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

DEPARTMENT ORDER

Loring Job Corps Center **Aroostook County** **Limestone, Maine** **A-843-71-E-R/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal and** **After-the-Fact Amendment**

FINDINGS OF FACT

After review of the air emission license renewal 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

Loring Job Corps Center (LJCC) has applied to renew their Air Emission License for the operation of emission sources associated with their educational facility. LJCC has requested an after-the-fact amendment to their license in order to add or replace several boilers, a furnace, and two generators.

The equipment addressed in this license is located at 36 Montana Road, Limestone, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Date of Install.	Stack #
Boiler #1A (new)*	2.32	16.6	Distillate fuel	2013	1A
Boiler #2A*	2.32	16.6	Distillate fuel	2013	2A
Boiler #1B (new)*	2.94	21	Distillate fuel	2014	1B
Boiler #2B*	2.94	21	Distillate fuel	2014	2B
Boiler #3B*	1.11	7.9	Distillate fuel	2014	3B
Boiler #1C	1.5	10.7	Distillate fuel	2017 (was 1986)	1C
Boiler #1F (new)*	4.13	29.5	Distillate fuel	2014	1F
Boiler #2F*	4.13	29.5	Distillate fuel	2014	1F
Boiler #1H (was HF)	6.2	44.3	Distillate fuel	1996 (was 1986)	1H (HF)
Boiler #1I	3.08	22.0	Distillate fuel	1996 (was 1986)	1I
Boiler #1J	1.05	7.5	Distillate fuel	1996 (was 1986)	1J

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Date of Install.	Stack #
*Boiler #1A (old)***	*5.1*	*36.4*	*Distillate fuel*	*1986*	*1A*
*Boiler #1B (old)***	*4.8*	*34.3*	*Distillate fuel*	*1986*	*1B*
*Boiler #1F (old)***	*7.1*	*50.7*	*Distillate fuel*	*1986*	*1F*
*Boiler #1G (old)***	*5.5*	*39.3*	*Distillate fuel*	*1986*	*1G*
*Boiler #2H***	*1.8*	*12.9*	*Distillate fuel*	*1986*	*2H*

* New to license
** Removed from license

The units in the following table are considered insignificant activities pursuant to *Major and Minor Source Air Emission License Regulations,* 06-096 Code of Maine Rules (C.M.R.) ch. 115, Appendix B, § B.2 because they each have a maximum heat input capacity less than 1.0 MMBtu/hr. They are included here for completeness purposes only.

Units Below Licensing Thresholds

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Date of Install.	Stack #
Boiler #1D	0.3	2	Distillate fuel	1996	1D
Furnace #1E	0.14	3.5	Distillate fuel	1996	1E
Boiler #3F	0.46	5.75	Distillate fuel	2002	2F
Boiler #1G	0.36	3.6	Distillate fuel	1996	1G
Boiler #1L	0.6	4.6	Distillate fuel	1996	1L

LJCC may also have several small boilers, water heaters, and unit heaters not listed in the table above. These are considered insignificant emissions units because they are each rated below 1.0 MMBtu/hr, the heat input capacity level at or above which would require their inclusion in the license; therefore, these small boilers, water heaters, and unit heaters are not addressed further in this license.

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1A	1.10	125	Distillate fuel	8.0	2003	2004
Generator #1B	1.10	125	Distillate fuel	8.0	2003	2004
Generator #1C*	1.41	125	Distillate fuel	10.3	2023	2024
Generator #1F	1.10	125	Distillate fuel	8.0	2003	2004
Generator #1H	0.64	75	Distillate fuel	4.7	2003	2004
Generator #1I*	1.12	125	Distillate fuel	8.2	2023	2024

* New to the license

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

Additionally, LJCC 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.

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.

