



DEPARTMENT ORDER

**Central Maine Medical Center
 Androscoggin County
 Lewiston, Maine
 A-387-71-N-R/A**

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

FINDINGS OF FACT

After review of the air emission license renewal and amendment application, staff investigation reports, and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Central Maine Medical Center (CMMC) has applied to renew their Air Emission License for the operation of emission sources associated with their medical facility. Additionally, CMMC has requested an amendment to their license in order to add an additional emergency generator.

The equipment addressed in this license is located at 300 Main St, Lewiston, 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, % sulfur	Date of Manuf.	Date of Install.	Stack #
Boiler #1	25.0	167 gal/hr	distillate fuel, 0.0015%	1969	1969	1
		26,215 scf/hr	natural gas, neg.			
Boiler #2	25.0	167 gal/hr	distillate fuel, 0.0015%	1969	1969	1
		26,215 scf/hr	natural gas, neg.			
Boiler #3	9.0	60 gal/hr	distillate fuel, 0.0015%	1967	1967	1
		8,740 scf/hr	natural gas, neg.			

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate	Date of Manuf.	Date of Install.
Generator #2	5.7	600	distillate fuel, 0.0015%	41.8 gal/hr	1989	1989
Generator #3	14.5	1,500	distillate fuel, 0.0015%	104.5 gal/hr	2003	2003
Generator #4	5.9	600	distillate fuel, 0.0015%	42.7 gal/hr	2018	2018
Generator #5 *	4.3	405	distillate fuel, 0.0015%	30.9 gal/hr	2021	2021
Cogen #1	2.6	250	natural gas, neg.	2500 scf/hr	2017	2018

* New as of this license.

CMMC may operate small stationary engines smaller than 0.5 MMBtu/hr. Such engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department’s website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, CMMC may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

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 modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the “Significant Emission” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Previous License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	16.0	16.0	0.0	100
PM ₁₀	16.0	16.0	0.0	100
SO ₂	0.2	0.2	0.0	100
NO _x	35.5	36.1	0.6	100
CO	30.5	30.6	0.1	100
VOC	4.0	4.0	0.0	100

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With the annual operating hours restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions for NO_x, because CMMC is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; 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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. 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, and #3

CMMC operates Boilers #1, #2, and #3 for steam and heat. The boilers are rated at 25 MMBtu/hr, 25 MMBtu/hr, and 9 MMBtu/hr respectively, and each boiler fires distillate fuel and natural gas. Boilers #1 and #2 were installed in 1969, and Boiler #3 was installed in 1967. Boilers #1, #2, and #3 exhaust through a common stack, designated Stack #1.

Boilers #1, #2, and #3 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. However, pursuant to 38 M.R.S. § 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, the sulfur content of the distillate fuel purchased or otherwise obtained for use in Boilers #1, #2, and #3 shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings

The BPT emission limits for Boilers #1, #2, and #3 were based on the following:

Distillate Fuel

- | | |
|---------------------|--|
| PM/PM ₁₀ | – 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT |
| SO ₂ | – based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight |
| NO _x | – 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 |
| Visible Emissions | – 06-096 C.M.R. ch. 115, BPT |

Natural Gas

- PM/PM₁₀ – 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 7/98
 - NO_x – 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
 - Visible – 06-096 C.M.R. ch. 115, BPT
- Emissions

The BPT emission limits for Boilers #1, #2, and #3 are the following:

Unit	Pollutant	lb/MMBtu (distillate fuel)	lb/MMBtu (natural gas)
Boiler #1	PM	0.12	0.05
Boiler #2	PM	0.12	0.05
Boiler #3	PM	0.12	0.05

Fuel	Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Distillate fuel	Boiler #1	3.00	3.00	0.04	3.57	0.89	0.06
	Boiler #2	3.00	3.00	0.04	3.57	0.89	0.06
	Boiler #3	1.08	1.08	0.01	1.29	0.32	0.02
Natural gas	Boiler #1	1.25	1.25	0.01	2.43	2.20	0.14
	Boiler #2	1.25	1.25	0.01	2.43	2.20	0.14
	Boiler #3	0.45	0.45	0.01	0.87	0.73	0.05

CMMC shall be limited to 500,000 gallons of distillate fuel fired in Boilers #1, #2, and #3 on a calendar year total basis.

2. Visible Emissions

Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis when one of the units is firing distillate fuel.

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

Visible emissions from Stack #1 shall not exceed 30% opacity on a six-minute block average basis when more than one of the units are firing distillate fuel.

