



DEPARTMENT ORDER

**Husson University
 Penobscot County
 Bangor, Maine
 A-551-71-K-R/A**

**Departmental
 Findings of Fact and Order
 Air Emission License
 After-the-Fact Amendment
 and Renewal**

FINDINGS OF FACT

After review of the air emission license amendment and 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

Husson University (Husson) has applied to renew their Air Emission License for the operation of emission sources associated with their educational facility. Husson has requested an amendment to their license in order to add two boilers and two generators to the license after-the-fact, since they are already in operation at the facility.

The equipment addressed in this license is located at 1 College Circle, Bangor, Maine.

B. Emission Equipment

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

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler M-1	3.1	22.1 gal/hr 3,009.7 scf/hr	Distillate Fuel Natural Gas	2007	2008	5
Boiler M-2	3.1	22.1 gal/hr 3,009.7 scf/hr	Distillate Fuel Natural Gas	2007	2008	5
Boiler H-1	10.2	72.9 gal/hr 9,902.9 scf/hr	Distillate Fuel Natural Gas	2005	2006	1
Boiler H-2	10.2	72.9 gal/hr 9,902.9 scf/hr	Distillate Fuel Natural Gas	2005	2006	1
Boiler P-1	8.1	57.9 gal/hr 7,864.1 scf/hr	Distillate Fuel Natural Gas	1967	1967	2

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler P-2	8.1	57.9 gal/hr 7,864.1 scf/hr	Distillate Fuel Natural Gas	1967	1967	2
Boiler G-1	14.1	100.7 gal/hr 13,689.3 scf/hr	Distillate Fuel Natural Gas	1967	1967	3
Boiler G-2	14.1	100.7 gal/hr 13,689.3 scf/hr	Distillate Fuel Natural Gas	1967	1967	3
Boiler C-1	2.2	15.7 gal/hr 2,135.9 scf/hr	Distillate Fuel Natural Gas	2005	2006	4
Boiler C-2	2.2	15.7 gal/hr 2,135.9 scf/hr	Distillate Fuel Natural Gas	2005	2006	4
Boiler AH-1*	1.0	970.9 scf/hr	Natural Gas	2019	2020	6
Boiler AH-2*	1.0	970.9 scf/hr	Natural Gas	2019	2020	6

*New to the license

Note: The facility also operates W-1 Boiler (0.8 MMBtu/hr), which is considered an insignificant emissions unit because it is rated below 1.0 MMBtu/hr, the maximum heat input capacity that would require its inclusion in the license; therefore, this boiler is 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 1*	0.7	50	Distillate Fuel	4.9	2000	2002
Generator 2*	3.1	300	Distillate Fuel	22.4	2006	2007

*New to the license

Husson 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, Husson 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.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

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	3.4	6.5	3.1	100
PM ₁₀	3.4	6.5	3.1	100
PM _{2.5} *	0	6.5	6.5	100
SO ₂	21.2	0.1	-21.1	100
NO _x	6	12.8	6.8	100
CO	3.4	6.1	2.7	100
VOC	0.2	0.5	0.3	100

* PM_{2.5} emissions are being addressed for the first time in this Air Emission License.

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

The application for Husson includes both the license renewal and the installation of new equipment. Therefore, the license is considered to be a renewal of currently licensed emission units and an after-the-fact minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

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 NO_x, because Husson is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. 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 AH-1 and AH-2

Husson operates Boilers AH-1 and AH-2 for facility heating and hot water needs. The boilers are each rated at 1.0 MMBtu/hr and fire natural gas. The boilers were installed in 2020. Boilers AH-1 and AH-2 exhaust through Stack 6.

1. BACT Findings

Following is a BACT analysis for control of emissions from Boilers AH-1 and AH-2.

a. Particulate Matter (PM, PM₁₀, PM_{2.5})

Husson has proposed to burn only low-ash content fuels (natural gas) in the boilers. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM₁₀/PM_{2.5} emissions from Boilers AH-1 and AH-2 is emission limits listed in the tables below.

b. Sulfur Dioxide (SO₂)

Husson has proposed to fire only natural gas. The use of this fuel results in minimal emissions of SO₂, and additional add-on pollution controls are not economically feasible.

BACT for SO₂ emissions from Boilers AH-1 and AH-2 is the use of natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

Possible control strategies for the control of NO_x include Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), and use of good combustion and maintenance practices.

