STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Augusta East Redevelopment Company, LLC **Kennebec County** **Augusta, Maine** **A-230-71-N-A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #1**

FINDINGS OF FACT

After review of the air emission 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 (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Augusta East Redevelopment Company, LLC (AERC) was issued Air Emission License A-230-71-M-R on March 3, 2017, for the operation of emission sources associated with their leased office space facility.

AERC has requested an amendment to their license in order to remove the existing 12.6 MMBtu/hr distillate fuel-fired boiler (currently designated Boiler #2) and replace it with a new 10.5 MMBtu/hr dual fueled boiler (natural gas and distillate fuel, to be designated Boiler #2 as of the issuance of this amendment). Existing Boiler #2 will be permanently removed from the AERC facility and license.

The equipment addressed in this license is located at 6 East Chestnut Street in Augusta, Maine.

B. Emission Equipment

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

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % S	Manufacture Date	Installation Date
Boiler #2	10.5	10,461 scf/hr 72.7 gal/hr	Natural Gas, negligible Distillate Fuel, 0.0015%	2020	2020

AERC 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 following link:

http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

Additionally, AERC 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.

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.

D. Application Classification

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

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	6.2	6.2	0.0	100
PM_{10}	6.2	6.2	0.0	100
SO_2	15.3	0.3	-15.0	100
NO_x	10.5	10.5	0.0	100
CO	2.6	2.8	+0.2	100
VOC	0.4	0.4	0.0	50

This modification is determined to be a minor modification and has been processed as such.

E. <u>Facility Classification</u>

With the annual facility-wide heat-input limit on the boilers and the operating hours restriction on the emergency generators, AERC is licensed as follows:

- As a synthetic minor source of air emissions, because AERC is subject to license restrictions that 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. <u>Introduction</u>

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. Boiler #2

Boiler #2 is a Hurst boiler manufactured in 2020 with a maximum design heat input capacity of 10.5 MMBtu/hour and fires natural gas at a rate of 10,461 scf/hour or distillate fuel at a rate of 72.7 gallons/hour. This boiler will permanently replace the previous Boiler #2 which has a maximum design capacity of 12.6 MMBtu/hour and was manufactured and installed in 1970.

Boiler #2 is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use in Boiler #2 shall not exceed 0.0015% by weight (15 ppm).

As part of the installation of Boiler #2 and other upgrades of the boiler plant, AERC will be removing their existing brick stack due to structural issues. The current brick stack currently serves all boilers on AERC's license. The Department has determined that the replacement stacks associated with each boiler shall have a minimum height of 40-feet above the finished floor elevation of the boiler house and be vented in a vertical manner with no obstructions to the exhaust (i.e., rain cap, etc.).

1. BACT Findings

The following is a summary of the BACT analysis for control of emissions from Boiler #2.

a. Particulate Matter (PM and PM_{10})

Particulate matter emissions from fuel combustion are formed from incomplete combustion of fuel and non-combustible material in the fuel. Emissions of particulate matter from new natural gas-fired boilers are generally very low. Given the size of the unit and the minimal particulate matter emissions from the burning of natural gas, add-on emission control equipment for control of particulate matter from Boiler #2 when firing natural gas is not economically feasible.

During periods of gas curtailment, supply interruption, or for periodic testing/maintenance, Boiler #2 will fire distillate fuel. Given the size of the unit and the intermittent nature of distillate fuel firing in the unit, add-on emission control equipment for control of particulate matter from Boiler #2 when firing distillate fuel is not economically feasible.

AERC has proposed to burn only low-ash content fuels (natural gas and distillate fuel) in Boiler #2 and to optimize combustion using oxygen trim systems. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM_{10} emissions from Boiler #2 is the use of an oxygen trim system and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)

Sulfur dioxide is formed from the combustion of sulfur present in the fuel. Potential control options for sulfur dioxide emissions include the use of fuel with a low sulfur content, sorbent injection and SO_2 scrubbing technologies such as flue gas desulfurization and packed-bed scrubbers.