LJCC has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

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 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 Emissions Levels
PM	1.7	11.2	+9.5	100
PM_{10}	1.7	11.2	+9.5	100
$PM_{2.5}$	1.7	11.2	+9.5	100

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
SO_2	10.6	0.1	-10.5	100
NO_x	3.7	21.2	+17.5	100
CO	1.1	5.8	+4.7	100
VOC	0.1	0.1	-	100

Therefore, this license is considered to be both a renewal and a minor modification and has been processed through 06-096 C.M.R. ch. 115.

E. Facility Classification

With 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 LJCC 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.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1A, #2A, #1B, #2B, #3B, #1C, #1F, #2F, #1H, #1I, and #1J

LJCC operates their 11 licensed boilers for heat and hot water. The boilers are rated between 1.05 MMBtu/hr and 6.2 MMBtu/hr and fire distillate fuel. The boilers were installed in 1996, 2002, and 2013 to 2017, and each exhausts through its own dedicated stack, except Boilers #1F and #2F which share Stack #1F. Where discrepancies between heat input and firing rate existed, firing rate was selected for the basis of combustion calculations.

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 their boilers shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings

The following is an analysis similar to a BACT analysis for control of emissions from Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
LJCC fires only low-ash content fuel, distillate fuel, in the boilers and optimizes combustion conditions by following maintenance practices recommended by the manufacturer. Additional add-on pollution controls are not economically feasible.

BPT for PM/PM_{10}/$PM_{2.5}$ emissions from Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F is the use of low-ash content fuel and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
LJCC fires 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.

BPT for SO_2 emissions from Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
There are 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), low-NO_x burners, and use of oxygen trim systems.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the 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 Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F.

Water/steam injection and FGR can attain similar NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. However, both control strategies reduce the boiler's fuel efficiency.

BPT for NO_x emissions from Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F is the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
There are 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 be economically infeasible.

BPT for CO and VOC emissions from Boilers #1A, #2A, #1B, #2B, #3B, #1F, and #2F is the emission limits listed in the tables below.

e. Emission Limits

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

$PM/PM_{10}/PM_{2.5}$	–	0.08 lb/MMBtu 06-096 C.M.R. ch. 115, BPT
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO_x	–	20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	–	5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	–	0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

The BPT emission limits for the boilers are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1F	PM	0.08
Boiler #2F	PM	0.08
Boiler #1H	PM	0.08
Boiler #1I	PM	0.08

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 #1A	0.19	0.19	0.19	-	0.33	0.08	0.01
Boiler #2A	0.19	0.19	0.19	-	0.33	0.08	0.01
Boiler #1B	0.24	0.24	0.24	-	0.42	0.11	0.01
Boiler #2B	0.24	0.24	0.24	-	0.42	0.11	0.01
Boiler #3B	0.09	0.09	0.09	-	0.16	0.04	-
Boiler #1C	0.12	0.12	0.12	-	0.21	0.05	-
Boiler #1F	0.33	0.33	0.33	0.01	0.59	0.15	0.01
Boiler #2F	0.33	0.33	0.33	0.01	0.59	0.15	0.01
Boiler #1H	0.50	0.50	0.50	0.01	0.89	0.22	0.02
Boiler #1I	0.25	0.25	0.25	-	0.44	0.11	0.01
Boiler #1J	0.08	0.08	0.08	-	0.15	0.04	-

2. Visible Emissions

   Visible emissions from each boiler stack shall not exceed 20% opacity on a six-minute block average basis.

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

   Due to their size, none of the boilers are 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]

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

   Boilers #3B, #1C, and #1J <u>are not</u> 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. Hot water heaters, as defined in this subpart and including hot water boilers (i.e., those not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 MMBtu per hour, are not subject to the requirements of this subpart. [40 C.F.R. § 63.11195]

Boilers #1A, #2A, #1B, #2B, #1F, #2F, #1H, and #1I are subject to 40 C.F.R. Part 63, Subpart JJJJJJ. Boilers #1A, #2A, #1B, #2B, #1F, and #2F are considered new oil boilers less than 10 MMBtu/hr. Boilers #1H and #1I are considered existing oil boilers less than 10 MMBtu/hr.