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 vapor. Each technology is effective within a specific temperature range depending on the specific design, 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 AH-1 and AH-2.

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 NO_x control strategies reduce the boiler's fuel efficiency.

BACT for NO_x emissions from Boilers AH-1 and AH-2 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)

Possible control strategies for the control of CO and VOC include 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 be economically infeasible.

BACT for CO and VOC emissions from Boilers AH-1 and AH-2 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 Boilers AH-1 and AH-2 were based on the following:

Natural Gas

PM/PM ₁₀ /PM _{2.5}	–	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO ₂	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO _x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boilers AH-1 and AH-2 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)
AH-1 Boiler	0.05	0.05	0.05	0.01	0.10	0.08	0.01
AH-2 Boiler	0.05	0.05	0.05	0.01	0.10	0.08	0.01

Husson shall be limited to a facility-wide fuel limit of 100 MMscf/yr on a calendar year total basis. This limit applies to licensed emission units only and excludes insignificant activities.

2. Visible Emissions

Visible emissions from Stack 6 shall not exceed 10% opacity on a six-minute block average basis.

3. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used.

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

Due to their size, Boilers AH-1 and AH-2 are 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 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 JJJJJ

Boilers AH-1 and AH-2 are not subject to the NESHAP requirements, because Subpart JJJJJ is not applicable to units firing gas. [40 C.F.R. §§ 63.11195(e) and 63.11237]

C. Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2

Husson operates ten existing boilers for facility heating and hot water needs. Each of these boilers is licensed to fire distillate fuel and natural gas. The boilers are sited in pairs and each pair exhausts from a common stack.

Boilers H-1 and H-2 were installed in 2006, are each rated at 10.2 MMBtu/hr, and exhaust through Stack 1. Boilers P-1 and P-2 were installed in 1967, are each rated at

8.1 MMBtu/hr, and exhaust through Stack 2. Boilers G-1 and G-2 were installed in 1967, are each rated at 14.1 MMBtu/hr, and exhaust through Stack 3. Boilers C-1 and C-2 were installed in 2006, are each rated at 2.2 MMBtu/hr, and exhaust through Stack 4. Boilers M-1 and M-2 were installed in 2008, are each rated at 3.1 MMBtu/hr, and exhaust through Stack 5.

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

1. BPT Findings

The BPT emission limits for Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2 were based on the following:

Distillate Fuel

- PM/PM₁₀/PM_{2.5} – 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO₂ – 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 for units less than 10 MMBtu/hr based on AP-42 Table 1.3-3 dated 5/10
0.20 lb/1,000 gal for units greater than 10 MMBtu/hr based on AP-42 Table 1.3-3 dated 5/10
- Visible Emissions – 06-096 C.M.R. ch. 115 BPT

Natural Gas

- PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- NO_x – 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- CO – 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
- Visible Emissions – 06-096 C.M.R. ch. 115 BPT

The BPT emission limits for the boilers are the following:

Unit	Pollutant	lb/MMBtu	
		Firing Distillate Fuel	Firing Natural Gas
Boiler M-1	PM	0.08	0.05
Boiler M-2	PM	0.08	0.05
Boiler H-1	PM	0.08	0.05
Boiler H-2	PM	0.08	0.05
Boiler P-1	PM	0.08	0.05
Boiler P-2	PM	0.08	0.05
Boiler G-1	PM	0.08	0.05
Boiler G-2	PM	0.08	0.05

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)
Firing Distillate Fuel							
Boiler M-1	0.25	0.25	0.25	0.01	0.44	0.11	0.01
Boiler M-2	0.25	0.25	0.25	0.01	0.44	0.11	0.01
Boiler H-1	0.82	0.82	0.82	0.02	1.46	0.36	0.01
Boiler H-2	0.82	0.82	0.82	0.02	1.46	0.36	0.01
Boiler P-1	0.65	0.65	0.65	0.01	1.16	0.29	0.02
Boiler P-2	0.65	0.65	0.65	0.01	1.16	0.29	0.02
Boiler G-1	1.13	1.13	1.13	0.02	2.01	0.50	0.02
Boiler G-2	1.13	1.13	1.13	0.02	2.01	0.50	0.02
Boiler C-1	0.18	0.18	0.18	0.01	0.31	0.08	0.01
Boiler C-2	0.18	0.18	0.18	0.01	0.31	0.08	0.01

