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

DEPARTMENT ORDER

University of New England **York County** **Biddeford, Maine** **A-487-71-U-A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **After-The-Fact Amendment #5**

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

University of New England (UNE) was issued Air Emission License A-487-71-P-R/A on August 20, 2014, for the operation of emission sources associated with their educational facility. The license was subsequently amended as follows:

Amendment #	Date Issued	Brief Description
A-487-71-Q-A	September 1, 2017	Added Emergency Generator #11
A-487-71-R-A	December 21, 2018	Replacing Boiler #2 with Boiler #10
A-487-71-S-A	November 20, 2020	Added Emergency Generator #12
A-487-71-T-A	June 14, 2021	• Replacing Boiler #4 with Boiler #11 • Changing fuel of Boiler #3 from #4 fuel to distillate fuel and propane • Increasing annual distillate fuel limit to 430,000 gallons

The equipment addressed in this license amendment is located at 11 Hills Beach Rd, Biddeford, Maine.

UNE has requested an after-the-act amendment to their license in order to replace the existing Boiler #9 with a new unit designated Boiler #12. Additionally, the visible emissions limits will be updated to conform to the latest standards as found in 06-096 C.M.R. ch. 101, *Visible Emissions Regulation*.

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	Date of Manuf.	Date of Install.	Stack #
Boiler #12	2.5	18.0 gal/hr	Distillate fuel	2023	2024	4
*Boiler #9 **	*3.0*	*21.6 gal/hr*	*Distillate fuel*	*2008*	*2008*	*4*

* This equipment has been removed from the facility

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Records or *Logs* mean either hardcopy or electronic records.

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" 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	4.4	4.4	0.0	100
PM_{10}	4.4	4.4	0.0	100
$PM_{2.5}$	4.4	4.4	0.0	100
SO_2	0.2	0.2	0.0	100
NO_x	20.6	20.6	0.0	100
CO	5.6	5.6	0.0	100
VOC	0.8	0.8	0.0	50*

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

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

E. Facility Classification

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

- As a synthetic minor source of air emissions for criteria pollutants, because UNE is subject to license restrictions that keep facility emissions below major source thresholds for NO_x; 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 #12

Boiler #12 replaced the existing heating unit, Boiler #9, in the Pickus Research Center on the UNE Campus. Boiler #12 is rated at 2.5 MMBtu/hr and firing distillate fuel and will be installed in 2024. The replacement Boiler #12 will vent through the existing Stack #4, which has a release height of 46 feet above ground level and an internal diameter of 1.5 feet. The fuel fired in Boiler #12 will be included in the annual distillate fuel limit of 430,000 gallons per calendar year.

Boiler #12 is licensed to fire distillate fuel. With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boiler #12 shall not exceed 0.0015% by weight (15 ppm).

1. BACT Findings

Following is a BACT analysis for control of emissions from Boiler #12.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
UNE has proposed to burn only low-ash content fuel (distillate fuel) in Boiler #12 and to optimize combustion using good combustion and maintenance practices. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM_{10}/$PM_{2.5}$ emissions from Boiler #12 is the use of good combustion and maintenance practices and the emission limits listed in the tables below.

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

BACT for SO_2 emissions from Boiler #12 is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
UNE considered several control strategies for the control of NOx including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, low NO_x burners, flue gas recirculation (FGR), and use of good combustion and maintenance practices.

Both SCR and SNCR are technically feasible control technologies for minimizing NOx. 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 larger than Boiler #12. Water/steam injection and FGR have similar NOx reduction efficiencies. However, water/steam injection results in reduced boiler efficiency of approximately 5%. Low NO_x burners FGR are not available on this boiler.

BACT for NOx emissions from Boiler #12 is the use of good combustion and maintenance practices and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
UNE considered several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of good combustion and maintenance practices.

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

BACT for CO and VOC emissions from Boiler #12 is the use of good combustion and maintenance practices and the emission limits listed in the tables below.

e. Emission Limits
The BACT emission limits for Boiler #12 were based on the following:

Distillate Fuel

$PM/PM_{10}/PM_{2.5}$	–	0.08 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	–	20 lb/1000 gal based on AP-42 Table 1.3-1, dated 5/10
CO	–	5 lb/1000 gal based on AP-42 Table 1.3-1, dated 5/10
VOC	–	0.34 lb/1000 gal based on AP-42 Table 1.3-1, dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

The BACT emission limits for Boiler #12 are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #12	0.20	0.20	0.20	0.01	0.36	0.09	0.01

2. Visible Emissions

Visible emissions from Boiler #12 shall not exceed 20% opacity on a six-minute block average basis.

3. Periodic Monitoring

Periodic monitoring for Boiler #12 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 its size, Boiler #12 is not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than or equal to 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

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

Boiler #12 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. The unit is considered a new boiler rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements include the following. 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, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

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

(2) Boiler Tune-Up Program

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

(ii) Tune-ups 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**
Oil fired boilers with a heat input capacity of ≤ 5MMBtu/hr **Boiler #12**	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

(iii) 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 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, not to exceed 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)]

(iv) Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and/or EPA upon request. 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."

b. Recordkeeping

(1) 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)]

(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.

(2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

C. Visible Emissions Limit Updates

In 2023, the Department completed rulemaking on revisions to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101. The revised rule went into effect on January 1, 2024. The updated standards for the following equipment will be incorporated into this amendment.

