



DEPARTMENT ORDER

**NE Renewable Power Jonesboro, LLC
Washington County
Jonesboro, Maine
A-127-70-G-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 (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	NE Renewable Power Jonesboro, LLC (NERP)
LICENSE TYPE	Part 70 Minor License Modification
NAICS CODES	4911
NATURE OF BUSINESS	Electrical Power Generation
FACILITY LOCATION	62 Whitneyville, Jonesboro, Maine

In 2023, the Department completed rulemaking on revisions to *Visible Emissions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 101. The revised rule went into effect on January 1, 2024. NERP has requested, in a letter to the Department dated December 14, 2022, an amendment to their Part 70 License to address new and revised applicable requirements due to this rulemaking.

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

B. Emission Equipment

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

Boiler

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate	Fuel Type	Manufacture Date	Install Date	Stack #
Boiler #1	361.5	21.27 tons per hour *	Biomass Fuel	1985	1986	1
	30.0	320 gallons per hour	Propane			
	Mixed with Biomass	--	Waste Oil			

* Based on a fuel moisture content of 5% per Air Emission License A-70-127-C-R.

Emergency Engines

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Mfr. Date	Stack #
Emergency Generator	2.54	19.7	Distillate Fuel, 0.0015%	1986	2
Fire Pump	1.9	10.4		1986	3

C. Definitions

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings). This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. NERP should consult with the Department before adding any new biomass type to its fuel mix.

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;

- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Records or Logs mean either hardcopy or electronic records.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

A Part 70 Minor License Modification is for a license change that meets the following criteria:

- Does not violate any Applicable requirement;
- Does not involve a significant change to existing monitoring, reporting, or recordkeeping requirements in the license;
- Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impact or a visibility or increment analysis;
- Does not seek to establish or change a Part 70 license term or condition for which there is no corresponding underlying Applicable requirement, and that the source has assumed to avoid an Applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a Title I modification or a modification or reconstruction under any provision of Section 111, or 112 of the Clean Air Act (CAA); and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the CAA;
- Is not a Title I modification or a modification or reconstruction under any provision of Section 111 or 112 of the CAA; and
- Is not required by the Department to be processed under Part 70 Significant License Modification procedures.

NERP has requested the incorporation into the Part 70 License the relevant new and revised applicable requirements of 06-096 C.M.R. ch. 101. The incorporation of these existing standards is not considered a Part 70 Significant License Modification or a Title I modification. The facility is not proposing substantial changes to existing monitoring and testing requirements, nor is it proposing the relaxation of existing license conditions.

Therefore, the facility's request to incorporate the applicable requirements of 06-096 C.M.R. ch. 101 is classified as a Part 70 Minor License Modification and has been processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

II. APPLICABLE REQUIREMENTS AND REQUESTS FOR STREAMLINING

A. Boiler #1

1. 06-096 C.M.R. ch. 140, BPT

Boiler #1 is subject to the established visible emissions standards pursuant to 06-096 C.M.R. ch. 140, BPT which are found in their current license:

- a. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six (6)-minute block average basis, except no more than one (1), six (6)-minute period per hour of not more than 27%, subject to the exemptions listed in 06-096 C.M.R. 101, Section 3(E) and 40 CFR 60.43B(g). The opacity limit shall not apply during a total of 4 hours during the period of cold startup or shutdown provided records are available to demonstrate that the unit was being operated to minimize emissions.
- b. Visible emissions shall be limited to 20% opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity. Compliance shall be determined by monitoring with a COMS on a 6-minute block average basis.
- c. NERP shall operate Boiler #1 such that opacity does not exceed 20% over a six (6) minute average except for not more than one (1), six (6)-minute period per hour of not more than 27%, subject to the exemptions listed in 06-096 C.M.R. 101, Section 3 and 40 C.F.R. Part 60.43b(g).

Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system. The COM shall be installed and certified on the breaching of the ESP to the stack. NERP shall maintain the COM in accordance with Condition (18).

2. 40 C.F.R. Part 60, Subpart Db

Boiler #1 is subject to the following visible emissions standard pursuant to 40 C.F.R. Part 60, Subpart Db:

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one (1) six-minute block average in a one-hour period of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction.

[40 C.F.R. §§ 60.43b(f) and (g)]

3. 06-096 C.M.R. ch. 101

Boiler #1 is subject to the following visible emissions standard pursuant to 06-096 C.M.R. ch. 101, § 4(A)(5)(b):

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining 5% of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of startup, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages.

4. 06-096 C.M.R. ch. 140, BPT

With this amendment the Department is establishing the following new visible emissions standard through BPT:

Visible Emissions from Boiler#1 shall not exceed 20% opacity on a six-minute block average basis at all times the unit is operating, except for the following:

- a. For one (1) six-minute block per hour during normal operation (i.e., other than during periods of startup, shutdown, or malfunction), visible emissions may exceed 20% opacity but shall not exceed 27% opacity; and
- b. During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 45% opacity for any six-minute block average.

In addition, the number of six-minute block averages greater than 20% opacity shall not exceed 5% of the total number of six-minute block averages for all times Boiler #1 is operating during any calendar quarter, including periods of normal operation as well as periods of startup, shutdown, or malfunction.

Compliance shall be demonstrated by means of a continuous opacity monitoring system, on a 6-minute block average basis.

5. Streamlining

The Department has determined that the BPT visible emissions standard is more stringent than all other applicable standards. Therefore, the visible emissions limits have been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the Order of this air emission license. Streamlining the BPT limit with the Federally enforceable limits in 40 C.F.R. Part 60, Subpart Db and 06-096 C.M.R. ch. 101 makes the BPT limit Federally enforceable.

