



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Congress Federal Realty, LLC, sole
Trustee of Congress Federal Trust
Cumberland County
Portland, Maine
A-16-71-H-R**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

FINDINGS OF FACT

After review of the air emissions license renewal 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 (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

Congress Federal Realty, LLC, sole Trustee of Congress Federal Trust (Congress Federal Trust, or the licensee) has applied to renew their Air Emission License permitting the operation of emission sources associated with their office building. The equipment addressed in this license is located at One Monument Square, Portland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Max. Firing Rate (scf/hr)</u>	<u>Fuel Type</u>	<u>Date of Manuf.</u>	<u>Date of Installation</u>	<u>Stack #</u>
Boiler #1	6.30	6,176.5	Natural gas	1969	1970	1
Boiler #2	6.30	6,176.5				

Generator

<u>Equipment</u>	<u>Input Capacity (MMBtu/hr)</u>	<u>KW</u>	<u>Firing Rate (scf/hr)</u>	<u>Fuel Type</u>	<u>Date of Manuf.</u>	<u>Date of Installation</u>	<u>Stack #</u>
Back-up Generator	1.68	100	1,650	Natural gas	2005	2006	2

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 04769
(207) 764-0477 FAX: (207) 760-3143

Congress Federal Trust also has a water heater, the capacity of which is below the threshold capacity for inclusion in this air emission license. Because it is a water heater, it is not subject to 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. [40 CFR §63.11195 (f)]

C. Application Classification

The application for Congress Federal Trust does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual fuel limit on the boilers and the restriction of emergency generator operating hours, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of 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 CMR 100 (as amended). 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. Boilers #1 and #2

Boilers #1 and #2 are each rated at 6.3 MMBtu/hr and fire natural gas. The boilers were both manufactured in 1969 and installed in 1970. The boilers exhaust through a shared stack, Stack 1.

1. BPT Findings

The BPT emission limits for Boilers #1 and #2 were based on the following:

Pollutant	Emission Factor	Source of Emission Factor
PM, PM ₁₀	0.05 lb/MMBtu	06-096 CMR 115, BPT
SO ₂	0.6 lb/MMscf	AP-42 Table 1.4-2 (7/98)
NO _x	100 lb/MMscf	AP-42 Table 1.4-1 (7/98)
CO	84 lb/MMscf	AP-42 Table 1.4-1 (7/98)
VOC	5.5 lb/MMscf	AP-42 Table 1.4-2 (7/98)
Visible Emissions	N/A	06-096 CMR 115, BPT

The BPT emission limits for Boiler #1 and Boiler #2 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1 and Boiler #2	PM	0.05

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 6.3 MMBtu/hr; natural gas	0.32	0.32	0.004	0.62	0.52	0.03
Boiler #2 6.3 MMBtu/hr; natural gas	0.32	0.32	0.004	0.62	0.52	0.03

Visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

Congress Federal Trust shall be limited to a maximum of 18.53 MMscf/year of natural gas fired in Boilers #1 and #2. This is equivalent to the previously licensed limit of 18,900 MMBtu of fuel input on a calendar year basis.

2. Periodic Monitoring

Periodic monitoring for Boilers #1 and #2 shall include recordkeeping to document fuel use both on a monthly and a calendar year basis.

3. NSPS: 40 CFR Part 60, Subpart Dc

Due to the size and year of manufacture, Boilers #1 and #2 are not 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/hour manufactured after June 9, 1989.

4. NESHAP: 40 CFR Part 63, Subpart JJJJJ

Boilers #1 and #2 are considered gas-fired boilers, as defined in 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. Gas-fired boilers are

not subject to this Subpart, per 40 CFR § 63.11195 (e). A *gas-fired boiler* is defined by this Subpart as follows [40 CFR §63.11237]: any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing firing liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

The definition of *gaseous fuels* as found in §63.11237 includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, hydrogen, and biogas. The definition of *natural gas* as found in §63.11237 includes LPG and propane. Therefore, Boilers #1 and #2 are considered gas-fired boilers under NESHAP Subpart JJJJJ and are not subject to requirements under this Subpart.

C. Back-up Generator

Congress Federal Trust operates one emergency generator. The emergency generator is a generator set consisting of an engine and an electrical generator. The emergency generator has an engine rated at 1.68 MMBtu/hour which fires natural gas. The Back-up Generator was manufactured in 2005 and installed in 2006.

