



DEPARTMENT ORDER

**Southern Maine Community College  
Cumberland County  
South Portland, Maine  
A-669-71-H-R/A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal and  
After-the-Fact 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**

Southern Maine Community College (SMCC) has applied to renew their Air Emission License for the operation of emission sources associated with their education facility. SMCC has also requested an after-the-fact amendment to their license in order to add two boilers, one of which already replaced an existing boiler, and another to replace an existing boiler this year, and to remove two existing boilers from the license, which were replaced by heating units of a size below the licensing threshold level.

The equipment addressed in this license is located at 2 Fort Road, South Portland, Maine.

**B. Emission Equipment**

The following equipment is addressed in this air emission license renewal and amendment:

**Boilers**

<b>Equipment</b>	<b>Building</b>	<b>Max. Capacity (MMBtu/hr)</b>	<b>Maximum Firing Rate</b>	<b>Fuel Type</b>	<b>Date of Manuf.</b>	<b>Date of Install.</b>	<b>Stack No.</b>
Boiler #1	Preble	4.4	4,252 scf/hr	Natural gas	1982	1982	1
Boiler #2	Preble	4.0	3,913 scf/hr	Natural gas	1964	1964	2
Boiler #3*	Jewett	2.0	1,932 scf/hr	Natural gas	2014	2014	3
Boiler #4	HUB	2.7	2,592 scf/hr	Natural gas	2010	2010	4
Boiler #5	HUB	2.7	2,592 scf/hr	Natural gas	2010	2010	5
Boiler #8	CEC	1.6	11.4 gal/hr	Distillate fuel	1985	1985	8
Boiler #10*	HAC	1.0	1,000 scf/hr	Natural gas	2023	2023	10
Boiler #11	Culinary Arts	1.5	1,476 scf/hr	Natural gas	1974	1974	11
Boiler #12	Spring Point Hall	2.5	2,466 scf/hr	Natural gas	2007	2007	12
Boiler #13	Spring Point Hall	2.5	2,466 scf/hr	Natural gas	2007	2007	13

\* New to license

Changes To the List of Boilers Since the Last License Renewal

- The former Boiler #3, which was manufactured and installed in 1981, was replaced by the new Boiler #3 in 2014.
- Boiler #6, which was manufactured and installed around 1981, was replaced in 2016 with two Advanced Thermal Hydronic units that have a maximum heat input capacity of 0.39 MMBtu/hr each. Therefore, Boiler #6 has been removed from the license.
- Boiler #7, which was manufactured and installed in 1990, was replaced in 2014 with a BCF Hydrotherm unit that has a maximum heat input capacity of 0.60 MMBtu/hr. Therefore, Boiler #7 has been removed from the license.
- The replacements for Boilers #6 and #7 are considered insignificant emissions units because they are each rated below 1.0 MMBtu/hr, the heat input capacity level at or above which would require their inclusion in the license; therefore, these heating units are not addressed further in this license.
- The former Boiler #10, which was manufactured in 1969 and installed in 1973, is proposed to be replaced in the fall of 2023 with the new Boiler #10.

SMCC may operate small stationary engines smaller than 0.5 MMBtu/hr. These 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, SMCC 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.

SMCC operates four aqueous-based parts washers: Parts Washer AUP, ADwn1, HAC, and ADwn2. Because the cleaning solutions used contain less than 5% VOC, these units do not meet the definition of solvent cleaning machine, and there are no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, these parts washers are considered insignificant activities and mentioned for completeness purposes only.

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.

Portable or Non-Road 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.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

#### 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:

<b>Pollutant</b>	<b>Current License (tpy)</b>	<b>Future License (tpy)</b>	<b>Net Change (tpy)</b>	<b>Significant Emission Levels</b>
PM	1.6	5.7	4.1	100
PM <sub>10</sub>	1.6	5.7	4.1	100
PM <sub>2.5</sub>	--	5.7	5.7	100
SO <sub>2</sub>	1.8	0.1	-1.7	100
NO <sub>x</sub>	3	10.9	7.9	100
CO	2.2	8.5	6.3	100
VOC	0.1	0.5	0.4	50*

\* SMCC is located in an area of the state included in the Ozone Transport Region. Therefore, the significant emission level for VOC is 50 tpy.

This modification is determined to be a minor modification and has been processed as such. The application for SMCC includes both the license renewal and the installation of new equipment. Therefore, the license is considered to be a renewal of currently licensed emission units and an after-the-fact minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

E. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because no license restrictions are necessary to 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

SMCC operates ten boilers for heat. Boiler #8 fires distillate fuel, and each of the other boilers fires natural gas. Each boiler exhausts through its own stack.

