



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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**The University of Maine System
Kennebec County
Augusta, Maine
A-602-71-J-M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the air emissions license 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.A.), §344 and §590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

The University of Maine System (UMA) was issued Air Emission License A-602-71-I-R on December 19, 2011, permitting the operation of emission sources associated with their Augusta, Maine educational facility. UMA has requested a minor revision to their license to remove two boilers from the license and to add natural gas capacity to the remaining licensed boilers.

The equipment addressed in this license is located at 46 University Drive, Augusta, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license minor revision:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type (% sulfur)	Install. Date	Stack #
Boiler #18-STC-A	1.5	10.8	Distillate fuel (0.5% by weight) and Natural gas (negligible)	2003	1
Boiler #18-STC-B	1.5	10.8		2003	1
Boiler #2-JH	5.0	36.0		2001	1
Boiler #6-BDK-A	4.2	30.0		1973	6
Boilers Removed from the License					
Boiler #6-BDK-B	1.5	10.8	#2 Oil ASTM D396	1990	6
Boiler #16-RH	1.1	7.75	#2 Oil ASTM D396	1984	16

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C. Definition

Distillate Fuel. For the purposes of this license, *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.

D. Application Classification

This amendment will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined; therefore, this modification is determined to be a minor revision and has been processed as such.

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.

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 #18-STC-A, #18-STC-B, #2-JH, and #6-BDK-A

UMA operates Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A for facility hot water and heating needs. The boilers have a combined total maximum design heat input capacity of 12.2 MMBtu/hour and fire distillate fuel, with a maximum sulfur content no greater than 0.5% by weight, or natural gas. The natural gas firing capacity has recently been added to these boilers. The facility wishes to retain the flexibility to fire either fuel in the boilers, depending on facility needs and market and operational variables.

Each of these boilers has a maximum heat input capacity below 10 MMBtu/hour; therefore, these boilers are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-*

Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hour manufactured after June 9, 1989.

1. BACT/BPT Findings

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

Distillate Fuel

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Source of Emission Factor</u>
PM, PM ₁₀	0.12 lb/MMBtu	06-096 CMR 103(2)(B)(1)(a) for Boiler 6-BDK-A
	0.08 lb/MMBtu	A-602-71-I-R (December 19, 2011), BACT for Boilers 18-STC-A, 18-STC-B, and 2-JH
SO ₂	0.5 lb/MMBtu	Based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
NO _x CO VOC	20 lb/1000 gal 5 lb/1000 gal 0.34 lb/1000 gal	AP-42, Table 1.3-1 (5/10)
Visible Emissions	--	06-096 CMR 101

Natural Gas

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Source of Emission Factor</u>
PM, PM ₁₀	0.05 lb/MMBtu	06-096 CMR 115, BPT
SO ₂	0.6 lb/MMscf	AP-42, Table 1.4-2 (7/98)
NO _x CO	100 lb/MMscf 84 lb/MMscf	AP-42, Table 1.4-1 (7/98)
VOC	5.5 lb/MMscf	AP-42, Table 1.4-2 (7/98)
Visible Emissions	--	06-096 CMR 101

The BACT/BPT emission limits for Boilers #18-STC-A, #18-STC-B, #2-JH, and #6-BDK-A are the following:

Firing distillate fuel:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Authority</u>
Boiler #2-JH	PM	0.08	A-602-71-I-R (December 19, 2011), BACT
Boiler #6-BDK-A		0.12	06-096 CMR 103(2)(B)(1)(a) (applicable to boilers > 3.0 MMBtu/hour)

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler #18-STC-A 1.5 MMBtu/hour	0.12	0.12	0.76	0.21	0.05	0.004
Boiler #18-STC-B 1.5 MMBtu/hour	0.12	0.12	0.76	0.21	0.05	0.004

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2-JH 5.0 MMBtu/hour	0.40	0.40	2.54	0.72	0.18	0.01
Boiler #6-BDK-A 4.2 MMBtu/hour	0.34	0.34	2.12	0.60	0.15	0.01

Firing natural gas:

Unit	Pollutant	lb/MMBtu	Authority
Boiler #2-JH	PM	0.05	06-096 CMR 115, BACT
Boiler #6-BDK-A			

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #18-STC-A 1.5 MMBtu/hour	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #18-STC-B 1.5 MMBtu/hour	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #2-JH 5.0 MMBtu/hour	0.25	0.25	0.003	0.49	0.42	0.03
Boiler #6-BDK-A 4.2 MMBtu/hour	0.21	0.21	0.002	0.41	0.35	0.02

