



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION | AUGUSTA, MAINE 04333-0017
DEPARTMENT ORDER

**MaineGeneral Medical Center
Kennebec County
Waterville, Maine
A-438-71-N-R**

**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 (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. Registration

A. Introduction

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

This license completes the processing of the application with the following submission number as assigned by the Department: 591817 (accepted 08/16/2022).

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

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1	6.3	6,100 scf/hr	Natural Gas	2001	2012	1
Boiler #1	6.3	46.0 gal/hr	Distillate Fuel	2001	2012	1
Boiler #1	6.3	69.9 gal/hr	Propane	2001	2012	1
Boiler #4	8.4	8,200 scf/hr	Natural Gas	1982	1982	1
Boiler #4	8.4	60.0 gal/hr	Distillate Fuel	1982	1982	1
Boiler #4	8.4	53.9 gal/hr	#6 Fuel Oil	1982	1982	1
Boiler #4	8.4	93.0 gal/hr	Propane	1982	1982	1

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #5	8.4	8,400 scf/hr	Natural Gas	2018	2018	1
Boiler #5	8.4	60 gal/hr	Distillate Fuel	2018	2018	1

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #3	7.5	750	Distillate Fuel	54.5	2002	2002
Generator #4	4.8	500	Distillate Fuel	35.0	2009	2009

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Records or Logs mean either hardcopy or electronic records.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

The application for MGMC 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 (C.M.R.) ch. 115.

E. Facility Classification

With the annual fuel limit on Boilers #1, #4, and #5 and the operating hours restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because MGMC is subject to license restrictions that keep facility emissions below major source thresholds for NO_x; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. **Best Practical Treatment (BPT)**

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1, #4, and #5

MGMC operates Boilers #1, #4, and #5 for steam, heat, and hot water needs. The boilers are rated at 6.3 MMBtu/hr, 8.4 MMBtu/hr, and 8.4 MMBtu/hr, respectively. All three boilers are capable of firing distillate fuel and natural gas, while Boiler #1 can also fire propane, and Boiler #4 can also fire propane or #6 fuel oil. The boilers were installed in 2012, 1982, and 2018, respectively and all exhaust through a shared stack, Stack #1.

With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1, #4, and #5 shall not exceed 0.0015% by weight (15 ppm).

With limited exceptions, no person shall import, distribute, or offer for sale any residual fuel oil (including #6 fuel oil) with a sulfur content greater than 0.5% by weight pursuant to 38 M.R.S. §§ 603-A(2)(A)(1) and (2). Therefore, the #6 fuel oil

purchased or otherwise obtained for use in Boiler #4 shall not exceed 0.5% by weight.

1. BPT Findings

The BPT emission limits for Boilers #1, #4, and #5 were based on the following:

Boilers #1, #4 and #5 Firing Distillate Fuel

PM/PM₁₀/PM_{2.5} – 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO₂ – based on firing distillate fuel with a sulfur content of 0.0015% by weight
NO_x – 20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO – 5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC – 0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions– 06-096 C.M.R. ch. 101

Boilers #1, #4 and #5 Firing Natural Gas

PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO₂ – 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 4/26
NO_x – 100 lb/MMscf based on AP-42 Table 1.4-1 dated 4/26
CO – 84 lb/MMscf based on AP-42 Table 1.4-1 dated 4/26
VOC – 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 4/26
Visible Emissions– 06-096 C.M.R. ch. 101

Boilers #1 and #4 Firing Propane

PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO₂ – 0.054 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
NO_x – 13 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
CO – 7.5 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
VOC – 1 lb/1,000 gal based on AP-42 Table 1.5-1 dated 5/25
Visible Emissions– 06-096 C.M.R. ch. 101

Boiler #4 Firing #6 Fuel Oil

PM/PM₁₀/PM_{2.5} – 0.12 lb/MMBtu, 06-096 CMR 103(2)(A)(1)(a)
SO₂ – based on firing #6 fuel oil with a sulfur content of 0.5% by weight
NO_x – 0.5 lb/MMBtu from A-438-71-J-R/A dated 11/6/12
CO – 5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC – 1.13 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions– 06-096 C.M.R. ch. 101

The BPT emission limits for Boilers #1, #4, and #5 are the following:

Unit	Fuel	Pollutant	lb/MMBtu
Boilers #1, #4, and #5	Natural Gas	PM	0.05
Boilers #1, #4, and #5	Distillate Fuel	PM	0.08
Boilers #1 and #4	Propane	PM	0.05
Boiler #4	#6 Fuel Oil	PM	0.2

