



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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GOVERNOR

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**MaineGeneral Medical Center  
Kennebec County  
Augusta, Maine  
A-935-71-F-R (SM)**

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

**FINDINGS OF FACT**

After review of the air emission 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 (Department) finds the following facts:

**I. REGISTRATION**

**A. Introduction**

MaineGeneral Medical Center (MaineGeneral) has applied to renew their Air Emission License permitting the operation of emission sources associated with their healthcare facilities.

MaineGeneral has requested that this renewal incorporate the changes to their previous license renewal (A-935-71-C-R) found in A-935-71-D-A, dated September 29, 2011 and A-935-71-E-A, dated March 6, 2015.

The equipment addressed in this license is located at 35 Medical Center Parkway (Hospital) and 361 Old Belgrade Road (Cancer Center), Augusta, Maine.

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

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

<u>Equipment</u>	<u>Location</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Boiler #3	Hospital	24.5	24,500 scf/hr	natural gas, negl.	2012	2
			271 gal/hr	propane, negl.		
Boiler #4	Hospital	24.5	24,500 scf/hr	natural gas, negl.	2012	2
			271 gal/hr	propane, negl.		
Boiler #5	Hospital	24.5	24,500 scf/hr	natural gas, negl.	2012	2
			271 gal/hr	propane, negl.		
Boiler #6	Cancer Center	1.0	980 scf/hr	natural gas, negl.	2013	3
Boiler #7	Cancer Center	1.0	980 scf/hr	natural gas, negl.	2013	4
Boiler #8	Cancer Center	1.0	980 scf/hr	natural gas, negl.	2013	5
Boiler #9	Cancer Center	1.0	980 scf/hr	natural gas, negl.	2013	6
Boiler #10	Cancer Center	1.34	1,314 scf/hr	natural gas, negl.	2013	7
Boiler #11	Cancer Center	1.18	8.4 gal/hr	distillate fuel, 0.5%	2013	1

**Generators**

<u>Equipment</u>	<u>Location</u>	<u>Maximum Output (kW)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>
Generator #1	Cancer Center	400	4.4	32	distillate fuel, 0.0015%	2006
Generator #2	Hospital	1,500	14.4	105	distillate fuel, 0.0015%	2012
Generator #3	Hospital	1,500	14.4	105	distillate fuel, 0.0015%	2012
Generator #4	Hospital	1,500	14.4	105	distillate fuel, 0.0015%	2012

C. Definitions

*Distillate Fuel* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials 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

The application for MaineGeneral 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 non-emergency operating hours restriction on Generators #1-4, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the non-emergency operating hours restriction on Generators #1-4, 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 #3-5

MaineGeneral operates Boilers #3-5 for steam and heat at the MaineGeneral Medical Center Regional Hospital. Boilers #3-5 are all Cleaver Brooks CBLE-600-150ST firetube units rated at 24.5 MMBtu/hr capable of firing natural gas or propane. Boilers #3-5 were all manufactured and installed in 2012 and exhaust through Stack #2.

1. BPT Findings

The BPT emission limits for Boilers #3-5 were based on the following:

PM/PM <sub>10</sub>	–	0.008 lb/MMBtu based on Manufacturer's emission factor
SO <sub>2</sub>	–	0.001 lb/MMBtu based on Manufacturer's emission factor
NO <sub>x</sub>	–	0.052 lb/MMBtu based on Manufacturer's emission factor
CO	–	0.037 lb/MMBtu based on Manufacturer's emission factor
VOC	–	0.004 lb/MMBtu based on Manufacturer's emission factor
Opacity	–	06-096 CMR 101

The BPT emission limits for Boilers #3-5 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Boilers #3-5 [each]	PM	0.008

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boilers #3-5 [each]	0.20	0.20	0.02	1.27	0.91	0.10

Visible emissions from Boilers #3-5 shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Boilers #3-5 are licensed to fire natural gas and propane and to operate 8,760 hrs/yr.

2. 40 CFR Part 60, Subpart Dc

Due to their size and year of manufacture, Boilers #3-5 are 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/hr manufactured after June 9, 1989.

