



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

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COMMISSIONER

**MaineGeneral Medical Center –  
Thayer Campus  
Kennebec County  
Waterville, Maine  
A-438-71-J-R/A (SM)**

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

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 M.R.S.A., §344 and §590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

MaineGeneral Medical Center – Thayer Campus (MGMC) has applied to renew their Air Emission License permitting the operation of emission sources associated with their healthcare facility.

The equipment addressed in this license is located at 149 North Street, Waterville, Maine.

For this license renewal/amendment, MGMC has requested the following:

- Remove existing 10.8 MMBTU/hour Keeler Boiler (designated as Boiler #1) from previous license;
- Add 6.3 MMBTU/hour Hurst Boiler (will be designated as Boiler #1) which will be moved from the MGMC – Gardiner Campus and installed at the MGMC – Thayer Campus;
- Add the ability for existing Boilers #2, #3 and #4 to fire propane and natural gas, as they are currently only able to fire #2 and #6 fuel oil;
- Apply 75,000 MMBTU/year facility-wide limit only to Boilers #1 - #4 when firing #2 and/or #6 fuel; no annual limit will be placed on Boilers #1 - #4 when firing propane or natural gas.

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

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 04679-2094  
(207) 764-0477 FAX: (207) 760-3143

**Boilers**

Equipment	Maximum Capacity (MMBTU/hr)	Maximum Firing Rate	Fuel Type	Stack #
Boiler #1	6.3	46.0 gal/hr 69.6 gal/hr 6100 scf/hr	#2 fuel oil, 0.5%S Propane Natural Gas	1
Boiler #2	10.8	77.1 gal/hr 72.0 gal/hr 119.3 gal/hr 10500 scf/hr	#2 fuel oil, 0.5%S #6 fuel oil, 2.0%S Propane Natural Gas	1
Boiler #3	10.8	77.1 gal/hr 72.0 gal/hr 119.3 gal/hr 10500 scf/hr	#2 fuel oil, 0.5%S #6 fuel oil, 2.0%S Propane Natural Gas	1
Boiler #4	8.4	60.0 gal/hr 53.9 gal/hr 93.0 gal/hr 8200 scf/hr	#2 fuel oil, 0.5%S #6 fuel oil, 2.0%S Propane Natural Gas	1

**Generators**

Equipment	Power Output (kW)	Maximum Capacity (MMBTU/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Stack #
Generator #2	450	4.4	32.1	Diesel fuel, 0.0015%S	2
Generator #3	750	7.5	54.5	Diesel fuel, 0.0015%S	3

C. Application Classification

The application for MGMC includes the addition of a 6.3 MMBTU/hour boiler, which is considered to be a minor modification, as well as the renewal of currently licensed emission units. Therefore, this application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the annual fuel limit placed on Boilers #1, #2, #3 and #4 (when firing #2 and/or #6 fuel oil) and the operating hour restriction on the emergency generators, the facility is licensed below the major source thresholds and is therefore considered a synthetic minor.

**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 as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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, #2, #3 and #4

MGMC operates four boilers to provide steam, heat and hot water to their healthcare facility. Boiler #1 is a 6.3 MMBTU/hour Hurst Boiler which will replace the existing 10.8 MMBTU/hour Keeler boiler (which was also designated as Boiler #1 in previous licenses). Boilers #2, #3 and #4 are rated at 10.8, 10.8 and 8.4 MMBTU/hour, respectively. Boiler #1 can fire #2 fuel oil, propane and natural gas while Boilers #2, #3 and #4 can fire #6 fuel oil, #2 fuel oil, propane and natural gas.

Boilers #1, #2, #3 and #4 were manufactured in 2001, 1950, 1963 and 1982, respectively and exhaust through Stack #1 at a height of 131.2 feet (40.0 meters) above local ground level.

Due to either their size or date of manufacture/installation, none of the boilers 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/hour manufactured after June 9, 1989.