AERC has proposed to fire only natural gas and distillate fuel with a sulfur content not to exceed 0.0015% by weight.

Emissions of sulfur dioxide from new natural gas-fired boilers are very low due to the low sulfur content of natural gas. Given the low level of sulfur dioxide emissions from the firing of natural gas, add-on emission control equipment for control of sulfur dioxide from Boiler #2 when firing natural gas is not economically feasible.

During periods of gas curtailment, supply interruption, or for periodic testing/maintenance, Boiler #2 will fire ultra-low sulfur distillate fuel. Given the intermittent nature of distillate fuel firing in the unit and the size of the unit, the use of add-on emission control equipment for the control of SO_2 emissions from Boiler #2 when firing distillate fuel is not economically feasible.

BACT for SO_2 emissions from Boiler #2 is the firing natural gas as the primary fuel, the use of distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight (15 ppm) when natural gas is curtailed or its supply is interrupted or for periodic maintenance/testing, and the emission limits listed in the tables below.

c. <u>Nitrogen Oxides (NO_x)</u>

Nitrogen oxides mainly consist of nitric oxide (NO) and nitrogen dioxide (NO_2). NO_x from fuel combustion are generated through one of three mechanisms: fuel NO_x, thermal NO_x and prompt NO_x. Fuel NO_x is produced by the oxidation of nitrogen in the fuel source, with low nitrogen content fuels such as distillate fuel and natural gas producing less NO_x than fuels with higher levels of fuel-bound nitrogen. Thermal NO_x forms in the high temperature area of the combustor and increases exponentially with increases in flame temperature and linearly with increases in residence time. Prompt NO_x forms from the oxidation of hydrocarbon radicals near the combustion flame; this produces an insignificant amount of NO_x.

Control of NO_x emissions can be accomplished using one of three methods: the use of add-on controls, such as selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR); the use of combustion control techniques, such as low NO_x burners, flue gas recirculation (FGR) and good combustion practices; and the combustion of clean fuel, such as natural gas and distillate fuel.

Given the size of Boiler #2 and the low potential annual NO_x emissions from the unit, the use of add-on controls such as SCR and SNCR are not economically feasible when firing either natural gas or distillate fuel.

Combustion control methods available to control NO_x from small industrial and commercial boilers include low NO_x burners, FGR and good combustion practices. 'Low NO_x burners' refers to burner components (burner register, atomizing nozzle, diffuser) that are designed to achieve lower NO_x by mixing the fuel and combustion air in a way that limits NO_x formation. This is done by mixing the combustion air and fuel in multiple stages and by utilizing a specially designed nozzle and/or diffuser to achieve a particular flame pattern. The use of low NO_x burners is technically and economically feasible for firing natural gas and distillate fuel in Boiler #2.

In FGR systems, a portion of the combustion gases are recirculated back into the combustion zone. This process lowers peak flame temperatures, and therefore thermal NO_x formation, by allowing the relatively cool flue gas to absorb heat released by the burner flame. Although considered technically feasible, the use of FGR is not economically feasible for a small boiler due to the moderately high capital costs due to the ductwork needed to span from the burner outlet to the combustion air duct, the operating costs associated with the energy requirements of recirculation fans, and marginal emission reduction benefit. Additionally, FGR systems can affect heat transfer and system pressures.

Good combustion practices include operating the system based on the design and recommendations provided by the manufacturer and by maintaining proper air-to-fuel ratios with periodic maintenance checks.

BACT for NO_x emissions from Boiler #2 is the use of natural gas as the primary fuel, the use of low NO_x burners, the use of good combustion practices and the emission limits listed in the tables below.

d. <u>Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)</u>

Carbon monoxide and volatile organic compounds emissions are a result of incomplete combustion, caused by conditions such as insufficient residence time or limited oxygen availability. Potential control options for CO and VOC emissions include combustion controls and the use of a catalyst system.

Emissions of CO and VOC from new natural gas-fired boilers are generally low. Given the size of the unit and the low potential CO and VOC emissions, the use of add-on emission control equipment for the control of CO and VOC emissions from Boiler #2 when firing natural gas is not considered economically feasible.