MaineGeneral shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boilers #3-5 including, but not limited to, the following:

- a. MaineGeneral shall record and maintain monthly records of all fuel burned in Boilers #3-5. The records shall be maintained for two years following the date of the record. [40 CFR §60.48c(g) and 40 CFR §60.48c(i)]

3. 40 CFR Part 63, Subpart JJJJJ

Boilers #3-5 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). The units are considered new gas-fired boilers rated greater than 10 MMBtu/hr.

Gas-fired boilers are exempt from 40 CFR Part 63, Subpart JJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 CFR Part 63.11237]

C. Boilers #6-11

MaineGeneral operates Boilers #6-11 for heat at the Harold Alfond Center for Cancer Care. Boilers #6-9 are HydroTherm model KN-10 units, Boiler #10 is a Smith model 19HE-5/W-08 unit, and Boiler #11 is a Buderus model GE 515 unit. Boilers #6-9 have a maximum design heat input capacity of 1.0 MMBtu/hr and fire natural gas, Boiler #10 has a maximum design heat input capacity of 1.34 MMBtu/hr and fires natural gas, and Boiler #11 has a maximum design heat input capacity of 1.18 MMBtu/hr and fires distillate fuel. Boilers #6-11 were all manufactured in 2013 and installed in 2014 and exhaust through separate stacks.

1. BPT Findings

The BPT emission limits for Boilers #6-10 were based on the following:

- PM/PM<sub>10</sub> – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO<sub>2</sub> – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- NO<sub>x</sub> – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Opacity – 06-096 CMR 101

The BPT emission limits for Boiler #11 were based on the following:

- PM/PM<sub>10</sub> – 0.08 lb/MMBtu based on 06-096 CMR 115, BPT
- SO<sub>2</sub> – based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO<sub>x</sub> – 20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101

The BPT emission limits for Boilers #6-11 are the following:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boilers #6-9 [each]	0.05	0.05	0.01	0.10	0.08	0.01
Boiler #10	0.07	0.07	0.01	0.13	0.11	0.01
Boiler #11	0.09	0.09	0.59	0.17	0.04	0.01

Visible emissions from Boilers #6-10 shall each not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Visible emissions from Boiler #11 shall not exceed 20% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

Boilers #6-10 are licensed to fire natural gas and Boiler #11 is licensed to fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight. Boilers #6-11 are all licensed to operate 8,760 hrs/yr.

#### Fuel Sulfur Content Requirements

Boiler #11 is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boiler #11 shall not exceed 0.0015% by weight (15 ppm).

#### 2. 40 CFR Part 60, Subpart Dc

Due to the size of Boilers #6-11, they 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/hr manufactured after June 9, 1989.

#### 3. 40 CFR Part 63, Subpart JJJJJ

Boilers #6-11 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). Boilers #6-10 are considered new gas-fired boilers rated less than 10 MMBtu/hr and Boiler #11 is considered a new distillate fuel-fired boiler rated less than 10 MMBtu/hr. Boilers #6-11 are all considered hot water boilers rated less than 1.6 MMBtu/hr and are thus exempt from 40 CFR Part 63, Subpart JJJJJ.

#### D. Generators #1-4

MaineGeneral operates Generators #1-4 as emergency generators. Generators #1-4 are generator sets with each gen set consisting of an engine and an electrical generator. Generator #1 has an engine with a maximum design heat input capacity of 4.4 MMBtu/hr and a power output of 400 kW and Generators #2-4 all have engines with a maximum design heat input capacity of 14.4 MMBtu/hr and a power output of 1,500 kW. Generator #1 is located at the Harold Alfond Center for Cancer Care and Generators #2-4 are located at the MaineGeneral Medical Center Regional Hospital. Generators #1-4 all fire distillate fuel. Generator #1 was manufactured in 2006 and installed in 2007, and Generators #2-4 were all manufactured and installed in 2012.