1. Boilers

   Visible emissions from a boiler firing distillate fuel and exhausting through its own stack shall not exceed 20% opacity on a six-minute block average basis.
   [06-096 C.M.R. ch. 101, § 4(A)(2)]

   Visible emissions from a boiler firing natural gas and exhausting through its own stack shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

   Visible emissions from boilers venting to a common stack shall not exceed an opacity equivalent to the highest applicable standard for the individual units which exhaust to the common stack. [06-096 C.M.R. ch. 101§ 4(D)(1)]

2. Engines

   Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time UNE shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

   a. The duration of the startup shall not exceed 30 minutes per event;
   b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
   c. UNE shall keep records of the date, time, and duration of each startup.

   Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

   Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

   Visible emissions from Generators #2, #3, #4, #5, #6, #7, #8, #9, and #10 shall each not exceed 20% opacity on a six-minute block average basis.
   [06-096 C.M.R. ch. 101§ 4(A)(4)]

3. General Process Emissions

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

4. Fugitive Emissions

UNE shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

UNE shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.
[06-096 C.M.R. ch. 101 § 4(C)]

D. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

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-487-71-U-A subject to the conditions found in Air Emission License A-487-71-P-R/A; in amendments A-487-71-Q-A, A-487-71-R-A, A-487-71-S-A, and A-487-71-T-A; 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 Specific Condition (16) of Air Emission License A-487-71-T-A:

(16) **Boilers ##3, #6, #7, #8, #11, and #12**

A. Fuel

1. Total fuel use for Boilers #3, #6, #7, #8, #11, and #12 shall not exceed 430,000 gal/yr of distillate fuel, based on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT/BACT]

2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT/BACT]

3. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT/BACT]

4. Total propane use for UNE shall not exceed 750,000 gal/yr, on a calendar year total basis. Compliance shall be demonstrated by fuel records from the supplier showing quantity of the fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. 115, BPT]

B. Emissions for each boiler shall not exceed the following while firing distillate fuel:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #6	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #7	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #8	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #11	PM	0.08	06-096 C.M.R. ch. 115, BPT

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.54	0.54	0.54	0.01	0.96	0.24	0.02
Boiler #6	0.67	0.67	0.67	4.23	2.52	0.30	0.02
Boiler #7	0.67	0.67	0.67	4.23	2.52	0.30	0.02
Boiler #8	0.08	0.08	0.08	0.53	0.32	0.04	0.01
Boiler #11	0.50	0.50	0.50	0.01	0.90	0.23	0.02

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #12	0.20	0.20	0.20	0.01	0.36	0.09	0.01

[06-096 C.M.R. ch. 115, BPT for Boilers #3, #6, #7, #8, and #11; 06-096 C.M.R. ch. 115, BACT for Boiler #12]

C. Emissions from each boiler shall not exceed the following while firing propane:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #6	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #7	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #11	PM	0.05	06-096 C.M.R. ch. 115, BPT

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.34	0.34	0.34	--	.095	0.55	0.07
Boiler #6	0.42	0.42	0.42	0.01	1.19	0.69	0.09
Boiler #7	0.42	0.42	0.42	0.01	1.19	0.69	0.09
Boiler #11	0.32	0.32	0.32	--	0.90	0.52	0.07

[06-096 C.M.R. ch. 115, BPT]

D. Visible Emissions

1. Visible emissions from a boiler firing distillate fuel and exhausting through its own stack shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]

2. Visible emissions from a boiler firing natural gas and exhausting through its own stack shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

3. Visible emissions from boilers venting to a common stack shall not exceed an opacity equivalent to the highest applicable standard for the individual units which exhaust to the common stack. [06-096 C.M.R. ch. 101§ 4(D)(1)]

E. UNE shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #3, #11, and #12 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT/BACT]

1. An Initial Notification submittal to EPA is due for Boiler #12 within 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

2. The facility 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 or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" **Boilers #3 and #11**	Every 2 years
Oil fired boilers with a heat input capacity of ≤5MMBtu/hr **Boiler #12**	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

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, 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, 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, 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)]

c. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. 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 biennially for Boilers #3, and #11 and every five years for Boiler #12 which covers the previous two or five calendar years, respectively. 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. Recordkeeping

a. 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.

b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

The following shall replace Specific Condition (17)(F) of Air Emission License A-487-71-P-R/A.

(17) **Emergency Generators #1-#10**

F. Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time UNE shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

1. The duration of the startup shall not exceed 30 minutes per event;
2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
3. UNE shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.
[06-096 C.M.R. ch. 101, § 4(A)(4)]

Visible emissions from Generators #2, #3, #4, #5, #6, #7, #8, #9, and #10 shall each not exceed 20% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 101§ 4(A)(4)]

The following are new conditions of Air Emission License A-487-71-P-R/A.

(21) **General Process Sources**

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

(22) **Fugitive Emissions**

A. UNE shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. UNE shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

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

DONE AND DATED IN AUGUSTA, MAINE THIS 22nd DAY OF JULY, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for ____
MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-487-71-P-R/A (issued 8/20/2014).

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 4/11/24
Date of application acceptance: 4/16/24

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

FILED

JUL 22, 2024

State of Maine
Board of Environmental Protection