



DEPARTMENT ORDER

**Unum Corporation
Cumberland County
Portland, Maine
A-657-71-M-M (SM)**

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

FINDINGS OF FACT

After review of the air emission 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

Unum Corporation (Unum) was issued Air Emission License A-657-71-L-R/M on May 3, 2013, for the operation of emission sources associated with their insurance office facility.

Unum has requested a minor revision to their license in order to update the operating hours limitation on their emergency generators from 500 hours per year to 100 hours per year for maintenance and testing, and unlimited emergency use.

The equipment addressed in this license amendment is located at 2211 Congress Street, Portland, Maine.

B. Emission Equipment

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

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Stack #
HO1-Gen #1	1.6	150	Distillate fuel, 0.0015%	11.8	2010	-
HO2-Gen #2	2.7	250	Distillate fuel, 0.0015%	19.4	2010	-
HO3-Gen #3	1.0	100	Distillate fuel, 0.0015%	7.4	1998	8

<u>Equipment</u>	<u>Max. Input Capacity (MMBtu/hr)</u>	<u>Rated Output Capacity (kW)</u>	<u>Fuel Type, % sulfur</u>	<u>Firing Rate (gal/hr)</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Generator #4	20.14	2000	Distillate fuel, 0.0015%	147.0	2005	9
Generator #5	20.14	2000	Distillate fuel, 0.0015%	147.0	2005	10

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.

This amendment will not increase emissions of any pollutant. Therefore, this amendment is determined to be a minor revision 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 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. Emergency Generators

1. Description of Emission Units

Unum operates five emergency generators designated HO1-Gen #1, HO2-Gen #2, HO3-Gen #3, Generator #4, and Generator #5. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The emergency generators have engines rated at 1.6 MMBtu/hr, 2.7 MMBtu/hr, 1.0 MMBtu/hr, 20.14 MMBtu/hr, and 20.14 MMBtu/hr, respectively. All generators fire distillate fuel. The emergency generators were manufactured in 2010, 2010, 1998, 2005, and 2005, respectively.

2. Description of Minor Revision

Air emission license A-657-71-L-R/M limited operation of the generators to 500 hours/yr each. Unum has requested an amendment to set an operating limit on the generators of 100 hours/yr each for maintenance and testing, and unlimited emergency use. This is consistent with current licensing practices and will reduce Unum's licensed potential to emit to more accurately reflect the facility's actual emissions. Based on the revised emissions, Unum will no longer be subject to 06-096 C.M.R. ch. 137 annual reporting requirements.

3. BPT Findings

Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. There is no change to the BPT emission limits associated with the generators. Current emission limits continue to represent BPT.

C. Annual Emissions

Total Annual Emissions

Unum shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on a combined total use of 100,000,000 scf/yr of natural gas in the boiler units and 100 hrs/yr of operation for each of the emergency generators:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers	2.6	2.6	0.1	5.0	4.2	0.3
HO1-Gen #1	0.1	0.1	neg	0.4	0.1	0.1
HO2-Gen #2	0.1	0.1	neg	0.6	0.1	0.1
HO3-Gen #3	0.1	0.1	neg	0.2	0.1	0.1
Generator #4	0.1	0.1	neg	1.9	0.4	0.1
Generator #5	0.1	0.1	neg	1.9	0.4	0.1
Total TPY	3.1	3.1	0.1	10.0	5.3	0.8

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

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

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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.

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The Department hereby grants Air Emission License Amendment A-657-71-M-M subject to the conditions found in Air Emission License A-657-71-L-R/M 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.

The following shall replace Condition (17) A of Air Emission License A-657-71-L-R/M.

(17) Emergency Generators

- A. Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.
[06-096 C.M.R. ch. 115, BPT]

Condition (18) of Air Emission License A-657-71-L-R/M has been rescinded.

DONE AND DATED IN AUGUSTA, MAINE THIS 25 DAY OF September, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mark Allen Robert Cone for
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-657-71-L-R/M.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 26, 2017

Date of application acceptance: July 6, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