Visible emissions from each boiler firing distillate fuel shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101]

Visible emissions from each boiler firing natural gas shall not exceed 10% 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 CMR 101(2)(B)(1)(c)]

UMA shall continue to be limited to a total combined heat input of 84,000 MMBtu/year for the four boilers identified above, equivalent to 600,000 gallons/year of distillate fuel, 82.35 MMscf/year of natural gas, or a combination of distillate fuel and natural gas combustion not to exceed the MMBtu/year heat input limit, on a 12-month rolling total basis.

Prior to July 1, 2016, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. Per 38 MRSA §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm); and beginning January 1, 2018, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). The specific dates and requirements contained in this paragraph reflect the current dates and requirements in the statute as of the effective date of this license; however, if the statute is revised, the

facility shall comply with the revised dates and requirements upon promulgation of the statute revision.

2. Periodic Monitoring

Periodic monitoring for each boiler 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, if applicable.

3. 40 CFR Part 60, Subpart Dc

Due to the sizes, Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

4. 40 CFR Part 63, Subpart JJJJJ

Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A are subject to 40 CFR Part 63, Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. The units are considered existing oil boilers rated less than 10 MMBtu/hour.

Gas-fired boilers are exempt from 40 CFR 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 CFR §63.11237]

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010, is considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

A summary of the currently applicable requirements of 40 CFR Part 63, Subpart JJJJJ is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however UMA 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 no later than January 20, 2014. [40 CFR §63.11225(a)(2)]

ii. Boiler Tune-Up Program

- (a) A boiler tune-up program shall be implemented. [40 CFR §63.11223]
- (b) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired Boilers that are not designated as "Boilers with less frequent tune up requirements" listed below [Boiler #2-JH]	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with less frequent tune up requirements Seasonal (see definition §63.11237) Limited use (see definition §63.11237) With a heat input capacity of <5MMBtu/hr [Boiler #18-STC-A, Boiler #18-STC-B, Boiler #6 BDK-A] Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR §63.11223(a) and Table 2]

- (c) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §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 §63.11223(b)(2)]
 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(3)]
 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]
 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, **before** and

after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR §63.11223(b)(7)]

(d) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:

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

[40 CFR §63.11223(b)(6)]

- (e) After conducting the initial boiler tune-up, a Notification of Compliance Status should have been submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and 40 CFR §63.11214(b)]

iii. Compliance Report:

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

- (a) Company name and address;
- (b) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (c) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (d) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."

b. Recordkeeping

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

- i. Copies of notifications and reports with supporting compliance documentation;
- ii. 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;
- iii. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- iv. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 CFR §63.1125(a)(4)(vi)]

C. Annual Emissions

1. Total Annual Emissions

UMA shall be restricted to the following annual emissions, on a 12-month rolling total basis. The tons per year limits were calculated based on the following:

- 600,000 gallons/year of distillate fuel or the equivalent heat input quantity of natural gas fired in Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A, combined, using the worst case of both fuel options for each pollutant; and
- 100 hours/year of non-emergency operation of the Emergency 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	3.4	3.4	0.8	4.1	3.5	0.2
Generator	0.05	0.05	0.02	1.71	0.37	0.14
Total TPY	3.5	3.5	0.8	5.8	3.9	0.3

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), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

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

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

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

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

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

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

ORDER

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

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

The Department hereby grants Air Emission License A-602-71-J-M subject to the conditions found in Air Emission License A-602-71-I-R and the following conditions.

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

SPECIFIC CONDITIONS

This specific condition shall replace Specific Condition (16) of Air Emission License A-602-71-I-R (December 19, 2011). All other Conditions of the December 2011 license shall remain in effect unless modified through a future licensing action.