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)
Firing Natural Gas							
Boiler M-1	0.16	0.16	0.16	0.01	0.30	0.25	0.02
Boiler M-2	0.16	0.16	0.16	0.01	0.30	0.25	0.02
Boiler H-1	0.51	0.51	0.51	0.01	0.99	0.83	0.05
Boiler H-2	0.51	0.51	0.51	0.01	0.99	0.83	0.05
Boiler P-1	0.41	0.41	0.41	0.01	0.79	0.66	0.04
Boiler P-2	0.41	0.41	0.41	0.01	0.79	0.66	0.04
Boiler G-1	0.71	0.71	0.71	0.01	1.37	1.15	0.08
Boiler G-2	0.71	0.71	0.71	0.01	1.37	1.15	0.08
Boiler C-1	0.11	0.11	0.11	0.01	0.21	0.18	0.01
Boiler C-2	0.11	0.11	0.11	0.01	0.21	0.18	0.01

Total distillate fuel use for Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2 shall not exceed 700,000 gal/yr, on a calendar year total basis.

Total natural gas use for all licensed boilers shall not exceed 100 MMscf/yr, on a calendar year total basis.

2. Visible Emissions

Visible emissions from the boilers' respective stacks when distillate fuel is being fired in either of the boilers serviced by that stack shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

Visible emissions from the boilers' respective stacks when natural gas is the only fuel being fired in boilers serviced by that stack shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

3. Periodic Monitoring

Periodic monitoring for the boilers 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

Boilers H-1 and H-2 were installed in 2006 and are each rated at 10.2 MMBtu/hr. Therefore, these 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.

Boilers G-1 and G-2 were installed in 1967. Boilers P-1, P-2, C-1, C-2, M-1, and M-2 each have a maximum heat input less than 10 MMBtu/hr. Therefore, these boilers are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc.

[40 C.F.R. § 60.40c]

Husson shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers H-1 and H-2 including, but not limited to, the following:

a. Standards

Sulfur Dioxide (SO₂) Standard: The fuel fired in Boilers H-1 and H-2 shall not exceed 0.5% sulfur by weight. [40 C.F.R. § 60.42c(d)] This fuel sulfur content limit shall be streamlined to the lower limit required by State statute.

b. Reporting and Recordkeeping

- (1) Husson shall maintain monthly records of fuel delivered to the facility with fuel certifications for the fuel used in Boilers H-1 and H-2 to demonstrate sulfur content compliance. [40 C.F.R. § 60.48c(g)]
- (2) Husson shall maintain these records for a period of two years following the date of the record. [40 C.F.R. § 60.48c(i)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the two-year record retention requirement of Subpart Dc shall be streamlined to the more stringent six-year requirement.

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

Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2 are all 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 JJJJJ. The units are considered existing oil boilers. [40 C.F.R. §§ 63.11193 and 63.11195]

Currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ 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. Boiler Tune-Up Program

- (1) A boiler tune-up program is required to be implemented. [40 C.F.R. § 63.11223]
- (2) 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
Oil fired boilers with a heat input capacity of > 5MMBtu/hr Boilers H-1, H-2, P-1, P-2, G-1, G-2	Every 2 years
Oil fired boilers with a heat input capacity of ≤ 5MMBtu/hr Boilers M-1, M-2, C-1, C-2	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

- (3) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
- (i) 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)]
 - (ii) 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)]
 - (iii) 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)]
 - (iv) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
 - (v) 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)]
 - (vi) 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)]
- (4) 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:
- (i) 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;
 - (ii) A description of any corrective actions taken as part of the tune-up of the boiler; and
 - (iii) 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)]

b. Compliance Report

A compliance report shall be prepared by March 1st which covers the previous two 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)]

- (1) Company name and address;
- (2) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (3) 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;
- (4) The following certifications, as applicable:
 - (i) "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."
 - (ii) "No secondary materials that are solid waste were combusted in any affected unit."
 - (iii) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

c. Recordkeeping

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

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. 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 JJJJJ shall be streamlined to the more stringent six-year requirement.

EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

D. Emergency Generators

Husson operates Generator #1, an Olympian D50P1 emergency generator, and Generator #2, a CAT C9 emergency generator. Each generator set consists of an engine and an electrical generator. Generator #1 has an engine rated at 0.7 MMBtu/hr, and Generator #2 has an engine rated at 3.1 MMBtu/hr. Both generators fire distillate fuel. Generator #1 was manufactured and installed in 2002; Generator #2 was manufactured in 2006 and installed in 2007.

1. BACT Findings

The BACT emission limits for Generators #1 and #2 are based on the following:

- PM/PM₁₀/PM_{2.5} – 0.12 lb/MMBtu, 06-096 C.M.R. ch. 115, BACT
- SO₂ – 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 10/96
- CO – 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- VOC – 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- Visible Emissions – 06-096 C.M.R. ch. 115, BACT

The 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 #1	0.08	0.08	0.08	0.01	2.96	0.64	0.24
Generator #2	0.37	0.37	0.37	0.01	13.53	2.92	1.10

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

BACT for each emergency generator 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, Husson 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

Both Generator #1 and Generator #2 were installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and are therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards (NSPS)

Generator #1

Due to the date of manufacture of Generator #1, the engine is 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 III (Subpart III) since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

Generator #2

Subpart III is applicable to Generator #2 above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart III, the unit also meets 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 federal 40 C.F.R. Part 60, Subpart III requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart III, 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 40 C.F.R. Part 60, Subpart III, 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 III Requirements

(1) Manufacturer Certification Requirement

The engine 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)] Generator #2 is an EPA certified engine (Tier 3). The EPA certification supplied by the manufacturer is in the facility's air license file.

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the engine 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 the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

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

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall 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) Initial Notification Requirement

No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

Husson shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the 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 Generator #1. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at an area HAP source. However, it is considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since it is categorized as a residential, commercial, or institutional emergency engine and it does not operate and is 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.

E. 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 the following assumptions:

- Firing 700,000 gal/yr distillate fuel in the boilers;
- Firing 100 MMscf/yr natural gas in the boilers; and
- Operating Generator #1 and Generator #2 for 100 hrs/yr each.

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
Boilers	6.5	6.5	6.5	0.1	12.0	6.0	0.4
Generator #1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Generator #2	0.0	0.0	0.0	0.0	0.7	0.1	0.1
Total TPY	6.5	6.5	6.5	0.1	12.8	6.1	0.5

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source 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 amendment.

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed 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 Husson 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 Renewal and Amendment A-551-71-K-R/A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License Renewal and Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Renewal and Amendment 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 commencing 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]
- (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) **Fuel Limits** [06-096 C.M.R. ch. 115, BPT]
- A. Total distillate fuel use for Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2 shall not exceed 700,000 gal/yr, on a calendar year total basis.
 - B. Total natural gas use for all licensed boilers shall not exceed 100 MMscf/yr, on a calendar year total basis.
 - C. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
 - D. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel used. Records of annual fuel use shall be kept on a monthly and calendar year total basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired.
- (18) **Boilers AH-1 and AH-2**
- A. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	PM_{2.5} (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
AH-1 Boiler	0.05	0.05	0.05	0.01	0.10	0.08	0.01
AH-2 Boiler	0.05	0.05	0.05	0.01	0.10	0.08	0.01

- B. Visible emissions from Stack 6 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

(19) Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2

A. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	
		Firing Distillate Fuel	Firing Natural Gas
Boiler M-1	PM	0.08	0.05
Boiler M-2	PM	0.08	0.05
Boiler H-1	PM	0.08	0.05
Boiler H-2	PM	0.08	0.05
Boiler P-1	PM	0.08	0.05
Boiler P-2	PM	0.08	0.05
Boiler G-1	PM	0.08	0.05
Boiler G-2	PM	0.08	0.05

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)
Firing Distillate Fuel							
Boiler M-1	0.25	0.25	0.25	0.01	0.44	0.11	0.01
Boiler M-2	0.25	0.25	0.25	0.01	0.44	0.11	0.01
Boiler H-1	0.82	0.82	0.82	0.02	1.46	0.36	0.01
Boiler H-2	0.82	0.82	0.82	0.02	1.46	0.36	0.01
Boiler P-1	0.65	0.65	0.65	0.01	1.16	0.29	0.02
Boiler P-2	0.65	0.65	0.65	0.01	1.16	0.29	0.02
Boiler G-1	1.13	1.13	1.13	0.02	2.01	0.50	0.02
Boiler G-2	1.13	1.13	1.13	0.02	2.01	0.50	0.02
Boiler C-1	0.18	0.18	0.18	0.01	0.31	0.08	0.01
Boiler C-2	0.18	0.18	0.18	0.01	0.31	0.08	0.01

