



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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GOVERNOR

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COMMISSIONER

**Husson University
Penobscot County
Bangor, Maine
A-551-71-J-R (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

FINDINGS OF FACT

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Husson University (Husson) has applied to renew their Air Emission License permitting the operation of emission sources associated with their educational 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:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Install. Date	Stack #
Boiler H-1	10.2	72.9 gal/hr 9,900 scf/hr	#2 fuel oil, 0.5% Natural Gas	2006	1
Boiler H-2	10.2	72.9 gal/hr 9,900 scf/hr	#2 fuel oil, 0.5% Natural Gas	2006	1
Boiler P-1	8.1	57.9 gal/hr 7,860 scf/hr	#2 fuel oil, 0.5% Natural Gas	1967	2
Boiler P-2	8.1	57.9 gal/hr 7,860 scf/hr	#2 fuel oil, 0.5% Natural Gas	1967	2

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<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>	<u>Stack #</u>
Boiler G-1	14.1	100.7 gal/hr 13,690 scf/hr	#2 fuel oil, 0.5% Natural Gas	1967	3
Boiler G-2	14.1	100.7 gal/hr 13,690 scf/hr	#2 fuel oil, 0.5% Natural Gas	1967	3
Boiler C-1	2.2	15.7 gal/hr 2,136 scf/hr	#2 fuel oil, 0.5% Natural Gas	2006	4
Boiler C-2	2.2	15.7 gal/hr 2,136 scf/hr	#2 fuel oil, 0.5% Natural Gas	2006	4
Boiler MH-1	3.1	22.1 gal/hr 3,000 scf/hr	#2 fuel oil, 0.5% Natural Gas	2008	5
Boiler MH-2	3.1	22.1 gal/hr 3,000 scf/hr	#2 fuel oil, 0.5% Natural Gas	2008	5

C. Application Classification

The application for Husson does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the limit on annual MMBtu on the boilers Husson is licensed below the major source thresholds and is considered a synthetic minor.

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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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

Husson operates ten boilers for facility heating and hot water needs. Each of the boilers is licensed to fire both #2 fuel oil and natural gas. The boilers are sited in pairs and each pair exhausts to a common combined stack.

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 the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 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, MH-1, and MH-2 each have a maximum heat input less than 10 MMBtu/hr. Therefore, these boilers are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BPT Findings

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

#2 Fuel Oil

- PM/PM₁₀ – 0.08 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur); 0.5 lb/MMBtu
- NO_x – 20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.34 lb/1000 gal for boilers < 10 MMBtu/hr
0.20 lb/1000 gal for boilers > 10 MMBtu/hr
Based on AP-42, Table 1.3-3, dated 5/10
- Opacity – Visible emissions from each stack shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1), six (6) minute block average in a continuous 3 hour period.

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 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
- Opacity – Visible emissions from each stack shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1), six (6) minute block average in a continuous 3 hour period.

The BPT emission limits for the boilers are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler H-1 (10.2 MMBtu/hr) #2 fuel oil	0.82	0.82	5.14	1.46	0.36	0.01
Boiler H-1 (10.2 MMBtu/hr) natural gas	0.51	0.51	0.01	0.99	0.83	0.05
Boiler H-2 (10.2 MMBtu/hr) #2 fuel oil	0.82	0.82	5.14	1.46	0.36	0.01
Boiler H-2 (10.2 MMBtu/hr) natural gas	0.51	0.51	0.01	0.99	0.83	0.05
Boiler P-1 (8.1 MMBtu/hr) #2 fuel oil	0.65	0.65	4.08	1.16	0.29	0.02
Boiler P-1 (8.1 MMBtu/hr) natural gas	0.41	0.41	0.01	0.79	0.66	0.04
Boiler P-2 (8.1 MMBtu/hr) #2 fuel oil	0.65	0.65	4.08	1.16	0.29	0.02
Boiler P-2 (8.1 MMBtu/hr) natural gas	0.41	0.41	0.01	0.79	0.66	0.04
Boiler G-1 (14.1 MMBtu/hr) #2 fuel oil	1.13	1.13	7.10	2.01	0.50	0.02
Boiler G-1 (14.1 MMBtu/hr) natural gas	0.71	0.71	0.01	1.37	1.15	0.08
Boiler G-2 (14.1 MMBtu/hr) #2 fuel oil	1.13	1.13	7.10	2.01	0.50	0.02
Boiler G-2 (14.1 MMBtu/hr) natural gas	0.71	0.71	0.01	1.37	1.15	0.08
Boiler C-1 (2.2 MMBtu/hr) #2 fuel oil	0.18	0.18	1.11	0.31	0.08	0.01
Boiler C-1 (2.2 MMBtu/hr) natural gas	0.11	0.11	0.01	0.21	0.18	0.01