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. Work Practice Requirements

(1) 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**
Existing Oil fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" (Boiler #1H)	Every 2 years
Oil fired boilers with a heat input capacity of ≤ 5MMBtu/hr (Boilers #1A, #2A, #1B, #2B, #1F, #2F, and #1I)	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 36 months from the previous inspection (Boiler #1H). 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 #1A, #2A, #1B, #2B, #1F, #2F, and #1I). [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 (Boiler #1H). 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 #1A, #2A, #1B, #2B, #1F, #2F, and #1I). [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)]

(2) Compliance Report

For every two-year (Boiler #1H) or five-year (Boilers #1A, #2A, #1B, #2B, #1F, #2F, and #1I) compliance period, LJCC shall prepare a compliance report by March 1st of the following year to document the information below for the two-year or five-year period. 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. Generators #1A, #1B, #1C, #1F, #1H, and #1I

LJCC operates six emergency generators. The emergency generators are generator sets with each generator set consisting of an engine and an electrical generator. The emergency generators have engines rated at 0.64 MMBtu/hr to 1.41 MMBtu/hr that fire distillate fuel. Generators #1A, #1B, #1F, and #1H were manufactured in 2003, and Generators #1C and #1I were manufactured in 2023.

1. BPT Findings

The following is an analysis similar to a BACT analysis for control of emissions from Generators #1C and #1I.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
LJCC fires only low-ash content fuel, distillate fuel, in the boilers and optimizes combustion conditions by following maintenance practices recommended by the manufacturer. Additional add-on pollution controls are not economically feasible.

BPT for PM/PM_{10}/$PM_{2.5}$ emissions from Generators #1C and #1I is the use of low-ash content fuel and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
LJCC fires 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.

BPT for SO_2 emissions from Generators #1C and #1I is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
There are several control strategies for the control of NO_x from distillate fuel-fired engines including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), and proper operation and maintenance of the engine.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the 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 Generators #1C and #1I.

BPT for NO_x emissions from Generators #1C and #1I is proper maintenance and operation of the unit and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
There are 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 generators in question. These controls were determined to be economically infeasible.

BPT for CO and VOC emissions from Generators #1C and #1I is the emission limits listed in the tables below.

e. Emission Limits

The BPT emission limits for the generators are based on the following:

$PM/PM_{10}/PM_{2.5}$	–	0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT
SO_2	–	Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO_x	–	4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
CO	–	0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
VOC	–	0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
Visible Emissions	–	06-096 C.M.R. ch. 101

The BPT/BACT emission limits for the generators 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)
Generator #1A	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1B	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1C	0.17	0.17	0.17	-	6.22	1.34	0.51
Generator #1F	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1H	0.08	0.08	0.08	-	2.84	0.61	0.23
Generator #1I	0.13	0.13	0.13	-	4.95	1.07	0.40

Visible emissions from Generators #1A, #1B, #1F, and #1H each shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time LJCC 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) LJCC 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 the Generators #1C and #1I each shall not exceed 20% opacity on a six-minute block average basis.

BPT for the emergency generators includes recordkeeping of all maintenance conducted on each engine.

Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. Each emergency generator shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, LJCC shall keep records of the total hours of operation and the hours of emergency operation for each unit.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

2. Chapter 169

Generators #1A, #1B, #1F, and #1H were installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 (Chapter 169) and are therefore exempt from this rule pursuant to section 1.

