



DEPARTMENT ORDER

**Eastern Maine Community College
Penobscot County
Bangor, Maine
A-396-71-J-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

Eastern Maine Community College (EMCC) has applied to renew the Air Emission License for the operation of emission sources associated with its educational facility.

EMCC has also requested an amendment to its license to do the following:

- Update the sizes of the existing licensed emission units;
- License the replacement of Boiler 7 with a new Boiler 7;
- Remove Boiler 8
- Classify Generator 1 as a portable engine; and
- License the installation of an emergency engine

The equipment addressed in this license is located at 354 Hogan Road, Bangor, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manufacture	Date of Installation	Stack #
Boiler 1 Maine Hall	1.50	1,460 scf/hr	Natural gas, negligible	2010	2010	1A
Boiler 2 Maine Hall	1.50	1,460 scf/hr	Natural gas, negligible	2010	2010	1B
Boiler 3 Maine Hall	1.50	1,460 scf/hr	Natural gas, negligible	2010	2010	1C

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manufacture	Date of Installation	Stack #
Boiler 4 Acadia Hall	2.20	2,140 scf/hr	Natural gas, negligible	2011	2011	4
Boiler 6 Penobscot Hall	3.10	3,010 scf/hr	Natural gas, negligible	1978	1978	6
Boiler 7 Johnston Gym	1.80	1,750 scf/hr	Natural gas, negligible	2016	2016	7
Boiler 9A Kineo Hall	1.88	1,825 scf/hr	Natural gas, negligible	2006	2006	9
Boiler 9B Kineo Hall	1.88	1,825 scf/hr	Natural gas, negligible	2006	2006	9
Boiler B1 Katahdin Hall	2.20	2,140 scf/hr	Natural gas, negligible	1999	1999	3
Boiler B2 Katahdin Hall	2.20	2,140 scf/hr	Natural gas, negligible	1999	1999	3

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (scf/hr)	Date of Manuf.	Date of Install.
Backup Generator Maine Hall	2.10	150	Natural gas, negligible	2,043	2017	2017

Additionally, EMCC has a portable engine used for maintenance or emergency-only purposes, Generator #1 (1.06 MMBtu/hr input capacity). The unit has been included in previous licensing as a stationary engine; however, it qualifies as a portable engine. Generator #1, as a portable engine, is therefore considered an insignificant activity and is not required to be included in this license, but it may still be subject to applicable State and Federal regulations.

EMCC also operates several fuel burning units rated below minimum licensing thresholds (0.5 MMBtu/hr for engines, 1.0 MMBtu/hr for boilers). These units are considered insignificant activities and are not required to be included in this license, but they may still be subject to applicable State and Federal regulations.

C. Definitions

Portable Engine. For the purposes of this license, *portable engine* means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly,

trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

D. Application Classification

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

The renewal application for EMCC includes the licensing of the installation of new equipment. Therefore, the license is considered to be a renewal of currently licensed emission units and a modification.

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:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Significant Emission Levels</u>
PM	6.4	1.2	- 5.2	100
PM ₁₀	6.4	1.2	- 5.2	100
SO ₂	7.8	0.1	- 7.7	100
NO _x	15.0	8.9	- 6.1	100
CO	8.2	7.1	- 1.1	100
VOC	0.61	0.5	- 0.11	50

This modification is determined to be a minor modification and has been processed as such. The renewal and minor modification has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

With potential emissions that do not exceed significant emission levels, the facility is licensed below the major source thresholds for criteria air pollutants (CAP) and hazardous air pollutants (HAP). The facility is therefore considered a natural minor source of CAP and an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 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. Existing Boilers

EMCC operates nine previously licensed boilers that are rated above the minimum licensing threshold. The boilers are used for facility heat and range in input capacities from 1.5 MMBtu/hr to 3.10 MMBtu/hr. All nine of the boilers fire natural gas. Boilers 9A and 9B share a stack and Boilers B1 and B2 share a stack, while the rest exhaust through their own stacks. Installation dates for the boilers are between 1978 and 2010, and are listed, along with other information for each unit, in the Emission Equipment section of the Findings of Fact.

