



DEPARTMENT ORDER

**HC Bangor, LLC
Penobscot County
Bangor, Maine
A-1006-71-E-M**

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

FINDINGS OF FACT

After review of the air emission license 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 (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

HC Bangor, LLC was issued Air Emission License A-1006-71-D-R/T on February 20, 2014, for the operation of emission sources associated with their casino and hotel facility.

HC Bangor, LLC (HC Bangor) has requested a minor revision to their license in order to operate their emergency engine as a non-emergency engine.

The equipment addressed in this license minor revision is located at 500 Main St., Bangor, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license minor revision:

Stationary Engine

<u>Equipment</u>	<u>Max. Input Capacity (MMBtu/hr)</u>	<u>Rated Output Capacity (kWe)</u>	<u>Fuel Type, % sulfur</u>	<u>Firing Rate (gal/hr)</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>
Generator #1	19 MMBtu/hr	2,000	Distillate, 0.0015%	138.9	2007	2008

C. Definitions

Distillate Fuel. For the purposes of this license, *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.

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.

With the operating hours restriction on Generator #1 remaining at 100 hours per year, this licensing action will not increase emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

E. Facility Classification

With the annual fuel limit on the boilers and the operating hours restriction on the Generator #1 and on the snow melter, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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. Generators #1

HC Bangor operates one generator. This generator was originally licensed as an emergency generator. This permitting action will allow HC Bangor to operate the engine as a non-emergency engine so that it can continue to participate in the Demand Response program. The engine is certified to meet U.S. EPA emission limits when operated as either an emergency or a non-emergency engine. Generator #1 has an engine rated at 19 MMBtu/hr firing distillate fuel and was manufactured in 2007.

1. BPT Findings

The BPT emission limits for Generator #1 are based on the following:

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x - 3.2 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
- CO - 0.85 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
- VOC - 0.09 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
- Opacity - 06-096 C.M.R. 115, BPT

The BPT emission limits for Generator #1 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Generator #1	PM	0.12

<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>
Generator #1 (19 MMBtu/hr), distillate fuel	2.28	2.28	0.03	60.8	16.15	1.71

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis.

Generator #1 shall be limited to 100 hours per calendar year of operation for any reason, including startup and shutdown, testing, and both emergency and non-emergency use. Compliance shall be demonstrated by a written or electronic log of all generator operating hours. [06-096 C.M.R. ch. 115, BPT]

Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [06-096 C.M.R. ch. 115, BPT]

Recordkeeping

HC Bangor shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit was operated. [06-096 C.M.R. ch. 115, BPT]

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

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to the engine listed above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200]

By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart IIII requirements is listed below.

40 C.F.R. Part 60, Subpart IIII Requirements

a. Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4204(b)]

b. Ultra-Low Sulfur Fuel Requirement

The diesel fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. §60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

c. Operation and Maintenance Requirements

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by HC Bangor that are approved by the engine manufacturer. HC Bangor may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

d. Initial Notification Requirement

No initial notification is required for certified non-emergency stationary engines less than or equal to 3,000 HP. [40 C.F.R. § 60.4214(a)]

C. Annual Emissions

There are no changes in the annual emissions of this facility due to this amendment.

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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-1006-71-E-M subject to the conditions found in Air Emission License A-1006-71-D-R/T and the following conditions.

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

Condition (17) in license A-1006-71-D-R/T will be replaced with the following.

(17) Generator #1

A. Generator #1 shall be limited to 100 hours per calendar year of operation for any reason, including startup and shutdown, testing, and both emergency and non-emergency use. Compliance shall be demonstrated by a written or electronic log of all generator operating hours. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Generator #1	PM	0.12	06-096 C.M.R. ch 103(2)(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	2.28	2.28	0.03	60.80	16.15	1.71

D. Visible emissions from Generator #1 shall not exceed 20% opacity on a six (6) minute block average. [06-096 C.M.R. ch. 115, BPT]

E. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on Generator #1. [06-096 C.M.R. ch. 115, BPT]

F. Generator #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:

1. Manufacturer Certification

Generator #1 is certified to meet U.S. EPA emission limits when operated as an emergency or non-emergency engine. The certification shall be maintained by the source and submitted to the Department upon request. [40 C.F.R. §60.4204(b)]

2. Ultra-Low Sulfur Diesel Fuel

The diesel fuel fired in Generator #1 shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel.

[40 C.F.R. §60.4207(b) and 06-096 C.M.R. ch. 115]

3. Operation and Maintenance

Generator #1 shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by HC Bangor that are approved by the engine manufacturer. HC Bangor may only change those emission-related settings that are permitted by the manufacturer.

[40 C.F.R. §60.4211(a)]

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G. Recordkeeping

HC Bangor shall keep records that include maintenance conducted on Generator #1 and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit was operated.
[06-096 C.M.R. ch. 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 14 DAY OF September, 2018.

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-1006-71-D-R/T.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/24/2018

Date of application acceptance: 8/8/2018

Date filed with the Board of Environmental Protection:

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