Boiler #1 is rated at 4.4 MMBtu/hr and was manufactured and installed in 1982. Boiler #2 is rated at 4.0 MMBtu/hr and was manufactured and installed in 1964. Boiler #3, which is

new to the license, is rated at 2.0 MMBtu/hr and was manufactured and installed in 2014. Boilers #4 and #5 are each rated at 2.7 MMBtu/hr and were both manufactured and installed in 2010. Boiler #8 is rated at 1.6 MMBtu/hr and was manufactured and installed in 1985. Boiler #10 is rated at 1.0 MMBtu/hr and was manufactured in 2023. Boiler #11 is rated at 1.5 MMBtu/hr and was manufactured and installed in 1974. Boilers #12 and #13 are each rated at 2.5 MMBtu/hr and were both manufactured and installed in 2007.

Boiler #8 is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. 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 distillate fuel purchased or otherwise obtained for use in Boiler #8 shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings for Boilers #1, #2, #4, #5, #8, #11, #12, and #13

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

Boilers #1, #2, #4, #5, #11, #12, and #13 firing Natural Gas

PM/PM <sub>10</sub> /PM <sub>2.5</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
Visible Emissions	–	06-096 C.M.R. ch. 101

Boiler #8 firing Distillate Fuel

PM/PM <sub>10</sub> /PM <sub>2.5</sub>	–	0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO <sub>x</sub>	–	20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	–	5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	–	0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

The BPT emission limits for the boilers are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.05
Boiler #2	PM	0.05

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 - <i>Natural gas</i>	0.22	0.22	0.22	0.003	0.43	0.36	0.02
Boiler #2 - <i>Natural gas</i>	0.20	0.20	0.20	0.002	0.39	0.33	0.02
Boiler #4 - <i>Natural gas</i>	0.13	0.13	0.13	0.002	0.26	0.22	0.01
Boiler #5 - <i>Natural gas</i>	0.13	0.13	0.13	0.002	0.26	0.22	0.01
Boiler #8 - <i>Distillate fuel</i>	0.13	0.13	0.13	0.002	0.23	0.06	0.004
Boiler #11 - <i>Natural gas</i>	0.08	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #12 - <i>Natural gas</i>	0.13	0.13	0.13	0.001	0.25	0.21	0.01
Boiler #13 - <i>Natural gas</i>	0.13	0.13	0.13	0.001	0.25	0.21	0.01

2. BACT Findings for Boilers #3 and #10

a. BACT Summary for Control of Emissions for Boiler #3

Boiler #3, a BCF Hydrotherm unit, was manufactured and installed in 2014. It burns only natural gas, a low-ash content fuel. The use of this fuel results in minimal emissions of sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>).

Two possible control strategies for nitrogen oxides (NO<sub>x</sub>) emissions from this boiler are low NO<sub>x</sub> burners and oxygen trim systems. Low NO<sub>x</sub> burners control the fuel and air mixing in a boiler to produce much larger and branched flames to reduce the peak flame temperature and ultimately reduce NO<sub>x</sub> formation. An oxygen trim system is a system of monitors that is used to measure and maintain an optimum air-to-fuel ratio in the boiler combustion zone, which reduces fuel usage to increase boiler efficiency.

No add-on emission controls were identified as BACT for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, carbon monoxide (CO), and volatile organic compounds (VOC). Worst case emissions from operating Boiler #3 for 8,760 hours per year would create minimal emissions totals: less than half a ton for PM, PM<sub>10</sub>, and PM<sub>2.5</sub>; less than a ton each for NO<sub>x</sub> and CO; and negligible emissions of SO<sub>2</sub> and VOC.

BACT for SO<sub>2</sub>, PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from Boiler #3 is the use of natural gas. BACT for NO<sub>x</sub>, CO, and VOC emissions is the use of good combustion and maintenance practices. BACT for all emissions is the emissions limits listed in the table below.

b. BACT Summary for Control of Emissions for Boiler #10

Boiler #10 will be a BKBD high efficiency, fully condensing, fully modulating boiler rated at 1.0 MMBtu/hr with a thermal efficiency of 97%. Boiler #10 will fire

only natural gas. As mentioned in the previous section, the use of this fuel in a boiler this size results in minimal emissions of SO<sub>2</sub>, PM, PM<sub>10</sub>, and PM<sub>2.5</sub>.

To reduce all air emissions, Boiler #10 will have an increased fuel efficiency from its use of high turndown burners, which will be capable of a 4:1 turndown that can go as low as 0.25 MMBtu/hr. The high turndown burners will be able to adjust the heating demands, which will allow the boiler system to better match the heating requirements of the system, reducing fuel usage and improving efficiency and equipment durability. Boiler #10's heat exchanger has been designed to use a parallel flow, four pass, tube profile design. This design allows for maximum heat transfer through the heat exchanger while maintaining low NO<sub>x</sub> emissions throughout the firing range.

