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

DEPARTMENT ORDER

The Jackson Laboratory **Hancock County** **Ellsworth, Maine** **A-1127-71-C-A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #2**

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

The Jackson Laboratory (JAX) was issued Air Emission License A-1127-71-A-N on April 28, 2017, for the operation of emission sources associated with their mouse production facility. The license was subsequently amended on May 9, 2018 (A-1127-71-B-M).

JAX has requested an amendment to their license in order to install a new propane and distillate fuel fired boiler (Boiler #4).

JAX has also requested a correction that Boiler #1 utilizes flue gas recirculation (FGR) for control of nitrogen oxides.

The equipment addressed in this license amendment is located at 21 Kingsland Crossing, Ellsworth, Maine.

B. Emission Equipment

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

Boilers

Equipment	Max. Capacity* (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Stack #
Boiler #1	8.0	57.1 gal/hr 3,100 scfh	distillate fuel, 0.0015% propane, negligible	2017	B1
Boiler #4	25.0	178.6 gal/hr 9,700 scfh	distillate fuel, 0.0015% propane, negligible	2019	B4

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 refer to the amended version in effect as of the issued date of this license.

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	8.3	11.6	+3.3	100
PM_{10}	8.3	11.6	+3.3	100
SO_2	0.7	0.7	-0-	100
NO_x	37.0	47.6	+10.6	100
CO	19.4	27.4	+8.0	100
VOC	5.1	6.9	+1.8	50

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

E. Facility Classification

With the annual operating hours restriction on the emergency generators, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boiler #1

In the BACT analysis for Boiler #1, it was previously stated that flue gas recirculation (FGR) was not available for Boiler #1 due to its size. Boiler #1 is equipped with FGR and is included in the control strategy for this equipment.

C. Boiler #4

As part of phase II construction at the Ellsworth facility, JAX has proposed the installation of a new boiler (Boiler #4) to meet additional heating and hot water needs.

Boiler #4 will be a Cleaver-Brooks model FLX200-2500 with a maximum heat input of 25 MMBtu/hr, identical to Boilers #2 and #3 already installed at the facility. It will be capable of firing either propane or distillate fuel with a sulfur content of 0.0015% by weight or less. Boiler #4 will exhaust through its own independent stack.

1. BACT Findings

JAX submitted a BACT analysis for control of emissions from Boiler #4.

a. Particulate Matter (PM, PM_{10})
JAX has proposed to burn only low-ash content fuels (propane and distillate fuel) in the boilers 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 #4 is the use of an oxygen trim system and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
JAX has proposed to fire only propane and distillate fuel with a sulfur content not to exceed 0.0015% by weight. The use of these fuels results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

BACT for SO_2 emissions from Boiler #4 is the use of propane and ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
JAX considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), and use of oxygen trim systems.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. However, they have a negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units greater than 50 MMBtu/hr.

Water/steam injection and FGR have similar NO_x reduction efficiencies. However, water/steam injection results in reduced boiler efficiency of approximately 5%.

The use of FGR on Boiler #4 as well as an oxygen trim system has been determined to be feasible and has been selected as part of the BACT strategy.

BACT for NO_x emissions from Boiler #4 is the use of FGR, an oxygen trim system, and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
JAX considered several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boiler in question. These controls were determined to not be economically feasible.

An oxygen trim system monitors the O_2 content in the exhaust gas and automatically adjusts the fuel valve or air damper to optimize the air-to-fuel ratio. The use of an oxygen trim system has been determined to be feasible and has been selected as part of the BACT strategy for Boiler #4.

BACT for CO and VOC emissions from Boiler #4 is the use of an oxygen trim system and the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Boiler #4 were based on the following:

Distillate Fuel

PM/PM_{10}	–	0.03 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO_x	–	0.11 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
CO	–	0.036 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
VOC	–	0.016 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
Visible Emissions	–	06-096 C.M.R. ch. 115, BACT

Propane

PM/PM_{10}	–	0.03 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO_2	–	0.001 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
NO_x	–	0.049 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
CO	–	0.073 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
VOC	–	0.008 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT and manufacturer's specifications
Visible Emissions	–	06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boiler #4 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #4	PM	0.03

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #4 distillate fuel	0.75	0.75	0.04	2.75	0.90	0.40
Boiler #4 propane	0.75	0.75	0.03	1.23	1.83	0.20

When firing distillate fuel, visible emissions from Boiler #4 shall not exceed 20% opacity on a six-minute block average basis.