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

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

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

3. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, as applicable.

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

Due to the year of manufacture for Boilers #1 and #2, and the size and year of manufacture for Boiler #3, the boilers 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]

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

Boilers #1, #2, and #3 are 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 JJJJJ. The units are considered existing oil boilers. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 C.F.R. § 63.11225(a)(2)]

CMMC submitted their Initial Notification to EPA on September 17, 2011.

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. Because the boilers are all classified as existing oil-fired boilers, and because they don't meet any of the conditions for less frequent tune-up requirements, they are required to be tuned-up every 2 years. [40 C.F.R. § 63.11223(a) and Table 2]

(iii) 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, not to exceed 36 months from the previous inspection. [40 C.F.R. § 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 C.F.R. § 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. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, **before** and **after** adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 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 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

(iv) Tune-Up Report: A tune-up report shall be maintained onsite and, submitted to the Department and/or EPA upon request. The report shall contain the following information:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
2. A description of any corrective actions taken as part of the tune-up of the boiler; and
3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

Units sharing a fuel meter may estimate the fuel use by each unit.
[40 C.F.R. § 63.11223(b)(6)]

- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

CMMC submitted its Notification of Compliance Status to EPA July 1, 2014.

(3) Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 2. "No secondary materials that are solid waste were combusted in any affected unit."
 3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(4) Energy Assessment

Boilers #1 and #2 are subject to the energy assessment requirement as follows:

A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 C.F.R. § 63.11196(a)(3)]

CMMC conducted its one-time energy assessment on March 17, 2014.

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) 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;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

C. Generators #2-#5

CMMC operates Generators #2-#5 as emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The emergency generators have engines rated at 5.7 MMBtu/hr, 14.5 MMBtu/hr, 5.9 MMBtu/hr, and 4.3 MMBtu/hr, respectively. Generators #2-#5 fire distillate fuel and were manufactured in 1989, 2003, 2018, and 2021 respectively.

1. BACT and BPT Findings

The BPT emission limits for Generators #2-#4 and the BACT emission limits for Generator #5 are based on the following:

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x - 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
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT for Generators #2-#4 and 06-096 C.M.R. ch. 115, BACT for Generator #5

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

Unit	Pollutant	lb/MMBtu
Generator #2	PM	0.12
Generator #3	PM	0.12
Generator #4	PM	0.12
Generator #5	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #2	0.68	0.68	0.01	12.24	4.85	0.51
Generator #3	1.74	1.74	0.02	46.40	12.33	1.31
Generator #4	0.71	0.71	0.01	18.88	5.02	0.53
Generator #5	0.52	0.52	0.01	13.76	3.66	0.39

Visible emissions from each of the emergency generators shall not exceed 20% opacity on a six-minute block average basis.

Generators #2 and #3 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. Each emergency generator shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, CMMC shall keep records of the total hours of operation and the hours of emergency operation for each unit.

Generators #2 and #3 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. New Source Performance Standards (NSPS)

Due to the dates of manufacture of Generators #2 and #3, they are 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 III since the units were manufactured prior to April 1, 2006.
[40 C.F.R. § 60.4200]

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart III is applicable to Generators #4 and #5 since the units were ordered after July 11, 2005, and manufactured after April 1, 2006.
[40 C.F.R. § 60.4200]

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

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart III, 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 III, resulting in the engine being subject to requirements 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 paragraph (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 III Requirements

(1) Manufacturer Certification Requirement

The engines 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(s) 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 each engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

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

(5) Annual Time Limit for Maintenance and Testing

As emergency engines, the units shall each 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

CMMC shall keep records that include maintenance conducted on the engines and the hours of operation of each 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 each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

3. 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 Generators #2 - #5. 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 40 C.F.R. Part 63, Subpart ZZZZ since they are categorized as institutional emergency engines and they do not operate or are 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.

D. Cogen #1

CMMC operates a natural gas-fired cogeneration unit capable of producing electricity and hot water for the facility. The 250 kW Co-Energy America 8250-Amerigen is a Reciprocating Internal Combustion Engine with a maximum heat input capacity of 2.6 MMBtu/hr. The unit was installed in 2018 and exhausts through its own stack.