During periods of gas curtailment, supply interruption or for periodic maintenance/testing, Boiler #2 will fire distillate fuel. Given the intermittent nature of distillate fuel firing in the unit and the size of the unit, the use of add-on emission control equipment for the control of CO and VOC emissions from Boiler #2 when firing distillate fuel is not economically feasible.

BACT for CO and VOC emissions from Boiler #2 is the use of natural gas as the primary fuel, the use of distillate fuel when the natural gas supply is curtailed or interrupted or for period maintenance/testing, the use of efficient burner combustion technology and the emission limits listed in the tables below.

e. <u>Emission Limits</u>

The BACT emission limits for Boiler #2 when firing natural gas were based on the following:

PM/PM_{10}	0.05 lb/MMBtu, based on 06-096 C.M.R. ch. 115, BACT
SO_2	0.6 lb/MMscf, based on AP-42 Table 1.4-2, dated 7/98
NO_X	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. 115, BACT

The BACT emission limits for Boiler #2 when firing distillate fuel were based on the following:

PM/PM_{10}	0.08 lb/MMBtu, based on 06-096 C.M.R. ch. 115, BACT
SO_2	based on firing 0.0015% S distillate fuel
NO_X	0.3 lb/MMBtu, based on BACT determinations for similar boilers
CO	5.0 lb/1000 gallons, based on AP-42, Table 1.3-1, dated 5/10
VOC	0.2 lb/1000 gallons, based on AP-42 Table 1.3-3, dated 5/10
Visible Emissions	06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boiler #2 are the following:

Equipment	Fuel	Pollutant	lb/MMBtu
Boiler #2	Natural Gas	PM	0.05
	Distillate Fuel	PM	0.08

Emissions from Boiler #2 shall not exceed the following:

Equipment	Fuel	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	Natural Gas	0.5	0.5	0.1	1.0	0.9	0.1
	Distillate Fuel	0.8	0.8	0.1	3.2	0.4	0.1

Boiler #2 shall be included in the facility-wide heat input limit of 60,000 MMBtu/year, on a calendar-year basis.

2. Visible Emissions

   Visible emissions from the stack associated with Boiler #2 shall not exceed 10% opacity on a six-minute block average basis.

3. Periodic Monitoring

   Periodic monitoring for Boiler #2 shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable.

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

   Due to the maximum heat input capacity of Boiler #2, the unit is 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]

AERC shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #2 including, but not limited to, the following:

a. <u>Notifications</u>

AERC shall submit notification to EPA and the Department of the date of construction, anticipated start-up and actual start-up. This notification shall include the design heat input capacity of the boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]

b. <u>Standards: Sulfur Dioxide (SO_2)</u>

The fuel fired in Boiler #2 shall not exceed 0.0015% sulfur by weight. [40 C.F.R. § 60.42c(d)]

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

Boiler #2 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 JJJJJJ as Boiler #2 is considered a new gas-fired new boiler rated greater than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 C.F.R. § 63.11237]

AERC shall maintain records of the annual operating hours that Boiler #2 fires distillate fuel. These records shall include the number of hours Boiler #2 operated on distillate fuel, the reason the unit operated on distillate fuel and documentation regarding any periods of gas curtailment or gas supply interruption. If Boiler #2 exceeds 48 hours firing distillate fuel for periodic testing during a calendar year, that boiler will become subject to all applicable requirements for 40 C.F.R. Part 63, Subpart JJJJJJ, and AERC will be required to notify EPA and the Department of the change within 180 days of the effective date of the fuel switch. [40 C.F.R. § 63.11210(h) and 06-096 C.M.R. ch. 115, BPT]

C. 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included.

The maximum tons per year limits were calculated based on Boilers #1, #2 and #3 having a facility-wide heat input limit of 60,000 MMBtu/year and 100 hours/year of operation each for Generators #1 and #2.