Unit	Fuel	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	Distillate Fuel	0.50	0.50	0.50	0.01	0.90	0.23	0.02
Boiler #1	Natural Gas	0.32	0.32	0.32	--	0.61	0.51	0.03
Boiler #1	Propane	0.32	0.32	0.32	--	0.90	0.52	0.07
Boiler #4	Distillate Fuel	0.67	0.67	0.67	0.01	1.20	0.30	0.02
Boiler #4	#6 Fuel Oil	1.01	1.01	1.01	4.41	4.20	0.28	0.06
Boiler #4	Natural Gas	0.42	0.42	0.42	--	0.82	0.69	0.04
Boiler #4	Propane	0.42	0.42	0.42	0.01	1.19	0.69	0.09
Boiler #5	Distillate Fuel	0.67	0.67	0.67	0.01	1.20	0.30	0.02
Boiler #5	Natural Gas	0.42	0.42	0.42	--	0.82	0.69	0.04

MGMC shall be limited to 75,000 MMBtu/yr total from the firing of distillate fuel and #6 fuel oil in Boilers #1, #4, and #5 combined on a calendar year total basis. Compliance shall be demonstrated by records of fuel oil usage in the boilers and records of the calculated heat input on a monthly and calendar year basis. Calculations of heat input shall be based on heating values of 0.14 MMBtu/gal for distillate fuel and 0.15 MMBtu/gal for #6 fuel oil.

There is no limit on the amount of propane or natural gas fired in the boilers.

2. Visible Emissions

Visible emissions from Stack #1 when firing either distillate fuel or #6 fuel oil in any of the boilers shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from Stack #1 when all of the boilers are only firing natural gas or propane shall not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to their sizes, Boilers #1, #4, and #5 are **not** subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating*

Units 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

Boilers #1, #4, and #5 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. The units are considered gas-fired units rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11195(e)]

Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJJ. 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 C.F.R. § 63.11237]

In order to maintain the classification of gas-fired boilers, MGMC may only fire distillate fuel or #6 fuel oil in Boilers #1, #4, and #5 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 “Period of gas curtailment or supply interruption”), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year for each boiler.

C. Generator #3

MGMC operates Generator #3, an emergency generator consisting of an engine and an electrical generator. Generator #3 has an engine rated at 7.5 MMBtu/hr which fires distillate fuel and was manufactured in 2002.

1. BPT Findings

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

- PM/PM₁₀/PM_{2.5} – 0.12 lb/MMBtu, 06-096 C.M.R. ch. 103
- SO₂ – Combustion of distillate fuel with a maximum sulfur content of 15 ppm (0.0015% sulfur by weight)
- NO_x – 2.35 lb/MMBtu based on previously supplied vendor not-to-exceed data
- CO – 0.43 lb/MMBtu based on previously supplied vendor not-to-exceed data
- VOC – 0.12 lb/MMBtu based on previously supplied vendor not-to-exceed data
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for Generator #3 are the following:

Unit	Pollutant	lb/MMBtu
Generator #3	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #3	0.90	0.90	0.90	0.01	17.63	3.23	0.90

Visible emissions from Generator #3 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time MGMC shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. MGMC shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. Generator #3 shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate

compliance with the operating hours limit, MGMC shall keep records of the total hours of operation and the hours of emergency operation.

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 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.

2. Chapter 169

Generator #3 was installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and is therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards (NSPS)

Due to the date of manufacture of Generator #3, the engine is not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)*, 40 C.F.R. Part 60, Subpart IIII since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP):
40 C.F.R. Part 63, Subpart ZZZZ

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is not applicable to Generator #3. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at an area HAP source. However, it is considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since it is categorized as an institutional emergency engine and it does not operate or is not contractually obligated to be available 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 C.F.R. § 63.6640(f)(4)(ii).

Operation of any emergency engine 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 C.F.R. § 63.6640(f)(4)(ii), would cause the engine to be subject to 40 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements of this subpart.

D. Generator #4

MGMC operates Generator #4, which is a generator set consisting of an engine and an electrical generator. Generator #4 has an engine rated at 4.8 MMBtu/hr which fires distillate fuel and was manufactured in 2009.