1. BPT Findings

The BPT emission limits for Cogen #1 are based on the following:

PM/PM₁₀ - 0.05 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT
SO₂ - 0.0006 lb/MMBtu from AP-42 Table 3.2-2 dated 7/00
NO_x - 1.0 g/HP-hr from 40 C.F.R. Part 60, Subpart JJJJ, Table 1
CO - 2.0 g/HP-hr from 40 C.F.R. Part 60, Subpart JJJJ, Table 1
VOC - 0.7 g/HP-hr from 40 C.F.R. Part 60, Subpart JJJJ, Table 1
Visible Emissions - 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Cogen #1 are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Cogen #1	0.13	0.13	0.01	0.78	1.56	0.55

Visible emissions from Cogen #1 shall not exceed 10% opacity on a six-minute block average basis.

2. New Source Performance Standards (NSPS)

Due to the date of manufacture of Cogen #1, the engine is subject to the New Source Performance Standards (NSPS) *Standards of Performance for Spark Ignition Internal Combustion Engines (SI ICE)*, 40 C.F.R. Part 60, Subpart JJJJ since the unit was manufactured after January 1, 2009. [40 C.F.R. § 60.4230]

By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

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

a. Emission and Operation Standards

- (1) CMMC shall operate and maintain the engine to achieve the emission standards for Non-Emergency Spark Ignition Natural Gas engines in Table 1 of Subpart JJJJ for the life of the engine.
[40 C.F.R. §§ 60.4233(e) and 60.4234]
- (2) The air-to-fuel ratio controller (AFR controller) must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 C.F.R. § 60.4243(g)]
- (3) Because Cogen #1 is not a certified engine, CMMC shall comply with the following compliance requirements of 40 C.F.R. Part 60, Subpart JJJJ:
 - (i) CMMC shall maintain a maintenance plan and records of maintenance conducted on the engine,
 - (ii) To the extent practicable, CMMC shall maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions, and
 - (iii) CMMC shall conduct an initial performance test according to § 60.4244 within 1 year of engine startup and complete all related notification and recordkeeping requirements.

CMMC completed the performance test on June 27, 2018.

b. Operational Flexibility

CMMC may operate Cogen #1 using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use.

If propane is used for more than 100 hours per year and the engine is not certified to the applicable emission standards when using propane, CMMC shall conduct a performance test to demonstrate compliance with the emission standards of § 60.4233 according to § 60.4244. [40 C.F.R. § 60.4243(e)]

c. Recordkeeping

CMMC shall keep the following records:

- (1) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.

- (2) Any maintenance conducted on the engine.
- (3) Documentation that the engine meets the emission standards.
[40 C.F.R. § 60.4245(a)]

d. Notifications

CMMC shall submit to EPA a copy of the initial performance test as conducted in § 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
[40 C.F.R. § 60.4245(d)]

CMMC submitted a copy of the completed performance test to the Department and EPA on June 29, 2018.

E. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

F. General Process Emissions

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

G. 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Firing 500,000 gal/yr distillate fuel in the boilers;
- Unlimited natural gas use in the boilers;
- Operating all Emergency Generators for 100 hrs/yr each;
- Operating Cogen #1 for 8,760 hr/yr.

Please note, this information provides the basis for fee calculation only and should not be construed to 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	SO ₂	NO _x	CO	VOC
Boilers	15.25	15.25	0.19	27.87	22.51	1.47
Emergency Generators	0.18	0.18	--	4.82	1.28	0.14
Cogen #1	0.57	0.57	0.01	3.42	6.84	2.39
Total TPY	16.0	16.0	0.2	36.1	30.6	4.0

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

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
SO ₂	50
NO _x	50
CO	250

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

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-387-71-N-R/A 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 commencing 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]
- (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). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) Boilers #1-#3

A. Fuel

1. Boilers #1-#3 are licensed to fire distillate fuel and natural gas.
2. Total distillate fuel use for Boilers #1-#3 shall not exceed 500,000 gal/yr, based on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
3. 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]
4. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT]

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

Unit	Pollutant	lb/MMBtu (distillate fuel)	lb/MMBtu (natural gas)
Boiler #1	PM	0.12	0.05
Boiler #2	PM	0.12	0.05
Boiler #3	PM	0.12	0.05

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

Fuel	Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Distillate fuel	Boiler #1	3.00	3.00	0.04	3.57	0.89	0.06
	Boiler #2	3.00	3.00	0.04	3.57	0.89	0.06
	Boiler #3	1.08	1.08	0.01	1.29	0.32	0.02
Natural gas	Boiler #1	1.25	1.25	0.01	2.43	2.20	0.14
	Boiler #2	1.25	1.25	0.01	2.43	2.20	0.14
	Boiler #3	0.45	0.45	0.01	0.87	0.73	0.05

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

1. Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis when one of the boilers is firing distillate fuel.
2. Visible emissions from Stack #1 shall not exceed 30% opacity on a six-minute block average basis when more than one of the units are firing distillate fuel.
3. Visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis when all operating boilers are firing natural gas.

