



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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GOVERNOR

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Washington County Community
College
Washington County
Calais, Maine
A-806-71-F-N

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

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Washington County Community College has applied to renew their expired license permitting the operation of emission sources associated with their educational facility. In addition to the five previously licensed boilers, an existing 105 kW generator is being added to the license.

The licensed equipment is located at One College Drive, Calais, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)*</u>	<u>Max. Firing Rate (gal/hr)</u>	<u>Date of Manufact.</u>	<u>Fuel Type</u>	<u>Stack #</u>
Boiler #1 (consists of four 0.42 MMBtu/hr Weil-McLain Boilers in series)	1.68	12.0	2005	#2 fuel oil, ASTM D396	1
Boiler #2 (consists of four 0.42 MMBtu/hr Weil-McLain Boilers in series)	1.68	12.0	2004	#2 fuel oil, ASTM D396	2

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

Boiler #3 (consists of three 2.77 MMBtu/hr HB Smith Boilers in series)	8.32	59.4	2002	#2 fuel oil, ASTM D396	3
Boiler #4 (HB Smith Boiler)	2.79	19.9	1992	#2 fuel oil, ASTM D396	4
Boiler #5 (Peerless Boiler)	1.12	8.0	1992	#2 fuel oil, ASTM D396	5

* Note: The capacities of the boilers are based on the maximum burner ratings, rather than the boiler name plate capacities.

Generator

<u>Equipment</u>	<u>KW</u>	<u>Capacity⁺</u> (MMBtu/hr)	<u>Firing Rate⁺</u> (gal/hr)	<u>Fuel Type, % sulfur</u>	<u>Manufact. Date</u>	<u>Install. Date</u>
Generator #1	105	1.02	7.5	Diesel fuel oil	2008	2009

* Note: The maximum input capacity and firing rate of the generator is based on the kW output and an estimated efficiency of 35%.

The following is listed for informational purposes only:

Degreasers

<u>Equipment</u>	<u>Description</u>	<u>Date of Manufact.</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
EU #1	Filter and hydrocarbon degrader	1999	N/A	N/A
EU #2	Filter and hydrocarbon degrader	1999	N/A	N/A
EU #3	Filter and hydrocarbon degrader	1999	N/A	N/A

The units listed above are microbial bath VOC degraders that do not contain a VOC-based solvent. VOC are biologically digested. Washington County Community College operates these three cold cleaning microbial degreasers located in the automotive shop, the diesel shop, and the heavy equipment maintenance shop. The units do not use solvent and produce no VOC emissions;

therefore, they are not subject to 06-096 CMR 130 and do not have any licensing requirements at this time.

C. Application Classification

The previous air emission license for Washington County Community College expired on September 19, 2011. A complete application was not submitted on time, therefore Washington County Community College is considered to be an existing source applying for an after-the-fact renewal. The Department has determined the facility is a natural minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for an after-the-fact renewal requires an analysis similar to a Best Available Control Technology analysis per 06-096 CMR 115 (as amended).

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-#5

Washington County Community College operates Boilers #1-#5 to heat their facility. The boilers all fire #2 fuel oil meeting the ASTM D396 standard (maximum 0.5% sulfur) and exhaust through separate stacks. The capacities of all the boilers are based on the maximum burner ratings, since these were higher than the boiler nameplate capacity.

Boiler #1, located in the upper dorms, is comprised of four Weil-McLain boilers in series, for a total capacity of 1.68 MMBtu/yr. Each burner has a

manufacturer's rating of 3.0 gal/hr (12.0 gal/hr total). The boiler was manufactured and installed in 2005.

Boiler #2, located in the lower dorms, is comprised of four Weil-McLain boilers in series, for a total capacity of 1.68 MMBtu/yr. Each burner has a manufacturer's rating of 3.0 gal/hr (12.0 gal/hr total). The boiler was manufactured and installed in 2004.

Boiler #3 is comprised of three HB Smith boilers in series, for a total capacity of 8.32 MMBtu/yr. The boiler was manufactured and installed in 2002.