1. BPT Findings

The BPT emission limits for Generators #1-4 are based on the following:

- PM/PM<sub>10</sub> - 0.12 lb/MMBtu from 06-096 CMR 103
- SO<sub>2</sub> - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO<sub>x</sub> - 3.2 lb/MMBtu from AP-42 dated 10/96
- CO - 0.85 lb/MMBtu from AP-42 dated 10/96
- VOC - 0.09 lb/MMBtu from AP-42 dated 10/96
- Opacity - 06-096 CMR 101

The BPT emission limits for Generators #1-4 are the following:

Unit	Pollutant	lb/MMBtu
Generators #1-4 [each]	PM	0.12

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.53	0.53	0.01	14.08	3.74	0.40
Generators #2-4 [each]	1.73	1.73	0.02	29.35	3.85	0.72

Visible emissions from Generators #1-4 shall each not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

2. 40 CFR Part 60, Subpart III

The federal regulation 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)* is applicable to Generators #1-4 since they were all ordered after July 11, 2005 and manufactured after April 1, 2006. By meeting the requirements of Subpart III, the units also meet the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 CFR Part 63, Subpart ZZZZ.

a. 40 CFR Part 60, Subpart III Requirements:

(1) Manufacturer Certification Requirement

Generators #1-4 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]

- (2) Ultra-Low Sulfur Fuel Requirement  
The fuel fired in Generators #1-4 shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 CFR §60.4207(b)]
- (3) Non-Resettable Hour Meter Requirement  
Non-resettable hour meters shall be installed and operated on Generators #1-4. [40 CFR §60.4209(a)]
- (4) Operation and Maintenance Requirements  
Generators #1-4 shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by MaineGeneral that are approved by the engine manufacturer. MaineGeneral may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]
- (5) Annual Time Limit for Maintenance and Testing  
As emergency engines, Generators #1-4 shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §60.4211(f)(3)(i) are met). [40 CFR §60.4211(f)]
- (6) Initial Notification Requirement  
No initial notification is required for emergency engines. [40 CFR §60.4214(b)]
- (7) Recordkeeping  
MaineGeneral shall keep records that include maintenance conducted on Generators #1-4 and the hours of operation of each 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. If Generators #1-4 are 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 as specified in §60.4211(f)(3)(i), MaineGeneral shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR §60.4214(b)]
- (8) Annual Reporting Requirements for Demand Response Availability Over 15 Hours Per Year (for engines greater than 100 brake hp)

If Generators #1-4 at MaineGeneral operate or are 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 supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4211(f)(3)(i), the facility shall submit an annual report containing the information in §60.4214(d)(1)(i) through (vii). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

U.S. Environmental Protection Agency, Region I  
5 Post Office Square, Suite 100 (OES04-2)  
Boston, MA 02109-3912  
Attn: Air Compliance Clerk

[40 CFR §60.4214(d)]

E. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

F. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

G. Annual Emissions

1. Total Annual Emissions

MaineGeneral shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on 8,760 hrs/yr for Boilers #3-11 and 100 hrs/yr non-emergency operating time for Generators #1-4:

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

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Boilers #3-5	2.6	2.6	0.3	16.7	11.9	1.3
Boilers #6-10	1.2	1.2	0.1	2.3	1.9	0.1
Boiler #11	0.4	0.4	2.6	0.7	0.2	0.1
Generator #1	0.1	0.1	0.1	0.7	0.2	0.1
Generators #2-4	0.3	0.3	0.1	4.4	0.6	0.1
<b>Total TPY</b>	<b>4.6</b>	<b>4.6</b>	<b>3.2</b>	<b>24.8</b>	<b>14.8</b>	<b>1.7</b>

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 (CO<sub>2</sub>e).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility’s operating hours restrictions and fuel use;
- 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 shall be 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:

<u>Pollutant</u>	<u>Tons/Year</u>
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	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-935-71-F-R subject to the following conditions.

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.