1. BPT Findings

The BPT emission limits for Generator #4 are based on the following:

PM/PM₁₀/PM_{2.5} – 0.12 lb/MMBtu, 06-096 C.M.R. ch. 103
SO₂ – Combustion of distillate fuel with a maximum sulfur content of 15 ppm (0.0015% sulfur by weight)
NO_x – 3.2 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
CO – 0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
VOC – 0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for Generator #4 are the following:

Unit	Pollutant	lb/MMBtu
Generator #4	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #4	0.58	0.58	0.58	0.01	15.36	4.08	0.43

Visible emissions from Generator #4 shall not exceed 20% opacity on a six-minute block average basis.

BPT for Generator #4 includes recordkeeping of all maintenance conducted on the engine.

2. Chapter 169

Generator #4 was installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and is therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Generator #4 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200]

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

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements of this subpart applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission

organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraphs (2) and (2)(i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, 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.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

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

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

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

MGMC shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, 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).

[40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement

No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

MGMC shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time.

[40 C.F.R. § 60.4214(b)]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP):

40 C.F.R. Part 63, Subpart ZZZZ

Pursuant to 40 C.F.R. § 63.6590(c), stationary compression ignition engines subject to regulations under 40 C.F.R. Part 60, Subpart IIII must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60, Subpart IIII. No further requirements apply for such engines under Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

E. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

F. Fugitive Emissions

MGMC shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program

of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

MGMC shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

G. Emissions Statements

MGMC is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. MGMC shall maintain the following records in order to comply with this rule:

1. The amount of each fuel fired in each boiler and generator for each calendar year;
2. The sulfur content of the distillate fuel and/or #6 fuel oil fired in the boilers and the distillate fuel fired in the generators;
3. Hours each emission unit was active or operating on a monthly and calendar year total basis.

Every third year, or as requested by the Department, MGMC shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. MGMC shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

H. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- A combined limit of 75,000 MMBtu/yr when firing distillate fuel or #6 fuel oil in the boilers;

- Firing an unlimited amount of natural gas or propane in the boilers;
- Operating Generators #3 and #4 for 100 hrs/yr of non-emergency operation.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

**Total Licensed Annual Emissions for the Facility
Tons/year**

(used to calculate the annual license fee)

	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Boilers #1, #4, and #5 (firing oil)	4.5	4.5	4.5	19.7	18.8	1.3	0.3
Boilers #1, #4, and #5 (firing natural gas/propane)	5.2	5.2	5.2	0.1	13.0	8.5	0.9
Generator #3	0.1	0.1	0.1	--	0.9	0.2	0.1
Generator #4	0.1	0.1	0.1	--	0.8	0.2	0.1
Total TPY	9.9	9.9	9.9	19.8	33.4	10.1	1.4

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

III. Ambient Air Quality Analysis

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

Pollutant	Tons/Year
PM ₁₀	25
PM _{2.5}	15
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.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require MGMC to submit additional information and may require an ambient air quality impact analysis at that time.

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-438-71-N-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. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115] Payment of the annual air emission license fee for MGMC is due by the end of August of each year. [38 M.R.S. § 353-A(3)]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 the written test report by the Department, or another alternative timeframe approved by the Department, 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 C.F.R. 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 C.M.R. ch. 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 license requirement. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (16) The licensee 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. § 605).

Specific Conditions

(17) Boilers #1, #4, and #5

A. Fuel

- 1. Boiler #1 is licensed to fire distillate fuel, natural gas, and propane. [06-096 C.M.R. ch. 115, BPT]
- 2. Boiler #4 is licensed to fire distillate fuel, #6 fuel oil, natural gas, and propane. [06-096 C.M.R. ch. 115, BPT]
- 3. Boiler #5 is licensed to fire distillate fuel, and natural gas. [06-096 C.M.R. ch. 115, BPT]
- 4. Total use of distillate fuel and #6 fuel oil for Boilers #1, #4, and #5 combined shall not exceed 75,000 MMBtu/yr, based on a calendar year total basis. Compliance shall be demonstrated by records of fuel oil usage in the boilers and calculated heat input on a monthly and calendar year basis. Calculations of heat input shall be based on heating values of 0.14 MMBtu/gal for distillate fuel and 0.15 MMBtu/gal for #6 fuel oil [06-096 C.M.R. ch. 115, BPT]

5. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
6. The facility shall not purchase or otherwise obtain #6 fuel oil with a maximum sulfur content that exceeds 0.5% by weight . [06-096 C.M.R. ch. 115, BPT]
7. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