E. CMMC shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boilers #1-#3 including, but not limited to, the following:
[incorporated under 06-096 C.M.R. ch. 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
 - a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. Because the boilers are all classified as existing oil-fired boilers, and because they don't meet any of the conditions for less frequent tune-up requirements, they are required to be tuned-up every 2 years. [40 C.F.R. § 63.11223(a) and Table 2]
 - 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, not to exceed 36 months from the previous inspection. [40 C.F.R. § 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 C.F.R. § 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. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
 - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]

(5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, **before** and **after** adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[40 C.F.R. § 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 30 days of start-up.
[40 C.F.R. § 63.11223(b)(7)]

c. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:

(1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

(2) A description of any corrective actions taken as part of the tune-up of the boiler; and

(3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

2. Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following:
[40 C.F.R. § 63.11225(b)]

a. Company name and address;

b. A statement of whether the source has complied with all the relevant requirements of Subpart JJJJJ;

c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

d. The following certifications, as applicable:

- (1) “This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart.”
 - (2) “No secondary materials that are solid waste were combusted in any affected unit.”
 - (3) “This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler’s time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer’s recommended procedures or procedures specified for a boiler of similar design if manufacturer’s recommended procedures are not available.”
3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
- a. Copies of notifications and reports with supporting compliance documentation;
 - b. 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;
 - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system.
[40 C.F.R. § 63.11225(a)(4)(vi)]

(18) Generators #2-#5

- A. Each of the emergency generator 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. CMMC shall keep records that include maintenance conducted on Generators #2 and #3 and the hours of operation of each 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 Generators #2-#5 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 tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT]

D. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #2	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator #3	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator #4	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Generator #5	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 and BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #2	0.68	0.68	0.01	12.24	4.85	0.51
Generator #3	1.74	1.74	0.02	46.40	12.33	1.31
Generator #4	0.71	0.71	0.01	18.88	5.02	0.53
Generator #5	0.52	0.52	0.01	13.76	3.66	0.39

F. Visible Emissions

Visible emissions from each of the emergency generators shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT and BACT]

G. Generators #2 and #3 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 and/or fire pumps 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.

H. Generators #4 and #5 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 engines 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 engines 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 tank containing the fuel to be fired. [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 each engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

a. As emergency engines, the units shall each 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. CMMC shall keep records that include maintenance conducted on each engine and the hours of operation of each 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 each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

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

(19) **Cogen #1**

- A. Cogen #1 is licensed to fire natural gas. Cogen #1 may also fire propane as allowed by 40 C.F.R. Part 60, Subpart JJJJ.
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Cogen #1	0.13	0.13	0.01	0.78	1.56	0.55

- C. Visible emissions from Cogen #1 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- D. Cogen #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart JJJJ, including the following [incorporated under 06-096 C.M.R. ch. 115, BPT]:

1. Emission and Operation Standards

- a. CMMC shall operate and maintain the engine to achieve the emission standards for Non-Emergency Spark Ignition Natural Gas engines in Table 1 of Subpart JJJJ for the life of the engine. [40 C.F.R. §§ 60.4233(e) and 60.4234]
- b. The air-to-fuel ratio controller (AFR controller) must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 C.F.R. § 60.4243(g)]
- c. Because Cogen #1 is not a certified engine, CMMC shall comply with the following compliance requirements of 40 C.F.R. Part 60, Subpart JJJJ:
 - (1) CMMC shall maintain a maintenance plan and records of maintenance conducted on the engine.
 - (2) To the extent practicable, CMMC shall maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions.

2. Operational Flexibility

CMMC may operate Cogen #1 using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use.

If propane is used for more than 100 hours per year and the engine is not certified to the applicable emission standards when using propane, CMMC shall conduct a performance test to demonstrate compliance with the emission standards of § 60.4233 according to § 60.4244. [40 C.F.R. § 60.4243(e)]

3. Recordkeeping

CMMC shall keep the following records:

- a. All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.
- b. Any maintenance conducted on the engine.
- c. Documentation that the engine meets the emission standards.
[40 C.F.R. § 60.4245(a)]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.
[06-096 C.M.R. ch. 115, BPT]

(21) **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. 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 28th DAY OF MARCH, 2022.

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: 2/23/22

Date of application acceptance: 3/1/22

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