When firing propane, visible emissions from Boiler #4 shall not exceed 10% opacity on a six-minute block average basis.

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

   Boiler #4 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]

   JAX shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #4 including, but not limited to, the following:

   a. Notifications
      JAX shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up of Boiler #4. 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. Standards
      The fuel fired in Boiler #4 shall not exceed 0.5% sulfur by weight.
      [40 C.F.R. § 60.42c(d)] This fuel sulfur content limit shall be streamlined to the lower limit required by State statute.

   c. Initial Compliance Requirements
      Within 30 days after achieving the maximum production rate at which Boiler #4 will be operated but not later than 180 days after the initial start-up of the boiler, JAX shall submit to EPA and the Department copies of the fuel supplier certification of the sulfur content of the fuel fired in Boiler #4. The fuel supplier certification must contain the name of the oil supplier, a statement from the oil supplier that the oil complies with ASTM specifications for distillate oil, and the maximum sulfur content of the oil. [40 C.F.R. § 60.44c(h)]

   d. Reporting and Recordkeeping
      JAX shall record and maintain records of the amounts of each fuel combusted on-site during each calendar month [40 C.F.R. § 60.48c(g)]

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

   Boiler #4 is 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. This unit is considered a new oil-fired boiler.

   A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements is listed below. Notification forms and additional rule information can be

found on the following website: https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source.

a. Compliance Dates and Notifications

(1) An Initial Notification submittal to EPA is due within 120 days after becoming subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

(2) JAX is not required to submit a Notification of Compliance Status for Boiler #4. [40 C.F.R. § 63.11225(a)(4)]

b. Emission Limits and Work Practice Requirements

(1) New oil-fired boilers that combust only gaseous fuel and ultra-low-sulfur liquid fuel (i.e. distillate fuel with a sulfur content not to exceed 0.0015% by weight) are exempt from the PM emission limits of Subpart JJJJJJ. [40 C.F.R. § 63.11210(f)]

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) 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 oil-fired boilers 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 C.F.R. § 63.11223(a) and Table 2]

(iii) Boiler #4 is not required to complete an initial performance tune-up. However, the first tune-up is due no later than 61 months after initial startup. [40 C.F.R. § 63.11210(g)]

(iv) 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [40 C.F.R. § 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 C.F.R. § 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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [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)]

(v) 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)]

(3) Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or 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)]

(i) Company name and address;

(ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
(iii) 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;
(iv) 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."

c. Recordkeeping

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)]:
(1) Copies of notifications and reports with supporting compliance documentation;
(2) 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;
(3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
(4) 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.

D. Annual Emissions

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

- Operating each boiler for 8,760 hr/year and selecting the highest emissions from each fuel;
- Operating each vaporizer for 8,760 hr/year;
- Operating each generator for 100 hr/year; and
- Operating the sterilizer for 8,760 hr/year.

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

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler #1	1.1	1.1	0.1	7.0	1.4	1.1
Boiler #2	3.3	3.3	0.2	12.1	8.0	1.8
Boiler #3	3.3	3.3	0.2	12.1	8.0	1.8
Boiler #4	3.3	3.3	0.2	12.1	8.0	1.8
Vaporizer #1	0.2	0.2	–	0.9	0.5	0.1
Vaporizer #2	0.2	0.2	–	0.9	0.5	0.1
Generator #1	0.1	0.1	0.1	2.0	0.5	0.1
Generator #2	0.1	0.1	0.1	2.0	0.5	0.1
Total TPY	**11.6**	**11.6**	**0.7**	**49.1**	**27.4**	**6.9**

Pollutant	Tons/year
Total HAP	1.0

III. AMBIENT AIR QUALITY ANALYSIS

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

Pollutant	Tons/Year
PM_{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 Amendment A-1127-71-C-A subject to the conditions found in Air Emission License A-1127-71-A-N, in amendment A-1127-71-B-M, 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-1127-71-B-M:
Note: Minor changes have been made to the lb/hr limits for Boilers #1, #2, and #3 based on updated information on the boilers' maximum heat input.