Some condensing boilers use a mesh burner head for ideal mixing at all firing rates. In these designs, the fuel and combustion air are pre-mixed and distributed evenly through a mesh material on the surface of the burner. Condensing boilers that utilize a mesh head design require that the mesh head be kept clean and the mixing of the natural gas and air be consistent, or the mesh can get damaged, increasing maintenance time and costs and reducing boiler efficiency. Boiler #10's design eliminates the need to use a mesh head and ensures that the O<sub>2</sub> in the combustion process remains uniformly low at 3% O<sub>2</sub> (15% excess air) across the entire 4:1 firing range. The average fuel savings and corresponding reduction in emissions with the use of this design over a standard boiler is 10-15%. Boiler #10 will have Limpsfield low O<sub>2</sub> burners and an Autoflame Mini Mk 8 linkageless Combustion Management system (ACMS) to ensure proper air-to-fuel ratio for optimum combustion.

c. Emission Limits

The BACT emission limits for Boilers #3 and #10 were based on the following:

Natural Gas

PM/PM <sub>10</sub> /PM <sub>2.5</sub>	– 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
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
Visible Emissions	– 06-096 C.M.R. ch. 101

The BACT emission limits for Boiler #3 and #10 are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3 – <i>Natural gas</i>	0.10	0.10	0.10	0.001	0.19	0.16	0.01
Boiler #10 – <i>Natural gas</i>	0.05	0.05	0.05	0.001	0.10	0.08	0.01

3. Visible Emissions

Visible emissions from Boilers #1, #2, #3, #4, #5, #10, #11, #12, and #13 shall not exceed 10% opacity on a six-minute block average basis.

Visible emissions from Boiler #8 shall not exceed 20% opacity on a six-minute block average basis.

4. Periodic Monitoring

Documentation shall include the type of fuel used and sulfur content of the fuel for distillate fuel.

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

Due to their sizes, 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]

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

The natural gas-fired boilers 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. These units are considered gas-fired boilers and are covered under the gas-fired boiler exemption. [40 C.F.R. §§ 63.11195 and 63.11237]

Boiler #8 is 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 unit is considered a hot water heater less than 1.6 MMBtu/hr and is covered under the hot water heater exemption. [40 C.F.R. §§ 63.11195 and 63.11237]



C. General Process Emissions

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

D. Annual Emissions

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

- Operating natural gas-fired boilers for 8,760 hr/yr;
- Operating Boiler #8 for 8,760 hr/yr.

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

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

	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Natural Gas-fired Boilers	5.1	5.1	5.1	0.1	9.9	8.3	0.5
Boiler #8	0.6	0.6	0.6	--	1.0	0.2	--
<b>Total TPY</b>	<b>5.7</b>	<b>5.7</b>	<b>5.7</b>	<b>0.1</b>	<b>10.9</b>	<b>8.5</b>	<b>0.5</b>

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 <sub>10</sub>	25
PM <sub>2.5</sub>	15
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 renewal and amendment.

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

### ORDER

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

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

The Department hereby grants Air Emission License Renewal and Amendment A-669-71-H-R/A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Renewal and Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Renewal and Amendment 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**

#### **A. Fuel**

1. 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]
2. Fuel sulfur content compliance for distillate fuel used in Boiler #8 shall be demonstrated by fuel delivery receipts from the supplier, certificate of analysis, or testing of the fuel in the tank. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #2	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/BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 - <i>Natural gas</i>	0.22	0.22	0.22	0.003	0.43	0.36	0.02
Boiler #2 - <i>Natural gas</i>	0.20	0.20	0.20	0.002	0.39	0.33	0.02
Boiler #3 - <i>Natural gas</i>	0.10	0.10	0.10	0.001	0.19	0.16	0.01
Boiler #4 - <i>Natural gas</i>	0.13	0.13	0.13	0.002	0.26	0.22	0.01
Boiler #5 - <i>Natural gas</i>	0.13	0.13	0.13	0.002	0.26	0.22	0.01
Boiler #8 - <i>Distillate fuel</i>	0.13	0.13	0.13	0.002	0.23	0.06	0.004
Boiler #10 - <i>Natural gas</i>	0.05	0.05	0.05	0.001	0.10	0.08	0.01
Boiler #11 - <i>Natural gas</i>	0.08	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #12 - <i>Natural gas</i>	0.13	0.13	0.13	0.001	0.25	0.21	0.01
Boiler #13 - <i>Natural gas</i>	0.13	0.13	0.13	0.001	0.25	0.21	0.01

D. Visible Emissions

Visible emissions from Boilers #1, #2, #3, #4, #5, #10, #11, #12, and #13 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]

Visible emissions from Boiler #8 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(2)]

(18) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

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

DONE AND DATED IN AUGUSTA, MAINE THIS 24<sup>th</sup> DAY OF AUGUST, 2023.

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: August 24, 2022

Date of application acceptance: September 20, 2022

Date filed with the Board of Environmental Protection:

This Order prepared by Kendra Nash, Bureau of Air Quality.