1. BPT Findings

The BPT emission limits for the existing boiler were based on the following:

Natural Gas:

PM/PM ₁₀	0.05 lb/MMBtu 06-096 C.M.R. ch. 115, BPT <u>For Boiler 6</u>
	7.6 lb/MMscf AP-42 Table 1.4-2, dated 7/98 <u>For all other natural gas fired boilers</u>
SO ₂	0.6 lb/MMscf AP-42 Table 1.4-2, dated 7/98

NO _x	100 lb/MMscf AP-42 Table 1.4-1, dated 7/98
CO	84 lb/MMscf AP-42 Table 1.4-1, dated 7/98
VOC	5.5 lb/MMscf AP-42 Table 1.4-2, dated 7/98
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the existing boilers are the following:

Unit	Pollutant	lb/MMBtu
Boiler 6	PM	0.05

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 1 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 2 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 3 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 4 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01
Boiler 6 Natural gas	0.16	0.16	Negligible	0.30	0.25	0.02
Boiler 9A Natural gas	0.01	0.01	Negligible	0.18	0.15	0.01
Boiler 9B Natural gas	0.01	0.01	Negligible	0.18	0.15	0.01
Boiler B1 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01
Boiler B2 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01

Visible Emissions

Visible emissions from each of that natural gas fired boilers and shared stacks shall not exceed 10% opacity on a six-minute block average basis.

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

Due to the sizes of the boilers, none are 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]

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

None of the boilers are subject to *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 all considered gas-fired boilers and are therefore exempt via § 63.11195(3).

C. New Boiler (Boiler #7)

EMCC replaced Boiler 7 from previous licensing with a new boiler which will also be called Boiler 7. Boiler 7 is used for building heat and is rated at 1.80 MMBtu/hr. Boiler 7 fires natural gas, exhausts through its own stack, and was installed in 2016.

1. BACT Findings

The BACT emission limits for Boiler 7 is based on the following:

Natural Gas:

PM/PM ₁₀	0.05 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
SO ₂	0.6 lb/MMscf AP-42 Table 1.4-2, dated 7/98
NO _x	100 lb/MMscf AP-42 Table 1.4-1, dated 7/98
CO	84 lb/MMscf AP-42 Table 1.4-1, dated 7/98
VOC	5.5 lb/MMscf AP-42 Table 1.4-2, dated 7/98
Visible Emissions	06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boiler #7 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)
Boiler 7 Natural Gas	0.01	0.01	Negligible	0.18	0.15	0.01

Visible emissions from Boiler 7 shall not exceed 10% opacity on a six-minute block average basis.

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

Due to the size of the boiler, it is 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]

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

Boiler 7 is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. Boiler 7 is considered a gas-fired boiler and is therefore exempt via § 63.11195(3).

D. Backup Generator

EMCC operates one stationary emergency generator rated above minimum licensing thresholds. The emergency generator, Backup Generator, is a generator set consisting of an engine and an electrical generator. Backup Generator has a lean-burning 4-stroke engine rated at 2.10 MMBtu/hr which fires natural gas, and it was manufactured in 2017.

1. BACT Findings

The BACT emission limits for the generator are based on the following:

Natural Gas

PM/PM ₁₀	0.05 lb/MMBtu 06-096 C.M.R. ch. 115, BACT
SO ₂	0.000588 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
NO _x	4.08 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00

CO	0.32 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
VOC	0.12 lb/MMBtu from AP-42 Table 3.2-2, dated 07/00
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BACT emission limits for the generator 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)
Backup Generator 2.10 MMBtu/hr Natural Gas	0.11	0.11	Negligible	8.57	0.67	0.25

Visible emissions from the natural gas generator shall not exceed 10% opacity on a six-minute block average basis.

2. 40 C.F.R. Part 60, Subpart JJJJ

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is applicable to the emergency engine listed above since the units was ordered after June 12, 2006, and 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. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart JJJJ, 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 JJJJ, 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 or equipment failure;
- 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.

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

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. § 60.4233]

(2) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237]

(3) Operation and Maintenance Requirement

The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by EMCC that are approved by the engine manufacturer. EMCC may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

(4) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance and testing. The emergency engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]

(5) Recordkeeping

EMCC 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 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. § 60.4245(b)]

E. Parts Washers

EMCC makes use of a 50-gallon capacity parts washer, designated Parts Cleaner 1, and two 20-gallon parts degreaser units, designated Parts Cleaners 2 and 3. The parts cleaning machines are located in the facility's automotive shop in the Penobscot Hall building.

Parts Cleaner 1 utilizes Simple Green® solvent. Simple Green® is a water-based degreaser with less than 5% maximum VOC content. A cold cleaning machine using a solvent with less than or equal to 5% VOCs by weight is exempt from requirements given in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, EMCC shall keep a copy of the

Simple Green® Safety Data Sheet (SDS) that demonstrates the VOC content of the solvent used in Parts Cleaner 1.