(16) **Boilers #1, #2, #3, and #4**

A. Fuel

1. Boilers #1, #2, #3, and #4 are each licensed to fire propane and distillate fuel. [06-096 C.M.R. ch. 115, BACT]
2. JAX shall fire distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight. [06-096 C.M.R. ch. 115, BACT]

B. JAX shall operate FGR and oxygen trim systems on all boilers to control emissions. [06-096 C.M.R. ch. 115, BACT]

C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.03	06-096 C.M.R. ch. 115, BACT
Boiler #2	PM	0.03	06-096 C.M.R. ch. 115, BACT
Boiler #3	PM	0.03	06-096 C.M.R. ch. 115, BACT
Boiler #4	PM	0.03	06-096 C.M.R. ch. 115, BACT

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 distillate fuel	0.24	0.24	0.01	1.60	0.31	0.24
Boiler #1 propane	0.24	0.24	0.01	0.42	0.30	0.06
Boiler #2 distillate fuel	0.75	0.75	0.04	2.75	0.90	0.40
Boiler #2 propane	0.75	0.75	0.03	1.23	1.83	0.20
Boiler #3 distillate fuel	0.75	0.75	0.04	2.75	0.90	0.40
Boiler #3 propane	0.75	0.75	0.03	1.23	1.83	0.20
Boiler #4 distillate fuel	0.75	0.75	0.04	2.75	0.90	0.40
Boiler #4 propane	0.75	0.75	0.03	1.23	1.83	0.20

E. Visible emissions from any boiler firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

F. Visible emissions from any boiler firing propane shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

G. JAX shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #2, #3, and #4 including, but not limited to, the following:

1. JAX shall perform and submit to EPA and the Department an initial performance test within 30 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility on distillate fuel. The performance test shall consist of fuel supplier certification of the sulfur content of the fuel fired in each boiler. The fuel supplier certification must contain the name of the oil supplier, the sulfur content (or maximum sulfur content) of the oil, and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil as contained in this license. [40 C.F.R. §§ 60.44c(h) and 60.48c(f)]

2. JAX shall record and maintain records of the amounts of each fuel combusted in the boilers during each calendar month. Records may be kept for each individual boiler or the facility as a whole. [40 C.F.R. § 6048c(g)] If JAX keeps facility-wide records, estimated fuel use for each boiler will still be required for reporting under 06-096 C.M.R. ch. 137.

3. JAX shall submit semi-annual reports to EPA and to the Department. These reports shall include the calendar dates covered in the reporting period, records of fuel supplier certifications, and a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. The semi-annual reports are due within 30 days of the end of each six-month period.
[40 C.F.R. §§ 60.48c(d), (e), (f), and (j)]

H. JAX shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #1, #2, #3, and #4 including, but not limited to, the following:
[incorporated under 06-096 C.M.R. ch. 115, BACT]

1. For each boiler, JAX shall submit an Initial Notification to EPA within 120 days after becoming subject to the standard. [40 C.F.R. § 63.11223] The initial notification for Boilers #1, #2, and #3 was submitted on January 31, 2018.

2. JAX shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

   a. 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 oil-fired boilers 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 C.F.R. § 63.11223(a) and Table 2]

   b. Boilers #1, #2, #3, and #4 are not required to complete an initial performance tune-up. However, the first tune-up is due no later than 61 months after initial startup. [40 C.F.R. § 63.11210(g)]

   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 for up to 72 months from the previous inspection. [40 C.F.R. § 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 C.F..R § 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 for up to 72 months from the previous inspection. [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)]

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 C.F.R. § 63.11223(b)(6)]

3. Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and/or 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."

4. 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, on a monthly basis, of the type(s) of fuel combusted in each boiler;
   d. Records of the occurrence and duration of each malfunction of each applicable boiler; and
   e. 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.

DONE AND DATED IN AUGUSTA, MAINE THIS 1 DAY OF April, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
GERALD D. REID, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1127-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/22/19
Date of application acceptance: 2/25/19

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

Filed
APR 0 1 2019
State of Maine
Board of Environmental Protection