### 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 Chapter 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 #3-5**

A. Fuel

1. Boilers #3-5 are each licensed to operate 8,760 hours per year on a calendar year total basis. [06-096 CMR 115, BPT]
2. Boilers #3-5 are licensed to fire natural gas and propane. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

<u>Emission Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boilers #3-5 [each]	PM	0.008	06-096 CMR 115, BPT

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

<u>Emission Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boilers #3-5 [each]	0.20	0.20	0.02	1.27	0.91	0.10

- D. Visible emissions from Boilers #3-5 shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]
- E. MaineGeneral shall meet the applicable requirements of 40 CFR Part 60, Subpart Dc, including maintaining monthly records of all fuel burned in Boilers #3-5. The records shall be maintained for two years following the date of the record. [40 CFR Part 60, Subpart Dc]

**(17) Boilers #6-11**

A. Fuel

1. Boilers #6-11 are each licensed to operate 8,760 hours per year on a calendar year total basis. [06-096 CMR 115, BPT]
2. Boilers #6-10 are licensed to fire natural gas. [06-096 CMR 115, BPT]
3. Prior to July 1, 2018, MaineGeneral shall fire distillate fuel with a maximum sulfur content of 0.5% by weight in Boiler #11. [06-096 CMR 115, BPT]

4. Beginning July 1, 2018, MaineGeneral shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boiler #11. [06-096 CMR 115, BPT]
5. Compliance shall be demonstrated by fuel records from the supplier showing the type and percent sulfur of the fuel delivered (if applicable). [06-096 CMR 115, BPT]

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

<b>Emission Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Boilers #6-9 [each]	0.05	0.05	0.01	0.10	0.08	0.01
Boiler #10	0.07	0.07	0.01	0.13	0.11	0.01
Boiler #11	0.09	0.09	0.59	0.17	0.04	0.01

C. Visible Emissions

1. Visible emissions from Boilers #6-10 shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]
2. Visible emissions from Boiler #11 shall not exceed 20% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(18) **Generators #1-4**

A. Generators #1-4 shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

<b>Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
Generators #1-4 [each]	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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

<b>Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Generator #1	0.53	0.53	0.01	14.08	3.74	0.40
Generators #2-4 [each]	1.73	1.73	0.02	29.35	3.85	0.72

- D. Visible emissions from Generators #1-4 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
- E. Generators #1-4 shall meet the applicable requirements of 40 CFR Part 60, Subpart III, including the following:
1. **Manufacturer Certification**  
The engines in Generators #1-4 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]
  2. **Ultra-Low Sulfur Fuel**  
The fuel fired in Generators #1-4 shall not exceed 15 ppm sulfur (0.0015% sulfur). 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 CFR §60.4207(b) and 06-096 CMR 115, BPT]
  3. **Non-Resettable Hour Meter**  
Non-resettable hour meters shall be installed and operated on Generators #1-4. [40 CFR §60.4209(a)]
  4. **Annual Time Limit for Maintenance and Testing**
    - a. As emergency engines, Generators #1-4 shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §60.4211(f)(3)(i) are met). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 CFR §60.4211(f) and 06-096 CMR 115, BPT]
    - b. MaineGeneral shall keep records that include maintenance conducted on Generators #1-4 and the hours of operation of each 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. If the engines are 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 as specified in §60.4211(f)(3)(i), MaineGeneral shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

5. Operation and Maintenance

Generators #1-4 shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by MaineGeneral that are approved by the engine manufacturer. MaineGeneral may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

6. Annual Reporting For Demand Response Availability Over 15 Hours Per Year (for engines greater than 100 brake hp)

If Generators #1-4 at MaineGeneral operate or are 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 supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4211(f)(3)(i), MaineGeneral shall submit an annual report containing the information in §60.4214(d)(1)(i) through (vii). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

U.S. Environmental Protection Agency, Region I  
5 Post Office Square, Suite 100 (OES04-2)  
Boston, MA 02109-3912  
Attn: Air Compliance Clerk

[40 CFR §60.4214(d)]

(19) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(20) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

MaineGeneral Medical Center  
Kennebec County  
Augusta, Maine  
A-935-71-F-R (SM)

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Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal

- (21) MaineGeneral 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 20 DAY OF November, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maureen Allen Robert Case for  
AVERY T. DAY, ACTING COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/27/2015

Date of application acceptance: 10/29/2015

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