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

Emission Unit	Fuel	Pollutant	lb/MMBtu
Boilers #1, #4, and #5	Natural Gas	PM	0.05
Boilers #1, #4, and #5	Distillate Fuel	PM	0.08
Boilers #1 and #4	Propane	PM	0.05
Boiler #4	#6 Fuel Oil	PM	0.20

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

Unit	Fuel	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	Distillate Fuel	0.50	0.50	0.50	0.01	0.90	0.23	0.02
Boiler #1	Natural Gas	0.32	0.32	0.32	--	0.61	0.51	0.03
Boiler #1	Propane	0.32	0.32	0.32	--	0.90	0.52	0.07
Boiler #4	Distillate Fuel	0.67	0.67	0.67	0.01	1.20	0.30	0.02
Boiler #4	#6 Fuel Oil	1.68	1.68	1.68	4.41	4.20	0.28	0.06
Boiler #4	Natural Gas	0.42	0.42	0.42	--	0.82	0.69	0.04
Boiler #4	Propane	0.42	0.42	0.42	0.01	1.19	0.69	0.09
Boiler #5	Distillate Fuel	0.67	0.67	0.67	0.01	1.20	0.30	0.02
Boiler #5	Natural Gas	0.42	0.42	0.42	--	0.82	0.69	0.04

- D. Visible emissions from Stack #1 when firing either distillate fuel or #6 fuel oil in any of the boilers shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2) and § 4(A)(1)(a)(i)]
- E. Visible emissions from Stack #1 when all of the boilers are only firing natural gas or propane shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

F. Operational Limitation

MGMC may only fire distillate fuel in Boilers #1, #4, and #5 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 "Period of gas curtailment or supply interruption"), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year for each boiler.
[06-096 C.M.R. ch. 115, BPT]

(18) **Generator #3**

A. Generator #3 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.
[06-096 C.M.R. ch. 115, BPT]

B. MGMC shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]

C. The fuel sulfur content for Generator #3 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

D. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #3	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #3	0.90	0.90	0.90	0.01	17.63	3.23	0.90

F. Visible Emissions

Visible emissions from Generator #3 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time

MGMC shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

1. The duration of the startup shall not exceed 30 minutes per event;
2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
3. MGMC shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

- 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 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. [06-096 C.M.R. ch. 115, BPT]

(19) **Generator #4**

- A. Generator #4 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]
- B. MGMC shall keep records of all maintenance conducted on the engine associated with Generator #4. [06-096 C.M.R. ch. 115, BPT]
- C. Emissions shall not exceed the following:

Unit	Pollutant	Ib/MMBtu	Origin and Authority
Generator #4	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #4	0.58	0.58	0.58	0.01	15.36	4.08	0.43

E. Visible Emissions

Visible emissions from Generator #4 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

F. The Generator shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:
[incorporated under 06-096 C.M.R. ch. 115, BPT]

1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, 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). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours.
[40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]

- b. MGMC shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

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

MGMC shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(20) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(21) **Fugitive Emissions**

- A. MGMC shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
- B. MGMC shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(22) **Annual Emissions Statements**

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, MGMC shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory.

The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

- B. MGMC shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
1. The amount of each fuel fired in each boiler and generator for each calendar year;
 2. The sulfur content of the distillate fuel and/or #6 fuel oil fired in the boilers and the distillate fuel fired in the generators;
 3. Hours each emission unit was active or operating on a monthly and calendar year total basis.
[06-096 C.M.R. ch. 137]
- C. Every third year, or as requested by the Department, MGMC shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. MGMC shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

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Waterville, Maine
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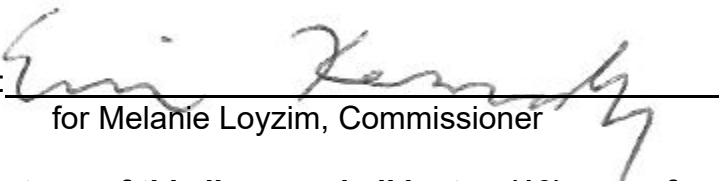
**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

(23) Additional Information

If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, MGMC may be required to submit additional information. Upon written request from the Department, MGMC shall provide information necessary to demonstrate ambient air quality standards (AAQS) will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

Done and Dated in Augusta, Maine this 7th day of AUGUST, 2026.

Department of Environmental Protection

BY: 
for Melanie Loyzim, 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 M.R.S. § 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: 8/8/2022

Date of application acceptance: 8/16/2022

This Order prepared by Jack Doran, Bureau of Air Quality.