Chapter 169 is applicable to Generators #1C and #1I. They are each an emergency generator powered by an engine with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

a. Chapter 169 Emission Standards Requirements

For Generators #1C and #1I, LJCC shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart IIII. [06-096 C.M.R. ch. 169, § 4(B)(1)]

b. Chapter 169 Stack Height Requirements

Chapter 169 identifies stack height requirements for any stack used to exhaust a generator engine or combination of generator engines with a combined rated output equal to or greater than 1,000 brake horsepower (747 kW). Individual generator engines with a maximum power capacity of less than 300 kW are not included in the assessment of the combined generator power capacity exhausted through a common stack. [06-096 C.M.R. ch. 169, § 6]

There are no stack height requirements in Chapter 169 applicable to Generators #1C and #1I because they exhaust through their own stacks and their rated output is less than 1,000 brake horsepower (747 kilowatts) each. [06-096 C.M.R. ch. 169, § 6]

3. New Source Performance Standards (NSPS)

Due to the dates of manufacture of engines associated with Generators #1A, #1B, #1F, and #1H, the units are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE),* 40 C.F.R. Part 60, Subpart IIII (Subpart IIII) since they were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

Subpart IIII is applicable to the engines associated with Generators #1C and #1I since they were ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of Subpart IIII, the units also meet the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable Subpart IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be

considered an emergency engine under Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement
The engines associated with Generators #1C and #1I shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement
The fuel fired in Generators #1C and #1I shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on Generators #1C and #1I. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements
Generators #1C and #1I shall be operated and maintained according to the manufacturer's emission-related written instructions. LJCC may only change those emission-related settings that are permitted by the manufacturer.
[40 C.F.R. § 60.4211(a)]

LJCC shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, Generators #1C and #1I shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Recordkeeping
LJCC shall keep records that include the hours of operation of Generators #1C and #1I recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the

number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time.
[40 C.F.R. § 60.4214(b)]

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is not applicable to LJCC's emergency engines. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source. However, they are considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since they are categorized as residential, commercial, or institutional emergency engines and they do not operate or are not contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii).

Operation of any emergency engine in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii), would cause the engine to be subject to 40 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements.

D. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

E. Fugitive Emissions

LJCC 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.

LJCC 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.

F. 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 and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on operating each emergency generator for 100 hrs/yr of non-emergency operation and each boiler for 8,760 hr/yr.

This information does not 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)

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boiler #1A	0.8	0.8	0.8	-	1.5	0.4	-
Boiler #2A	0.8	0.8	0.8	-	1.5	0.4	-
Boiler #1B	1.0	1.0	1.0	-	1.8	0.5	-
Boiler #2B	1.0	1.0	1.0	-	1.8	0.5	-
Boiler #3B	0.4	0.4	0.4	-	0.7	0.2	-
Boiler #1C	0.5	0.5	0.5	-	0.9	0.2	-
Boiler #1F	1.5	1.5	1.5	-	2.6	0.7	-
Boiler #2F	1.5	1.5	1.5	-	2.6	0.7	-
Boiler #1H	2.2	2.2	2.2	-	3.9	1.0	0.1
Boiler #1I	1.1	1.1	1.1	-	1.9	0.5	-
Boiler #1J	0.4	0.4	0.4	-	0.7	0.2	-
Generator #1A	-	-	-	-	0.2	0.1	-
Generator #1B	-	-	-	-	0.2	0.1	-
Generator #1C	-	-	-	-	0.3	0.1	-
Generator #1F	-	-	-	-	0.2	0.1	-
Generator #1H	-	-	-	-	0.1	-	-
Generator #1I	-	-	-	-	0.3	0.1	-
Total TPY	**11.2**	**11.2**	**11.2**	**0.1***	**21.2**	**5.8**	**0.1**

* Because estimated emissions are small but not zero, this value was rounded to the nearest tenth of a ton.

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

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
$PM_{2.5}$	15
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.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require LJCC to submit additional information and may require an ambient air quality impact analysis at that time.

ORDER

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

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

The Department hereby grants Air Emission License A-843-71-E-R/A subject to the following conditions.