1. BACT (Boiler #1) / BPT (Boilers #2, #3 and #4) Findings

For #2 fuel oil, the BACT/BPT emission limits for Boilers #1, #2, #3 and #4 were based on the following:

PM/PM<sub>10</sub> 0.08 lb/MMBTU for #2 fuel oil, previous BACT determination  
 SO<sub>2</sub> 0.5 lb/MMBTU, firing ASTM D396 #2 fuel oil (0.5% sulfur)  
 NO<sub>x</sub> 0.3 lb/MMBTU, previous BACT determination  
 CO 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10  
 VOC 0.2 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10  
 Opacity Based on 06-096 CMR 101, Visible Emission Regulation: visible emissions from Stack #1 shall not exceed 20% on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

When firing #2 fuel oil, the pound/hour limits are as follows:

Equipment	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)
Boiler #1	0.5	0.5	3.1	1.9	0.2	0.1
Boiler #2	0.9	0.9	5.4	3.2	0.4	0.1
Boiler #3	0.9	0.9	5.4	3.2	0.4	0.1
Boiler #4	0.7	0.7	4.2	2.5	0.3	0.1

For #6 fuel oil, the BPT emission limits for Boilers #2, #3 and #4 were based on the following:

PM/PM<sub>10</sub> 0.2 lb/MMBTU for #6 fuel oil, previous BACT determination  
 SO<sub>2</sub> 2.1 lb/MMBTU, firing #6 fuel oil (2.0% sulfur)  
 NO<sub>x</sub> 0.5 lb/MMBTU, previous BACT determination  
 CO 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10  
 VOC 0.28 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10  
 Opacity Based on 06-096 CMR 101, Visible Emission Regulation: visible emissions from Stack #1 shall not exceed 20% on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

When firing #6 fuel oil, the pound/hour limits are as follows:

Equipment	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)
Boiler #2	2.2	2.2	22.7	5.4	0.4	0.1
Boiler #3	2.2	2.2	22.7	5.4	0.4	0.1
Boiler #4	1.7	1.7	17.7	4.2	0.3	0.1

For propane, the BACT emission limits for Boilers #1, #2, #3 and #4 were based on the following:

PM/PM<sub>10</sub> 0.05 lb/MMBTU, BACT determination  
 SO<sub>2</sub> 0.1 lb/1000 gallons, AP-42, Table 1.5-1, dated 7/08  
 NO<sub>x</sub> 13.0 lb/1000 gal, AP-42, Table 1.5-1, dated 7/08  
 CO 7.5 lb/1000 gal, AP-42, Table 1.5-1, dated 7/08  
 VOC 1.0 lb/1000 gal, AP-42, Table 1.5-1, dated 7/08  
 Opacity Based on 06-096 CMR 101, Visible Emission Regulation: visible emissions from Stack #1 shall not exceed 10% on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

When firing propane, the pound/hour limits are as follows:

Equipment	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)
Boiler #1	0.3	0.3	0.1	0.9	0.5	0.1
Boiler #2	0.5	0.5	0.1	1.6	0.9	0.1
Boiler #3	0.5	0.5	0.1	1.6	0.9	0.1
Boiler #4	0.4	0.4	0.1	1.2	0.7	0.1

For natural gas, the BACT emission limits for Boilers #1, #2, #3 and #4 were based on the following:

PM/PM<sub>10</sub> 0.05 lb/MMBTU, BACT determination  
 SO<sub>2</sub> 0.6 lb/MMscf, AP-42, Table 1.4-2, dated 7/98  
 NO<sub>x</sub> 100 lb/MMscf, AP-42, Table 1.4-1, dated 7/98  
 CO 84 lb/MMscf, AP-42, Table 1.4-1, dated 7/98  
 VOC 5.5 lb/ MMscf, AP-42, Table 1.4-2, dated 7/98  
 Opacity Visible emissions from Stack #1 shall not exceed 10% on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

When firing natural gas, the pound/hour limits are as follows:

Equipment	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)
Boiler #1	0.3	0.3	0.1	0.6	0.5	0.1
Boiler #2	0.5	0.5	0.1	1.1	0.9	0.1
Boiler #3	0.5	0.5	0.1	1.1	0.9	0.1
Boiler #4	0.4	0.4	0.1	0.8	0.7	0.1

The combined fuel use of #2 and #6 fuel oil for MGMC shall not exceed the equivalent of 75,000 MMBTU/year, on a twelve-month rolling total basis.

