit is applicable at all times during plant operation based on a 24-hour block average. A 24-hour block average shall be defined as midnight to midnight.

The following shall replace Condition (14)(I) of Air Emission License A-577-70-E-R/A:

(14) **Boiler #1**

I. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	0.02 lb/MMBtu	40 CFR Part 60, App. A, Method 5	Once every five years by 12/31/17.
	11.7 lb/hr		
PM ₁₀	0.02 lb/MMBtu	40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
	11.7 lb/hr		
SO ₂	54.1 lb/hr	40 CFR Part 60, App. A, Method 6	As requested

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
NO _x	0.15 lb/MMBtu	NO _x CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 CFR Part 60, App. B)
	87.9 lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	0.95 lb/MMBtu	CO CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 CFR Part 60, App. B)
	556.6 lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	9.4 lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested
NH ₃	40 ppm _{dv} @ 12% CO ₂	EPA's Conditional Test Method for Ammonia (CTM-027)	Once every two years by 12/31/14 (see Note 1)
Lead	0.062 lb/hr	40 CFR Part 60, App. A, Method 12	As requested
Visible Emissions	20 % opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 CFR Part 60, App. B)

Note 1: Testing for NH₃ is only required if NH₃ is used in the boiler within the previous year.

DONE AND DATED IN AUGUSTA, MAINE THIS 4 DAY OF February, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Mercer*
 PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-577-70-E-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 11/2/15
 Date of application acceptance: 11/5/15

Date filed with the Board of Environmental Protection:
 This Order prepared by Lynn Muzzey, Bureau of Air Quality.