Parts Cleaners 2 and 3 utilize L-78E solvent which contains less than or equal to 5% maximum VOC content. For these machines, EMCC shall keep a copy of the SDS sheet that demonstrates the VOC content of the solvents used in Parts Cleaners 2 and 3.

F. Annual Emissions

1. Total Annual Emissions

EMCC shall be restricted to the following annual emissions on a calendar year total basis. The tons per year restrictions were calculated based on lb/hr emission limits for each of the units with the boilers operating 8,760 hours, each, and Backup Generator operating for 100 non-emergency hours:

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
Boiler 1	0.05	0.05	--	0.64	0.54	0.04
Boiler 2	0.05	0.05	--	0.64	0.54	0.04
Boiler 3	0.05	0.05	--	0.64	0.54	0.04
Boiler 4	0.07	0.07	0.01	0.91	0.79	0.05
Boiler 6	0.68	0.68	0.01	1.32	1.11	0.07
Boiler 7	0.06	0.06	--	0.77	0.64	0.04
Boiler 9A	0.06	0.06	--	0.80	0.67	0.04
Boiler 9B	0.06	0.06	--	0.80	0.67	0.04
Boiler B1	0.07	0.07	0.01	0.94	0.79	0.05
Boiler B2	0.07	0.07	0.07	0.94	0.79	0.05
Backup Generator	--	--	--	0.43	0.03	.01
Total TPY	1.2	1.2	0.1	8.9	7.1	0.5

2. Greenhouse Gases

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

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

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

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

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 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-396-71-J-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 such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 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 Part 70 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]

SPECIFIC CONDITIONS

(16) **Existing Boilers**

A. The following boilers shall only fire natural gas [06-096 C.M.R. ch. 115, BPT]:

Unit	Location
Boiler 1	Maine Hall
Boiler 2	Maine Hall
Boiler 3	Maine Hall
Boiler 4	Acadia Hall
Boiler 6	Penobscot Hall
Boiler 9A	Kineo Hall
Boiler 9B	Kineo Hall
Boiler B1	Katahdin Hall
Boiler B2	Katahdin Hall

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler 6	PM	0.05	06-096 C.M.R. ch. 115, BPT

C. 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)
Boiler 1 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 2 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 3 Natural gas	0.01	0.01	Negligible	0.15	0.12	0.01
Boiler 4 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01
Boiler 6 Natural gas	0.16	0.16	Negligible	0.30	0.25	0.02
Boiler 9A Natural gas	0.01	0.01	Negligible	0.18	0.15	0.01
Boiler 9B Natural gas	0.01	0.01	Negligible	0.18	0.15	0.01
Boiler B1 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01
Boiler B2 Natural gas	0.02	0.02	Negligible	0.21	0.18	0.01

D. Visible emissions from each of that natural gas fired boilers and shared stacks shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(17) **New Boiler (Boiler 7)**

E. Boiler 7 shall only fire natural gas. [06-096 C.M.R. ch. 115, BACT]

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 7 Natural Gas	0.01	0.01	Negligible	0.18	0.15	0.01

G. Visible emissions from the Boiler #7 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

(18) **Backup Generator**

A. Backup 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, BACT]

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Backup Generator 2.10 MMBtu/hr Natural Gas	0.11	0.11	8.57	0.67	0.25

C. Visible emissions from Backup Generator shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

D. Backup Generator 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, BACT]

1. **Manufacturer Certification**

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1.

2. **Non-Resettable Hour Meter**

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4237 and 06-096 C.M.R. ch. 115, BPT]

3. **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). The 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. § 60.4243(d) and 06-096 C.M.R. ch. 115]

b. EMCC 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 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. § 60.4245(b)]

4. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by EMCC that are approved by the engine manufacturer. EMCC may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

(19) **Parts Washer**

Parts washers at EMCC are exempt from requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and thus, EMCC shall keep a copy of the SDS sheets that demonstrate the VOC contents of the solvents used in Parts Cleaners 1, 2 and 3 are less than 5% by weight.

(20) EMCC 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).

DONE AND DATED IN AUGUSTA, MAINE THIS 23 DAY OF February, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Paul Mercer
PAUL MERCER, 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: 02/23/2016

Date of application acceptance: 02/24/2016

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