There is no limit for the amount of propane and/or natural gas that MGMC can fire.

When firing #2 fuel oil prior to January 1, 2016, Boilers #1, #2, #3 and #4 shall fire ASTM D396 compliant #2 fuel oil with a maximum sulfur content of 0.5% by weight. Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, when firing #2 fuel oil, Boilers #1, #2, #3 and #4 shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). Beginning January 1, 2018, when firing #2 fuel oil, Boilers #1, #2, #3 and #4 shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

When firing #6 fuel oil prior to January 1, 2018, Boilers #2, #3 and #4 shall fire #6 fuel oil with a maximum sulfur content limit of 2.0% by weight. Per 38 MRSA §603-A(1) and (2), when firing #6 fuel oil after January 1, 2018, Boilers #2, #3 and #4 shall fire #6 fuel oil with a maximum sulfur content limit of 0.5% by weight.

#### *Periodic Monitoring*

Periodic monitoring for the boilers shall include recordkeeping to document total heat input (in MMBTU) based upon fuel oil use on a monthly and twelve-month rolling total basis. Documentation shall include the type and sulfur content of fuel oil fired. Records shall also be maintained for natural gas and propane use on a monthly and twelve-month rolling total basis.

#### 2. 40 CFR Part 63 Subpart JJJJJ

Boilers #1, #2, #3 and #4 may be subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

For informational purposes, a summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by USEPA, however MGMC is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to USEPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program

(a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012, according to the rule currently in place. [40 CFR Part 63.11196(a)(1)] However, a No Action Assurance letter was issued on March 13, 2012, stating that USEPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete the required tune-up by the stated compliance date. The rule is expected to have a future compliance date in either 2013 or 2014 once the final revisions are promulgated.

(b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. [40 CFR Part 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent,

before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]
- (c) A Notification of Compliance Status shall be submitted to USEPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
  - (d) MGMC shall implement a boiler tune-up program after the initial tune-up and initial compliance report has been submitted.
    1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size and age of the boiler. [40 CFR Part 63.11223(a)]
    2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to USEPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]
- iii. Energy Assessment (Boilers #2 and #3 only)
- (a) A one-time energy assessment shall be performed by a qualified energy assessor on the applicable boilers by March 21, 2014. [40 CFR Part 63.11196(a)(3)]
  - (b) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of energy using systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major systems consuming energy from affected boiler(s); a review of available architectural

and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR Part 63, Table 2(4)]

- (c) A Notification of Compliance Status shall be submitted to USEPA no later than 120 days after conducting the energy assessment. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

C. Emergency Generators #2 and #3

MGMC operates two emergency generators, designated Generators #2 and #3. Generators #2 and #3 were manufactured in 1982 and 2002, are rated at 4.4 and 7.5 MMBTU/hour and fire 0.0015%S (15ppm) diesel fuel at rates of 32.1 and 54.5 gallons/hour, respectively.

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 generators listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source; however, they are considered exempt from the requirements of Subpart ZZZZ since they are categorized as a residential, commercial, or institutional emergency engine.

1. BPT Findings

The BPT emission limits for Generator #2 is based on the following:

PM/PM<sub>10</sub> 0.20 lb/MMBTU, previous BACT determination  
SO<sub>2</sub> 0.0015 lb/MMBTU, firing 0.0015%S (15ppm) diesel fuel  
NO<sub>x</sub> 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 Visible emissions from the diesel generator stack shall not exceed 20% on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period.

The BPT emission limits for Generator #3 is based on the following:

PM/PM<sub>10</sub> 0.12 lb/MMBTU, previous BACT determination  
SO<sub>2</sub> 0.0015 lb/MMBTU, firing 0.0015%S (15ppm) diesel fuel  
NO<sub>x</sub> 2.35 lb/MMBTU, based upon not-to-exceed vendor data  
CO 0.43 lb/MMBTU, based upon not-to-exceed vendor data  
VOC 0.12 lb/MMBTU, based upon not-to-exceed vendor data  
Opacity Visible emissions from the diesel generator stack shall not exceed 20% on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period.