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)
Firing Natural Gas							
Boiler M-1	0.16	0.16	0.16	0.01	0.30	0.25	0.02
Boiler M-2	0.16	0.16	0.16	0.01	0.30	0.25	0.02
Boiler H-1	0.51	0.51	0.51	0.01	0.99	0.83	0.05
Boiler H-2	0.51	0.51	0.51	0.01	0.99	0.83	0.05
Boiler P-1	0.41	0.41	0.41	0.01	0.79	0.66	0.04
Boiler P-2	0.41	0.41	0.41	0.01	0.79	0.66	0.04
Boiler G-1	0.71	0.71	0.71	0.01	1.37	1.15	0.08
Boiler G-2	0.71	0.71	0.71	0.01	1.37	1.15	0.08
Boiler C-1	0.11	0.11	0.11	0.01	0.21	0.18	0.01
Boiler C-2	0.11	0.11	0.11	0.01	0.21	0.18	0.01

B. Visible Emissions

Visible emissions from the boilers' respective stacks when distillate fuel is being fired in either of the boilers serviced by that stack shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

Visible emissions from the boilers' respective stacks when natural gas is the only fuel being fired in boilers serviced by that stack shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch.115, BPT]

C. Husson shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers H-1 and H-2 including, but not limited to, the following:

Husson shall maintain monthly records of fuel delivered to the facility with fuel certifications for the fuel used in Boilers H-1 and H-2 to demonstrate sulfur content compliance. [40 C.F.R. § 60.48c(g)]

D. Husson shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to the Boilers H-1, H-2, P-1, P-2, G-1, G-2, C-1, C-2, M-1, and M-2 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. A boiler tune-up program is required to be implemented. [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
Oil fired boilers with a heat input capacity of > 5MMBtu/hr Boilers H-1, H-2, P-1, P-2, G-1, G-2	Every 2 years
Oil fired boilers with a heat input capacity of ≤5MMBtu/hr Boilers M-1, M-2, C-1, C-2	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. 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. A compliance report shall be prepared by March 1st biennially which covers the previous two calendar years. The report shall be maintained by the source and submitted to the Department and/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. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
 - a. Copies of notifications and reports with supporting compliance documentation;
 - b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
 - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. 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.

EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [40 C.F.R. § 63.11225(a)(4)(vi)]

(20) **Emergency Generators**

- A. Generator #1 and Generator #2 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, BACT]
- B. Husson shall keep records that include maintenance conducted on the engines and the hours of operation of the engines 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, BACT]
- C. The fuel sulfur content for Generator #1 and Generator #2 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 tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BACT]
- D. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

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 #1	0.08	0.08	0.08	0.01	2.96	0.64	0.24
Generator #2	0.37	0.37	0.37	0.01	13.53	2.92	1.10

- E. Visible Emissions from each emergency generator shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]
- F. BACT for each emergency generator includes recordkeeping of all maintenance conducted on each engine. [06-096 C.M.R. ch. 115, BACT]
- G. 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, Husson shall keep records of the total hours of operation and the hours of emergency operation for each unit. [06-096 C.M.R. ch. 115, BPT]

- H. 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. [06-096 C.M.R. ch. 115, BPT]
- I. Generator #2 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:
1. Non-Resettable Hour Meter
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]
 2. Annual Time Limit for Maintenance and Testing
 - a. As an emergency engine, the unit shall 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. Husson shall keep records that include the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]
 3. Operation and Maintenance
The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. Husson may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

- (21) If the Department determines that any parameter value pertaining to construction and operation of the proposed 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, Husson may be required to submit additional information. Upon written request from the Department, Husson 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 9th DAY OF June, 2023.

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: April 5, 2023

Date of application acceptance: April 6, 2023

Date filed with the Board of Environmental Protection:

This Order prepared by Kendra Nash, Bureau of Air Quality.

FILED
JUN 09, 2023
State of Maine
Board of Environmental Protection