Please note, this information provides the basis for fee calculation only and should not be construed to 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)

Equipment	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler #1, #2 and #3	6.0	6.0	0.1	9.0	2.4	0.2
Generator #1	0.1	0.1	0.1	0.5	0.1	0.1
Generator #2	0.1	0.1	0.1	1.0	0.3	0.1
Total TPY	6.2	6.2	0.3	10.5	2.8	0.4

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 shall be determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. 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	25
PM_{10}	25
SO_2	50
NO_x	100
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 amendment.

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 Amendment A-230-71-N-A subject to the conditions found in Air Emission License A-230-71-M-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

The following shall replace Condition (16) of Air Emission License A-230-71-M-R (March 1, 2017):

(16) Boiler #1, #2 and #3

A. Boiler #1 is licensed to fire distillate fuel only. [06-096 C.M.R. ch. 115, BPT]

B. Boilers #2 and #3 are licensed to fire natural gas and/or distillate fuel. With the exceptions of gas curtailment, gas supply interruption, startups or periodic testing on liquid fuel, Boilers #2 and #3 shall fire natural gas at all times natural gas can reliably be supplied. [06-096 C.M.R. ch. 115, BPT/BACT]

C. Total facility-wide heat input into Boilers #1, #2 and #3 combined shall be limited to 60,000 MMBtu/year, on a calendar-year basis. [06-096 C.M.R. ch. 115, BPT/BACT]

D. AERC shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boilers #1, #2, and #3. Compliance with this limit shall be demonstrated by fuel supplier certification on an as-purchased basis. [06-096 C.M.R. ch. 115, BPT/BACT]

E. Records of annual fuel use shall be kept on both a monthly and calendar-year basis. [06-096 C.M.R. ch. 115, BPT/BACT]

F. When firing natural gas, emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boilers #2 & #3	PM	0.05	06-096 C.M.R. ch. 115, BPT

G. When firing distillate fuel, emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.20	06-096 C.M.R. ch. 115, BPT
Boilers #2 & #3	PM	0.08	

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

Equipment	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 – Firing Oil	2.44	2.44	0.02	3.66	0.44	0.02
Boiler #2 – Firing NG	0.53	0.53	0.01	1.02	0.86	0.06
Boiler #2 – Firing Oil	0.84	0.84	0.02	3.15	0.38	0.02
Boiler #3 – Firing NG	0.32	0.32	0.01	0.61	0.51	0.03
Boiler #3 – Firing Oil	0.50	0.50	0.01	1.89	0.23	0.02

I. Visible emissions from the stack associated with Boiler #2 shall not exceed 10% opacity on a six-minute block average basis. [06 -096 C.M.R. ch. 115, BPT/BACT]

J. When firing natural gas, visible emissions from the stack associated with Boiler #3 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

K. When firing distillate fuel, visible emissions from the stacks associated with Boilers #1 and/or #3 shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT/BACT]

L. AERC shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boiler #1 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT/BACT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

   Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. [40 C.F.R. § 63.11223(a) and Table 2]

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	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with less frequent tune up requirements	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
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

a. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

(1) <u>As applicable</u>, 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. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers.
[40 C.F.R. § 63.11223(b)(1)]

(2) Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F..R § 63.11223(b)(2)]

(3) Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, 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. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]

(4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 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 C.F.R. § 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 C.F.R. § 63.11223(b)(7)]

b. 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 C.F.R. § 63.11223(b)(6)]

2. Compliance Report

A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. 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 §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 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 C.F.R. § 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 §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 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.

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 C.F.R. § 63.11225(a)(4)(vi)]

The following is a new condition to be appended to Air Emission License A-230-71-M-R (March 1, 2017):

(19) The replacement steel stacks associated with each boiler shall have a minimum height of 40 feet above the finished floor elevation of the boiler house and be vented in a vertical manner with no obstructions to the exhaust. [06-096 C.M.R. ch. 115, BPT/BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 14th DAY OF OCTOBER, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:__________________________________ for _____
MELANIE LOYZIM, ACTING COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-230-71-M-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 19, 2020
Date of application acceptance: June 26, 2020

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J Ostrowski, Bureau of Air Quality.

FILED

OCT 14, 2020

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