



DEPARTMENT ORDER

**State of Maine – Augusta Complex  
 East Campus  
 Kennebec County  
 Augusta, Maine  
 A-23-71-P-R/M (SM)**

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

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

**I. REGISTRATION**

A. Introduction

State of Maine – Augusta Complex East Campus (ACEC) has applied to renew their Air Emission License permitting the operation of emission sources associated with their state office complex.

ACEC has also requested a minor revision to their license in order to remove Boiler #4 from their license.

The equipment addressed in this license is located at 4 Blossom Lane, Augusta, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Boiler #1	27.4	195.5 gal/hr	Distillate fuel, 0.5%	1973	2
		26,863 scf/hr	Natural gas, negl.		
Boiler #2	27.4	195.5 gal/hr	Distillate fuel, 0.5%	1975	2
		26,863 scf/hr	Natural Gas, negl.		

Boiler #4 was disconnected from its fuel sources on October 5, 2016, and is hereby removed from this air emission license.

Generator

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Gross Engine Power Output (kW)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>
Generator #2	4.82	563	34.4	Distillate fuel, 0.0015%	3/7/2008

C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

D. Application Classification

The application for ACEC 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 with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115 (as amended). With the annual heat input limit on Boilers #1-2 and the operating hour restriction on Generator #2, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual heat input limit on Boilers #1-2 and the operating hour restriction on Generator #2, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

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

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

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

B. Boilers #1-2

ACEC operates Boilers #1-2 for steam and heat. Boilers #1-2 are both Cleaver Brooks boilers rated at 27.4 MMBtu/hr and are capable of firing distillate fuel and natural gas at rates of 195.5 gal/hr and 26,863 scf/hr, respectively. Boiler #1 was installed in 1973 and Boiler #2 was installed in 1975. Both boilers exhaust through a common stack, Stack 2.

1. BPT Findings

The BPT emission limits for Boilers #1-2 when firing distillate fuel were based on the following:

- PM/PM<sub>10</sub> – 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
- SO<sub>2</sub> – 0.5 lb/MMBtu based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO<sub>x</sub> – 0.5 lb/MMBtu based on A-23-71-M-R dated 1/22/10, BPT
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.2 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Boilers #1-2 when firing natural gas were based on the following:

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

The BPT emission limits for Boilers #1-2 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boilers #1-2 [each] Distillate fuel	PM	0.12	06-096 C.M.R. ch. 103
Boilers #1-2 [each] Natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boilers #1-2 [each] Distillate fuel	3.29	3.29	13.80	13.70	0.98	0.04
Boilers #1-2 [each] Natural gas	1.37	1.37	0.02	2.69	2.26	0.15

Visible emissions from the combined stack that Boilers #1-2 share shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

ACEC shall be limited to a heat input of 84,000 MMBtu/year for Boilers #1 and #2 combined.

#### Fuel Sulfur Content Requirements

Boilers #1-2 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 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, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boilers #1-2 shall not exceed 0.0015% by weight (15 ppm).

#### 2. Periodic Monitoring

Periodic monitoring for Boilers #1-2 shall include recordkeeping to document fuel use both on a monthly and calendar year basis. Documentation shall include the amount, type, and sulfur content of the fuel, if applicable. Fuel use shall be converted to heat input on a monthly and calendar year total basis using heating values of 0.14 MMBtu/gal for distillate fuel and 0.00102 MMBtu/scf for natural gas.

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

Due to the year of manufacture, Boilers #1-2 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.

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

Boilers #1-2 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 JJJJJ). The units are considered existing gas-fired boilers rated greater than 10 MMBtu/hr.

Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJ. However, boilers which fire fuel oil are not. A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on

liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 C.F.R. § 63.11237]

ACEC shall maintain records of the yearly operating hours each boiler fires distillate fuel. If either of the boilers exceed 48 hours firing distillate fuel for periodic testing during a calendar year, that boiler will become subject to all applicable requirements for 40 C.F.R. Part 63, Subpart JJJJJ for existing oil-fired boilers, and ACEC will be required to notify EPA and the Department of the change within 180 days of the effective date of the fuel switch. [40 C.F.R. § 63.11210(h) and 06-096 C.M.R. ch. 115, BPT]

C. Generator #2

ACEC operates Generator #2 as an emergency generator. Generator #2 is a generator set consisting of an engine and an electrical generator. Generator #2 is rated at 563 kW and is a Cummins Model 500 DFEK emergency generator. Generator #2 is located between the Tyson Building and the Stone Building on the ACEC campus. Generator #2 has an engine rated at 4.82 MMBtu/hr which fires distillate fuel. Generator #2 was manufactured in 2008.

1. BPT Findings

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

- PM/PM<sub>10</sub> - 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
- SO<sub>2</sub> - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO<sub>x</sub> - 3.2 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
- CO - 0.85 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
- VOC - 0.09 lb/MMBtu based on AP-42, Table 3.4-1, dated 10/96
- Opacity - 06-096 C.M.R. ch. 101

The BPT emission limits for Generator #2 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Generator #2	PM	0.12	06-096 C.M.R. ch. 103

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Generator #2	0.58	0.58	0.01	15.42	4.10	0.43

Visible emissions from Generator #2 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

2. NSPS: 40 C.F.R. Part 60, Subpart IIII

The federal regulation 40 C.F.R. Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)* is applicable to the emergency engine listed above since the unit was ordered after July 11, 2005 and manufactured after April 1, 2006. By meeting the requirements of Subpart IIII, 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.

a. Emergency Engine Designation and Operating Criteria

Under 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 Subpart IIII, 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, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, unless:

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
3. The dispatch follows reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation (NERC), regional, state, public utility commission, or local standards or guidelines.
4. The power is provided only to the facility itself or to support the local transmission and distribution system.
5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

b. 40 C.F.R. Part 60, Subpart III 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), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [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 or procedures developed by ACEC that are approved by the engine manufacturer. ACEC 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 an emergency engine, Generator #2 shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in 40 C.F.R. § 60.4211(f)(3)(i) are met). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement

No initial notification is required for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

ACEC 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 hours spent for emergency operation, including what classified the operation as emergency and the hours spent for non-emergency. If the engine is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power



during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 60.4211(f)(3)(i), ACEC shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 C.F.R. § 60.4214(b)]

- (8) Annual Reporting Requirements for Demand Response Availability Over 15 Hours Per Year (for engines greater than 100 brake hp)  
If Generator #2 at ACEC operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 60.4211(f)(3)(i), the facility shall submit an annual report containing the information in 40 C.F.R. § 60.4214(d)(1)(i) through (vii). The annual report for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

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

[40 C.F.R. § 60.4214(d)]

D. Parts Washer

ACEC has one parts washer with a design capacity of eight gallons. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 (as amended) and records shall be kept documenting compliance.

E. Fugitive Emissions

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

F. General Process Emissions

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

G. Annual Emissions

1. Total Annual Emissions

ACEC shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on an annual heat input limit of 84,000 MMBtu for Boilers #1, #2, and #4 combined and a non-emergency operating hour limit of 100 hours/year for Generator #2:

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

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boilers #1 and #2	5.0	5.0	21.2	21.0	3.5	0.2
Generator #2	0.1	0.1	0.1	0.8	0.2	0.1
<b>Total TPY</b>	<b>5.1</b>	<b>5.1</b>	<b>21.3</b>	<b>21.8</b>	<b>3.7</b>	<b>0.3</b>

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through ‘Tailoring’ revisions made to EPA’s *Approval and Promulgation of Implementation Plans*, 40 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 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

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

- the facility’s heat input limit and operating hour restriction;
- worst case emission factors from the following sources: U.S. EPA’s AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 C.F.R. Part 98, *Mandatory Greenhouse Gas Reporting*; 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 shall be 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:

<u>Pollutant</u>	<u>Tons/Year</u>
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	50
CO	250

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

### ORDER

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

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

The Department hereby grants Air Emission License A-23-71-P-R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

### STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the

purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 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) **Boilers #1 and #2 Fuel Limit**

Boilers #1 and #2 shall be limited to a combined total heat input of 84,000 MMBtu/year on a calendar year basis. Records of the type of fuel used and the amounts fired shall be maintained on a monthly and calendar year total basis. Compliance with the 84,000 MMBtu/year limit shall be calculated from monthly and calendar year fuel use records using heating values of 0.14 MMBtu/gal for distillate fuel and 0.00102 MMBtu/scf for natural gas. [06-096 C.M.R. ch. 115, BPT]

(17) **Boilers #1-2**

A. Fuel

1. Boilers #1-2 are each licensed to fire distillate fuel and natural gas. [06-096 C.M.R. ch. 115, BPT]
2. Prior to July 1, 2018, ACEC shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in Boilers #1-2. [06-096 C.M.R. ch. 115, BPT]
3. Beginning July 1, 2018, ACEC shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boilers #1-2. [06-096 C.M.R. ch. 115, BPT]
4. Compliance shall be demonstrated by fuel records from the supplier showing the type and the percent sulfur of the fuel delivered (if applicable). [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boilers #1-2 [each] Distillate fuel	PM	0.12	06-096 C.M.R. ch. 103
Boilers #1-2 [each] Natural gas	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]:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boilers #1-2 [each] Distillate fuel	3.29	3.29	13.80	13.70	0.98	0.04
Boilers #1-2 [each] Natural gas	1.37	1.37	0.02	2.69	2.26	0.15

D. Visible emissions from the combined stack that Boilers #1 and #2 share shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 C.M.R. ch. 115, BPT]

E. ACEC shall maintain records of the yearly operating hours each boiler fires distillate fuel. If either of the boilers exceed 48 hours firing distillate fuel for periodic testing during a calendar year, that boiler will become subject to all applicable requirements for 40 C.F.R. Part 63, Subpart JJJJJ for existing oil-fired boilers, and ACEC will be required to notify EPA and the Department of the change within 180 days of the effective date of the fuel switch. [40 C.F.R. § 63.11210(h) and 06-096 C.M.R. ch. 115, BPT]

(18) **Generator #2**

A. Generator #2 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. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Generator #2	PM	0.12	06-096 C.M.R. ch. 103

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

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM<sub>10</sub></u> <u>(lb/hr)</u>	<u>SO<sub>2</sub></u> <u>(lb/hr)</u>	<u>NO<sub>x</sub></u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Generator #2	0.58	0.58	0.01	15.42	4.10	0.43

D. Visible emissions from Generator #2 shall each not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 C.M.R. ch. 101]

E. Generator #2 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:

1. Manufacturer Certification

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

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 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, Generator #2 shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in 40 C.F.R. § 60.4211(f)(3)(i) are met). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]



b. ACEC 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 hours spent for emergency operation, including what classified the operation as emergency and the hours spent for non-emergency. If the engine is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 60.4211(f)(3)(i), ACEC shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 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 or procedures developed by ACEC that are approved by the engine manufacturer. ACEC may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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

If Generator #2 at ACEC operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 60.4211(f)(3)(i), the facility shall submit an annual report containing the information in 40 C.F.R. § 60.4214(d)(1)(i) through (vii). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

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

[40 C.F.R. § 60.4214(d)]

(19) **Parts Washer**

Parts washers at ACEC are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 (as amended).

A. ACEC shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:

1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
2. Wipe cleaning; and,
3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.

1. ACEC shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
  - a. Waste solvent shall be collected and stored in closed containers.
  - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
  - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
  - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
  - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
  - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
  - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
  - h. Work area fans shall not blow across the opening of the parts washer unit.
  - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 C.M.R. ch. 130]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour

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period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 101]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 C.M.R. ch. 101]

- (22) ACEC 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 31 DAY OF October, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mark Allen Robert Cone for  
PAUL MERCER, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/21/2015

Date of application acceptance: 1/21/2015

Date filed with the Board of Environmental Protection:

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