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

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115] Payment of the annual air emission license fee for LJCC is due by the end of August of each year. [38 M.R.S. § 353-A(3)]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated

noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
[06-096 C.M.R. ch. 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
[06-096 C.M.R. ch. 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 C.M.R. ch. 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and

representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

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

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

(16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Boilers #1A, #2A, #1B, #2B, #3B, #1C, #1F, #2F, #1H, #1I, and #1J**

A. Fuel

1. 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]

2. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered or fuel used. 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, fuel supplier certification, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1F	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #2F	PM	0.08	
Boiler #1H	PM	0.08	
Boiler #1I	PM	0.08	

C. Emissions shall not exceed the following [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 #1A	0.19	0.19	0.19	-	0.33	0.08	0.01
Boiler #2A	0.19	0.19	0.19	-	0.33	0.08	0.01
Boiler #1B	0.24	0.2	0.24	-	0.42	0.11	0.01
Boiler #2B	0.24	0.24	0.24	-	0.42	0.11	0.01
Boiler #3B	0.09	0.09	0.09	-	0.16	0.04	-
Boiler #1C	0.12	0.12	0.12	-	0.21	0.05	-
Boiler #1F	0.33	0.33	0.33	0.01	0.59	0.15	0.01
Boiler #2F	0.33	0.33	0.33	0.01	0.59	0.15	0.01
Boiler #1H	0.50	0.50	0.50	0.01	0.89	0.22	0.02
Boiler #1I	0.25	0.25	0.25	-	0.44	0.11	0.01
Boiler #1J	0.08	0.08	0.08	-	0.15	0.04	-

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

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

1. 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**
Existing Oil fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" (Boiler #1H)	Every 2 years
Oil fired boilers with a heat input capacity of ≤5MMBtu/hr (Boilers #1A, #2A, #1B, #2B, #1F, #2F, and #1I)	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 (Boiler #1H). 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 #1A, #2A, #1B, #2B, #1F, #2F, or #1I).
      [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 (Boiler #1H). 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 #1A, #2A, #1B, #2B, #1F, #2F, or #1I). [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)]

2. Compliance Report

For every two-year (Boiler #1H) or five-year (Boilers #1A, #2A, #1B, #2B, #1F, #2F, and #1I) compliance period, LJCC shall prepare a compliance report shall be prepared by March 1st of the following year to document the information below for the two-year or five-year period. 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."

3. 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.

(18) **Generators #1A, #1B, #1C, #1F, #1H, and #1I**

A. The emergency generators shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

B. LJCC shall keep records that include maintenance conducted on each emergency generator and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]

C. The fuel sulfur content for all generators shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel

supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

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

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)
Generator #1A	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1B	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1C	0.17	0.17	0.17	-	6.22	1.34	0.51
Generator #1F	0.13	0.13	0.13	-	4.83	1.04	0.39
Generator #1H	0.08	0.08	0.08	-	2.84	0.61	0.23
Generator #1I	0.13	0.13	0.13	-	4.95	1.07	0.40

E. Visible Emissions

1. Visible emissions from Generators #1A, #1B, #1F, and #1H each shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time LJCC 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. LJCC 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)]

2. Visible emissions from Generators #1C and #1I shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

F. The emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. The emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

G. Generators #1C and #1I shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT and ch. 169]

1. Manufacturer Certification
   The engines shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel
   The fuel fired in the engines shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. As emergency engines, Generators #1C and #1I, shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]

   b. LJCC shall keep records that include the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
   The engines shall be operated and maintained according to the manufacturer's emission-related written instructions. LJCC may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

LJCC shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

(19) **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)]

(20) **Fugitive Emissions**

A. LJCC 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. LJCC 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)]

(21) 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, LJCC may be required to submit additional information. Upon written request from the Department, LJCC 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 18TH DAY OF JUNE, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[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: December 17, 2024
Date of application acceptance: January 6, 2025

This Order prepared by Zac Hicks, Bureau of Air Quality.