The pound/hour limits for Generators #2 and #3 are as follows:

Equipment	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 #2	0.9	0.9	0.1	14.1	3.7	0.4
Generator #3	0.9	0.9	0.1	17.6	3.3	0.9

Generators #2 and #3 shall each be limited to 500 hours of operation, on a twelve-month rolling total basis. MGMC shall maintain records of the hours of operation for Generators #2 and #3.

D. Annual Emissions

1. Total Annual Emissions

MGMC shall be restricted to the following annual emissions:

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

Equipment	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boilers #1, #2, #3 & #4, firing oil	7.5	7.5	78.8	18.8	1.3	0.1
Boilers #1, #2, #3 & #4, firing gas/propane	8.0	8.0	0.1	22.8	13.2	1.8
Emergency Generators #2	0.2	0.2	0.1	3.5	0.9	0.1
Emergency Generators #3	0.2	0.2	0.1	4.4	0.8	0.2
<b>Total TPY</b>	<b>15.9</b>	<b>15.9</b>	<b>79.1</b>	<b>49.5</b>	<b>16.2</b>	<b>2.2</b>

The annual emissions were based on Boilers #1, #2, #3 and #4 firing the equivalent of 75,000 MMBTU/year combined of #2 and/or #6 fuel oil on a twelve-month rolling total basis, unlimited firing of natural gas and/or propane and Generators #2 and #3 each limited to 500 hours/year operation, on a twelve-month rolling total basis.

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).

Based on the facility’s fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, MGMC is below the major source threshold of 100,000 tons of CO<sub>2</sub>e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

**III. AMBIENT AIR QUALITY ANALYSIS**

MGMC previously submitted an ambient air quality analysis for air emission license A-438-73-B-R (dated December 1996) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards.

Since the maximum short-term emissions limits are not changing, an ambient air quality analysis is not required for this renewal.

### 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 (BPT) / Best Available Control Technology (BACT),
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-438-71-J-R/A, 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 months after receipt of such approval or if construction is discontinued for a period of eighteen 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 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 calendar days of receipt of a notification to test from the Department or USEPA, 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 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 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 USEPA 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 emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two 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, #2, #3 and #4**

A. Fuels

1. Boilers #1, #2, #3 and #4 may fire #2 fuel oil, while only Boilers #2, #3 and #4 may fire #6 fuel oil.
  - a. The combined fuel use of #2 and #6 fuel oil for MGMC shall not exceed the equivalent of 75,000 MMBTU/year, on a twelve-month rolling total basis. [06-096 CMR 115, BPT]
  - b. Prior to January 1, 2016, any #2 fuel oil fired in Boilers #1, #2, #3 and #4 shall be ASTM D396 compliant (maximum sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
  - c. Beginning January 1, 2016, any #2 fuel oil fired in Boilers #1, #2, #3 and #4 shall have a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
  - d. Beginning January 1, 2018, any #2 fuel oil fired in Boilers #1, #2, #3 and #4 shall have a maximum sulfur content limit 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

- e. Prior to January 1, 2018, any #6 fuel oil fired in Boilers #2, #3 and #4 shall have a maximum sulfur content limit of 2.0% by weight. [38 MRSA §603-A(2)(A)(1)]
- f. Beginning January 1, 2018, any #6 fuel oil fired in Boilers #2, #3 and #4 shall have a maximum sulfur content limit 0.5% by weight. [38 MRSA §603-A(2)(A)(1)]
- g. For #2 fuel oil, compliance shall be demonstrated by fuel records from the supplier showing the quantity of ASTM D396 compliant fuel delivered. For #6 fuel oil, compliance shall be demonstrated by fuel records from the supplier showing the quantity, type and percent sulfur of the fuel delivered. The records shall document the total heat input (in MMBTU) based upon fuel use on a monthly and twelve-month rolling total basis. [06-096 CMR 115, BPT]

2. Boilers #1, #2, #3 and #4 may fire natural gas and/or propane, with no annual fuel-use limit. Records of annual natural gas and propane use shall be maintained on a monthly and twelve-month rolling total basis. [06-096 CMR 115, BACT]