Boiler #4 is a HB Smith Boiler with a burner rated capacity of 2.79 MMBtu/yr. The boiler was manufactured and installed in 1992.

Boiler #5 is a Peerless Boiler with a burner rated capacity of 1.12 MMBtu/yr. The boiler was manufactured and installed in 1992.

The boilers are not subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, since they are all below 10 MMBtu/hr. 40 CFR Part 60, Subpart Dc is applicable to units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BACT/BPT Findings

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

- PM/PM₁₀ - 0.08 lb/MMBtu based on previous license
- SO₂ - based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur); 0.5 lb/MMBtu
- NO_x - 0.3 lb/MMBtu based on the previous license
- CO - 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10
- VOC - 0.34 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10
- Opacity - Visible emissions from each boiler firing fuel oil shall not exceed 20% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

The BACT/BPT emission limits for the boilers 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 #1 (1.68 MMBtu/hr) #2 fuel oil	0.13	0.13	0.84	0.50	0.06	0.004
Boiler #2 (1.68 MMBtu/hr) #2 fuel oil	0.13	0.13	0.84	0.50	0.06	0.004
Boiler #3 (8.32 MMBtu/hr) #2 fuel oil	0.67	0.67	4.16	2.50	0.30	0.02
Boiler #4 (2.79 MMBtu/hr) #2 fuel oil	0.22	0.22	1.40	0.84	0.10	0.01
Boiler #5 (1.12 MMBtu/hr) #2 fuel oil	0.09	0.09	0.56	0.34	0.04	0.003

Washington County Community College shall be limited to 280,000 gallons/yr of #2 fuel oil from Boilers #1-#5.

Prior to January 1, 2016, the fuel oil fired in Boilers #1-#5 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

2. 40 CFR Part 63 Subpart JJJJJ

Boilers #1-#5 may be subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). However, 40 CFR Part 63, Subpart JJJJJ is currently under reconsideration by the EPA and the applicability of the Subpart to this source may change, contingent upon the final specifications and requirements of the proposed amendments. The units are considered existing oil boilers.

For informational purposes, a summary of the current applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of

this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however Washington County Community College is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program – Initial and Subsequent

(a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012. [40 CFR Part 63.11196(a)(1)] However, a No Action Assurance letter was issued on March 13, 2012 stating that EPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete the required tune-up by the stated compliance date. The rule is expected to have a future compliance date in either 2013 or 2014 once the final revisions are promulgated.

(b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected within a certain timeframe. [40 CFR Part 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. [40 CFR Part 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)
- (c) A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a subsequent boiler tune-up program after the initial tune-up and initial compliance report has been submitted per the timeframe set forth in the rule.
 1. Each subsequent tune-up shall be conducted no more than the timeframe set forth in the rule after the previous tune-up. [40 CFR Part 63.11223(a)]
 2. The tune-up report shall be maintained onsite and submitted to EPA, if requested. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

C. Emergency Generator #1

Washington County Community College has a John Deere Powertech Model #4045HF285 emergency generator manufactured in 2008 and installed in 2009. The emergency generator is rated at 105 kW and fires diesel fuel oil. The

maximum capacity of 1.02 MMBtu/hr was based on the nameplate 105 kW output and a worst-case assumption of 35% efficiency. The generator was added to allow St. Croix Hall to serve as a central community emergency shelter.

1. BACT/BPT Findings

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

- PM/PM₁₀- 0.31 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
- SO₂ – based on firing 0.0015% sulfur, 0.0015 lb/MMBtu
- NO_x – 4.41 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
- CO – 0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
- VOC – 0.36 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96)
- Opacity – Visible emissions from the diesel generator shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period.

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (1.02 MMBtu/hr) diesel, 0.0015% S	0.32	0.32	0.002	4.52	0.97	0.37

The emergency generator shall be limited to 500 hours of operation a year, based on a 12 month rolling total. Washington County Community College shall keep records of the hours of operation for the generator.