1. BPT Findings

The BPT emission limits for the Back-up Generator are based on the following:

Pollutant	Emission Factor	Source of Emission Factor
PM, PM ₁₀	7.71 E-05 lb/MMBtu	AP-42 Table 3.2-2 (7/00)
SO ₂	5.88 E-04 lb/MMBtu	
NO _x	0.847 lb/MMBtu	
CO	0.557 lb/MMBtu	
VOC	0.118 lb/MMBtu	
Visible Emissions	N/A	06-096 CMR 101

The BACT/BPT emission limits for the generators are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Back-up Generator 1.68 MMBtu/hr Natural gas	negligible			1.42	0.94	0.20

Visible emissions from the Back-up Generator shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

2. Operating Hours Limitations

The Back-up Generator shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. The Back-up Generator shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, Congress Federal Trust shall keep records of the total hours of operation and the hours of emergency operation for each unit.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity.

3. NSPS: 40 CFR Part 60, Subpart JJJJ

Due to the year of manufacture, the Back-up Generator is not subject to the NSPS 40 CFR Part 60, Subpart JJJJ, *New Source Performance Standards for Spark Ignition Internal Combustion Engines*, for engines manufactured after January 1, 2009.

4. NESHAP: 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*, is not applicable to the emergency engine listed above. The unit is considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source. However, it is considered exempt from the requirements of Subpart ZZZZ since it is categorized as a commercial emergency engine and it does not operate or is not contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 CFR §63.6640(f)(4)(ii).

Operation of the Back-up Generator such that it exceeds 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 CFR §63.6640(f)(4)(ii), would cause the engine to be subject to 40 CFR Part 63, Subpart ZZZZ, and require compliance with all applicable requirements.

D. Annual Emissions

1. Total Annual Emissions

Congress Federal Trust shall be restricted to the following annual emissions, on a calendar year basis. The tons per year limits were calculated based on firing 18.53 MMscf/year of natural gas in Boilers #1 and #2 and 100 hours/year of operation of the Back-up Generator.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers #1 and #2	0.47	0.47	0.01	0.93	0.78	0.05
Back-up Generator	negligible			0.07	0.05	0.01
Total TPY*	0.5	0.5	0.1	1.0	0.8	0.1

* rounded to the nearest tenth of a ton

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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 CMR 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.

The Department hereby grants Air Emission License A-16-71-H-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

- A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. Pursuant to any other requirement of this license to perform stack testing.
 - B. Install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. Submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 CMR 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boilers #1 and #2**

A. Fuel

- Boilers #1 and #2 shall fire natural gas. Total fuel use for Boilers #1 and #2 shall not exceed 18.53 MMscf/year of natural gas, on a calendar year basis. [06-096 CMR 115, BPT]
- Compliance with the fuel use limit shall be demonstrated by fuel records from the supplier showing the quantity and type of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boilers #1 and #2	PM	0.05	06-096 CMR 115, BPT

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

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Boiler #1 6.3 MMBtu/hr; natural gas	0.32	0.32	Negligible	0.62	0.52	0.03
Boiler #2 6.3 MMBtu/hr; natural gas	0.32	0.32	Negligible	0.62	0.52	0.03

D. Visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 115, BPT]

(17) **Back-up Generator**

A. The Back-up Generator shall fire only natural gas. Compliance shall be based on fuel records from the supplier of the type of fuel delivered. [06-096 CMR 115, BPT]

B. The Back-up Generator shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. A non-resettable hour meter shall be maintained and operated on the Back-up Generator. [06-096 CMR 115, BPT]

C. Congress Federal Trust 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 hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. [06-096 CMR 115, BACT/BPT]

D. If the Back-up Generator is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity, Congress Federal Trust shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [06-096 CMR 115, BPT]

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

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Back-up Generator 1.68 MMBtu/hr Natural gas	negligible			1.42	0.94	0.20

F. Visible emissions from the Back-up Generator shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101]

Congress Federal Realty, LLC, sole
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- G. Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity.
- (18) Congress Federal Trust shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 28 DAY OF April, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Curcio for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 MRSA §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 30, 2015

Date of application acceptance: March 31, 2015

Date filed with the Board of Environmental Protection:

This Order prepared by Jane E. Gilbert, Bureau of Air Quality.