B. When firing #2 fuel oil, emissions from each boiler shall not exceed the following:

Equipment	Pollutant	lb/MMBTU	Origin and Authority
Boilers #1, #2, #3 & #4	PM	0.08	06-096 CMR 115, BPT

C. When firing #2 fuel oil, emissions shall not exceed the following [06-096 CMR 115, BPT]:

Equipment	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)
Boiler #1	0.5	0.5	3.1	1.9	0.2	0.1
Boiler #2	0.9	0.9	5.4	3.2	0.4	0.1
Boiler #3	0.9	0.9	5.4	3.2	0.4	0.1
Boiler #4	0.7	0.7	4.2	2.5	0.3	0.1

D. When firing #6 fuel oil, emissions from each boiler shall not exceed the following:

Equipment	Pollutant	lb/MMBTU	Origin and Authority
Boiler #2, #3 & #4	PM	0.20	06-096 CMR 103(2)(B)(1)(a)

E. When firing #6 fuel oil, emissions shall not exceed the following [06-096 CMR 115, BPT]:

Equipment	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)
Boiler #2	2.2	2.2	22.7	5.4	0.4	0.1
Boiler #3	2.2	2.2	22.7	5.4	0.4	0.1
Boiler #4	1.7	1.7	17.7	4.2	0.3	0.1

F. When firing #2 and/or #6 fuel oil, visible emissions from Stack #1 shall not exceed 20% 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]

G. When firing propane, emissions from each boiler shall not exceed the following:

Equipment	Pollutant	lb/MMBTU	Origin and Authority
Boilers #1, #2, #3 & #4	PM	0.05	06-096 CMR 115. BACT

H. When firing propane, emissions shall not exceed the following [06-096 CMR 115, BACT]:

Equipment	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)
Boiler #1	0.3	0.3	0.1	0.9	0.5	0.1
Boiler #2	0.5	0.5	0.1	1.6	0.9	0.1
Boiler #3	0.5	0.5	0.1	1.6	0.9	0.1
Boiler #4	0.4	0.4	0.1	1.2	0.7	0.1

I. When firing natural gas, emissions from each boiler shall not exceed the following:

Equipment	Pollutant	lb/MMBTU	Origin and Authority
Boilers #1, #2, #3 & #4	PM	0.05	06-096 CMR 115. BACT

J. When firing natural gas, emissions shall not exceed the following [06-096 CMR 115, BACT]:

Equipment	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)
Boiler #1	0.3	0.3	0.1	0.6	0.5	0.1
Boiler #2	0.5	0.5	0.1	1.1	0.9	0.1
Boiler #3	0.5	0.5	0.1	1.1	0.9	0.1
Boiler #4	0.4	0.4	0.1	0.8	0.7	0.1

K. When firing propane and/or natural gas, visible emissions from Stack #1 shall not exceed 10% 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]

(17) **Emergency Generators #2 and #3**

A. The diesel fuel fired in Emergency Generators #2 and #3 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. [06-096 CMR 115]

B. Generators #2 and #3 are each limited to 500 hours per year of total operation, based on a twelve-month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115]

C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #2	PM	0.20	06-096 CMR 103(2)(A)(1)
Generator #3	PM	0.12	06-96 R 103(2)(B)(1)(a)

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

Equipment	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 #2	0.9	0.9	0.1	14.1	3.7	0.4
Generator #3	0.9	0.9	0.1	17.6	3.3	0.9

E. Visible emissions from Stacks #2 and #3, servicing Generators #2 and #3 respectively, shall each not exceed 20% on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 CMR 101]

(18) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- 1) A computer program and accompanying instructions supplied by the Department; or

MaineGeneral Medical Center –  
Thayer Campus  
Kennebec County  
Waterville, Maine  
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- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

- (19) MGMC 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 5 DAY OF November, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Patricia W. Aho*  
PATRICIA W. AHO, 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, 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 renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 17, 2011

Date of application acceptance: November 28, 2011

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J Ostrowski, Bureau of Air Quality.