2. 40 CFR Part 60, Subpart IIII

The federal regulation 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* (CI ICE) is applicable to the emergency generator 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 CFR Part 63, Subpart ZZZZ.

Emergency Definition:

Emergency stationary internal combustion engine is defined in 40 CFR Part 60, Subpart IIII as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a

facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

40 CFR Part 60, Subpart IIII Requirements:

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

The diesel fuel fired in the generator shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 CFR §60.4207(b)]

A non-resettable hour meter shall be installed and operated on the generator. [40 CFR §60.4209(a)]

The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Washington County Community College that are approved by the engine manufacturer. Washington County Community College may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

The generator shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). [40 CFR §60.4211(f)]

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

D. Annual Emissions

1. Washington County Community College shall be restricted to the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on 280,000 gal/yr fuel oil use in the boilers and 500 hrs/yr of operation for the generator.

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

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers	1.6	1.6	9.8	5.9	0.7	0.05
Generator #1	0.08	0.08	0.0004	1.13	0.24	0.09
Total TPY	1.7	1.7	9.8	7.0	0.9	0.1

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 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. "Greenhouse gases" as defined in 06-096 CMR 100 (as amended) means the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases (GHG) for purposes of licensing are calculated and reported as carbon dioxide equivalents (CO₂ e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Washington County Community College is below the major source threshold of 100,000 tons of CO₂ e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

Pollutant	Tons/Year
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, Washington County Community College is below the emissions level required for modeling.

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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-806-71-F-N 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.A. §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 CMR 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 CMR 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 CMR 115]

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR 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 CFR 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 CMR 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 CFR 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 CMR 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 CMR 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 emission 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 CMR 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 CMR 115]

SPECIFIC CONDITIONS

(16) Boilers #1-#5

A. Fuel

1. Total fuel use for the five boilers shall not exceed 280,000 gal/yr of #2 fuel oil, based on a 12 month rolling total basis.
2. Prior to January 1, 2016, the #2 fuel oil fired in the boiler shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
3. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. The boiler emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3	PM	0.08	06-096 CMR 115, BPT

C. The boiler emissions shall not exceed the following [06-096 CMR 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 (1.68 MMBtu/hr) #2 fuel oil	0.13	0.13	0.84	0.50	0.06	0.004
Boiler #2 (1.68 MMBtu/hr) #2 fuel oil	0.13	0.13	0.84	0.50	0.06	0.004
Boiler #3 (8.32 MMBtu/hr) #2 fuel oil	0.67	0.67	4.16	2.50	0.30	0.02
Boiler #4 (2.79 MMBtu/hr) #2 fuel oil	0.22	0.22	1.40	0.84	0.10	0.01
Boiler #5 (1.12 MMBtu/hr) #2 fuel oil	0.09	0.09	0.56	0.34	0.04	0.003

- D. Visible emissions from each boiler shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(17) **Emergency Generator #1**

- A. The emergency generator is limited to 500 hours per year total operation, based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115]
- B. The emergency generator emissions shall not exceed the following [06-096 CMR 115, BPT]:

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Generator #1 (1.02 MMBtu/hr), diesel	0.32	0.32	0.002	4.52	0.97	0.37

- C. Visible emissions from the emergency generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
- D. The emergency generator shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:
1. The emergency generator shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]
 2. The diesel fuel fired in the emergency generator shall not exceed 15 ppm sulfur (0.0015% sulfur). 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 CFR §60.4207(b) and 06-096 CMR 115]
 3. A non-resettable hour meter shall be installed and operated on the emergency generator. [40 CFR §60.4209(a)]
 4. The emergency generator shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). These limits are based on a 12 month rolling total. Compliance shall be

demonstrated by a written log of all emergency generator operating hours.
[40 CFR §60.4211(f) and 06-096 CMR 115]

5. The emergency generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Washington County Community College that are approved by the engine manufacturer. Washington County Community College may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]
- (18) Washington County Community College 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.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 1st DAY OF May, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Patricia W. DHD*
PATRICIA W. DHD, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 21, 2011

Date of application acceptance: November 22, 2011

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.