B. Wood Chip Storage and Handling

Air Emission License A-127-70-A-I (issued September 5, 2001) established a visible emissions standard through 06-096 C.M.R. ch. 140, BPT, specific to the storage of wood chips and handling in which the visible emissions are limited to 5% opacity on a 6-minute block average basis. This state-only enforceable standard is superseded by the updated fugitive visible emissions standard detailed below. This new standard is considered more stringent than the existing requirement, and only this more stringent standard shall be included in the Order of this air emission license.

C. Emergency Generator and Fire Pump

On January 1, 2024, the applicable visible emissions standard for the Emergency Generator and Fire Pump contained in 06-096 C.M.R. ch. 101 changed to the following:

Visible emissions from the Emergency Generator and Fire Pump shall each not exceed an opacity of 20% on a six-minute block average basis, except during periods of startup. During periods of startup, the engines must meet the normal operating visible emissions standard or the or the following work practice standards and alternative visible emissions standard. Use of the following work practice standards and alternative visible emissions standard in lieu of the normal operating visible emissions standard is limited to no more than once per day per engine.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. NERP shall keep records as of the date, time, and duration of each startup event.
[06-096 C.M.R. ch. 101, § 4(A)(4)]

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

This new standard is considered more stringent than the applicable requirement in the previous version of 06-096 C.M.R. ch. 101, and only this more stringent standard shall be included in the Order of this air emission license.

D. Fugitive Emissions

On January 1, 2024, the applicable visible emissions standard for Fugitive Emissions contained in 06-096 C.M.R. ch. 101 changed to the following:

NERP shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management

practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

NERP shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22. [06-096 C.M.R. ch. 101, § 4(C)]

This new fugitive visible emissions standard is considered more stringent than either the applicable requirement in the previous version of 06-096 C.M.R. ch. 101 or the BPT emission limit contained in Air Emission License A-127-70-A-I (issued September 5, 2001), and only this more stringent standard shall be included in the Order of this air emission license.

E. General Process Sources

On January 1, 2024, the applicable visible emissions standard for General Process Sources contained in 06-096 C.M.R. ch. 101 changed to the following:

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

F. Startup, Shutdown, and Malfunction Definitions

For the purposes of this Part 70 License amendment, NERP shall use the following to define the operating conditions of Boiler #1:

Startup is defined by regulation as the setting in operation of an affected facility for any purpose. [40 C.F.R. § 60.2] For purposes of this license amendment when used in reference to Boiler #1, startup is defined as the period which begins when any fuel is fired in the boiler after a shutdown and ends no later than 4 hours after power electrical generation commences (i.e., 4 hours after generator breaker-closed). Startup may also end by removal of fire from Boiler #1. [06-096 C.M.R. ch. 140, BPT]

Shutdown is defined by regulation as the cessation of operation of an affected facility for any purpose. [40 C.F.R. § 60.2] For purposes of this license amendment when used in reference to Boiler #1, shutdown is the period which begins when power generation ceases and ends when fuel is no longer being combusted in Boiler #1. [06-096 C.M.R. ch. 140, BPT]

Malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 C.F.R. § 60.2]

G. Facility Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

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 Minor License Amendment A-127-70-G-A, pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Part 70 License A-127-70-C-R, in amendments A-127-70-D-A and A-127-7-F-T, and the following conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 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 of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following shall replace Specific Conditions (14)(E)(2), (15)(D), (16), and (17) of Part 70 License A-127-70-C-R.

With this replacement, Specific Conditions (14)(G) and (14)(K) become rendered obsolete and are hereby removed.

Specific Condition (14)(O) of Part 70 License A-127-70-C-R is hereby removed.

(14) **Boiler #1**

E. Boiler #1 Emission Limits

2. Visible Emissions from Boiler#1 shall not exceed 20% opacity on a six-minute block average basis at all times the unit is operating, except for the following:
 - a. For one (1) six-minute block per hour during normal operation (i.e., other than during periods of startup, shutdown, or malfunction), visible emissions may exceed 20% opacity but shall not exceed 27% opacity; and
 - b. During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 45% opacity for any six-minute block average.

In addition, the number of six-minute block averages greater than 20% opacity shall not exceed 5% of the total number of six-minute block averages for all times Boiler #1 is operating during any calendar quarter, including periods of normal operation as well as periods of startup, shutdown, or malfunction.

Compliance shall be demonstrated by means of a continuous opacity monitoring system, on a 6-minute block average basis.
[06-096 C.M.R. ch. 140, BPT]

(15) **Emergency Generator and Fire Pump**

D. Visible Emissions

Visible emissions from the Emergency Generator and Fire Pump shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time NERP shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

1. The duration of the startup shall not exceed 30 minutes per event;
2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
3. NERP shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day per engine.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

(16) **Fugitive Emissions**

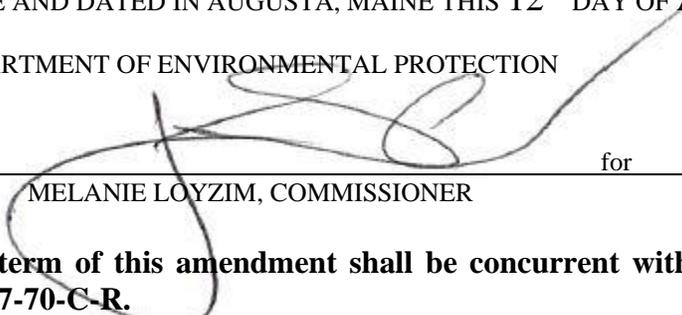
1. NERP shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
2. NERP shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22. [06-096 C.M.R. ch. 101, § 4(C)]

(17) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

DONE AND DATED IN AUGUSTA, MAINE THIS 12th DAY OF APRIL, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-127-70-C-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/2/24

Date of application acceptance: 1/4/24

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