(16) **Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6 BDK-A**

A. Fuel Requirements

1. Total fuel use for Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A shall not exceed 600,000 gal/year of distillate fuel, 82.35 MMscf/year of natural gas, or a combination of those two fuels not to exceed 84,000 MMBtu/heat input, on a 12-month rolling total basis. [06-096 CMR 115, BPT]
2. Prior to July 1, 2016, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. [06-096 CMR 115, BPT]
3. Beginning July 1, 2016, or on the date specified in 38 MRSA §603-A(2)(A)(3), distillate fuel fired at the facility shall have a maximum sulfur content of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]

4. Beginning January 1, 2018, or on the date specified in 38 MRSA §603-A(2)(A)(3), distillate fuel fired at the facility shall have a maximum sulfur content of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

The specific dates and requirements contained in this Specific Condition reflect the current dates and requirements in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision. [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. Emissions shall not exceed the following for each specified boiler firing distillate fuel:

Unit	Pollutant	lb/MMBtu	Authority
Boiler #2-JH	PM	0.08	A-602-71-I-R (December 19, 2011), BACT
Boiler #6-BDK-A		0.12	06-096 CMR 103(2)(B)(1)(a)

- C. Emissions shall not exceed the following for each boiler firing distillate fuel: [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 #18-STC-A 1.5 MMBtu/hour	0.12	0.12	0.76	0.21	0.05	0.004
Boiler #18-STC-B 1.5 MMBtu/hour	0.12	0.12	0.76	0.21	0.05	0.004
Boiler #2-JH 5.0 MMBtu/hour	0.40	0.40	2.54	0.72	0.18	0.01
Boiler #6-BDK-A 4.2 MMBtu/hour	0.34	0.34	2.12	0.60	0.15	0.01

- D. Emissions shall not exceed the following for each specified boiler firing natural gas:

Unit	Pollutant	lb/MMBtu	Authority
Boiler #2-JH	PM	0.05	06-096 CMR 115, BACT
Boiler #6-BDK-A			

E. Emissions shall not exceed the following for each boiler firing natural gas: [06-096 CMR 115, BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #18-STC-A 1.5 MMBtu/hour	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #18-STC-B 1.5 MMBtu/hour	0.08	0.08	0.001	0.15	0.12	0.01
Boiler #2-JH 5.0 MMBtu/hour	0.25	0.25	0.003	0.49	0.42	0.03
Boiler #6-BDK-A 4.2 MMBtu/hour	0.21	0.21	0.002	0.41	0.35	0.02

F. Visible emissions from each boiler firing distillate fuel shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period. [06 096 CMR 101]

Visible emissions from each boiler firing natural gas shall not exceed 10% 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 CMR 101(2)(B)(1)(c)]

G. 40 CFR Part 63, Subpart JJJJJ Requirements for Boiler #18-STC-A, Boiler #18-STC-B, Boiler #2-JH, and Boiler #6-BDK-A [incorporated under 06-096 CMR 115, BPT]

The facility shall implement a boiler tune-up program. [40 CFR §63.11223]

1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired Boilers that are not designated as "Boilers with less frequent tune up requirements" listed below [Boiler #2-JH]	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with less frequent tune up requirements Seasonal (see definition 40 CFR §63.11237) Limited use (see definition 40 CFR §63.11237) With a heat input capacity of <5MMBtu/hr [Boiler #18-STC-A, Boiler #18-STC-B, Boiler #6 BDK-A] Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

2. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 - a. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(1)]
 - b. 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 §63.11223(b)(2)]
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(3)]
 - d. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]
 - e. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]
 - f. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR §63.11223(b)(7)]
3. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - a. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - b. A description of any corrective actions taken as part of the tune-up of the boiler; and
 - c. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using

more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR §63.11223(b)(6)]

4. Compliance Report: A compliance report shall be prepared by March 1st biennially or every five years, as applicable, which covers the previous two or five calendar years, as applicable. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in 40 CFR §63.11225(b)(1) and (2), including the following: [40 CFR §63.11225(b)]
 - a. Company name and address;
 - b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
 - c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
 - d. The following certifications, as applicable:
 - (1) "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (2) "No secondary materials that are solid waste were combusted in any affected unit."
 - (3) "This facility complies with the requirement in 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."
5. Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR §63.11225(c)]:
 - a. Copies of notifications and reports with supporting compliance documentation;
 - b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
 - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

The University of Maine System
Kennebec County
Augusta, Maine
A-602-71-J-M (SM)

15

Departmental
Findings of Fact and Order
Air Emission License
Amendment #1

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 CFR §63.1125(a)(4)(vi)]

DONE AND DATED IN AUGUSTA, MAINE THIS 17 DAY OF June, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Patricia W. Aho for
PATRICIA W. AHO, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-602-71-I-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 4, 2015

Date of application acceptance: May 6, 2015

Date filed with the Board of Environmental Protection:

This Order prepared by Jane E. Gilbert, Bureau of Air Quality.