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler C-2 (2.2 MMBtu/hr) #2 fuel oil	0.18	0.18	1.11	0.31	0.08	0.01
Boiler C-2 (2.2 MMBtu/hr) natural gas	0.11	0.11	0.01	0.21	0.18	0.01
Boiler MH-1 (3.1 MMBtu/hr) #2 fuel oil	0.25	0.25	1.56	0.44	0.11	0.01
Boiler MH-1 (3.1 MMBtu/hr) natural gas	0.16	0.16	0.01	0.30	0.25	0.02
Boiler MH-2 (2.6 MMBtu/hr) #2 fuel oil	0.25	0.25	1.56	0.44	0.11	0.01
Boiler MH-2 (2.6 MMBtu/hr) natural gas	0.16	0.16	0.01	0.30	0.25	0.02

Husson shall be limited to the fuel use equivalent of 84,000 MMBtu/yr on a calendar year basis firing #2 fuel oil, natural gas, or a combination of fuels in the boilers. For conversion purposes, fuel oil shall be considered to have a heating value of 0.14 MMBtu/gal and natural gas shall be considered to have a heating value of 0.00103 MMBtu/scf.

Prior to January 1, 2016, the fuel oil fired in the boilers shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use (both #2 fuel oil and natural gas) and the corresponding MMBtu produced. Husson shall keep these records both on a monthly and annual basis. Documentation shall include the type of fuel used and sulfur content of the #2 fuel oil.

3. 40 CFR Part 63 Subpart JJJJJ

Some of the boilers may be subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ).

Gas-fired boilers are exempt from 40 CFR Part 63 Subpart JJJJJ. However, boilers which fire #2 fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns

liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Any of Husson's boilers which currently fire #2 fuel oil would be considered an existing boiler under this rule. Boiler which currently fire natural gas, but convert back to firing #2 fuel oil in the future, would become subject, as an existing boiler, at the time it is converted back to fuel oil.

For informational purposes, a summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, However, Husson is still subject to any applicable requirements. Notification forms and additional rule information can be found on the following website:
<http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA is due no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program

(a) A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers by March 21, 2014. [40 CFR Part 63.11196(a)(1)]

(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. You may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months for boilers greater than 5 MMBtu/hr or 72 months for boilers less than 5 MMBtu/hr from the previous inspection. [40 CFR Part 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 CFR Part 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. You may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months for boilers greater than 5 MMBtu/hr or 72 months for boilers less than 5MMBtu/hr from the previous inspection. [40 CFR Part 63.11223(b)(3)]
 4. Optimize total emissions of CO, consistent with manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. [40 CFR Part 63.11223(b)(4)]
 5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, 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 CFR Part 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 CFR Part 63.11223(b)(7)]
- (c) A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report has been submitted.
1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size and age of the boiler. (See table below.)

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
<i>New and Existing Oil, Biomass, and Coal fired Boilers with less frequent tune up requirements</i>	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains and optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

iii. Energy Assessment

Boilers H-1, H-2, G-1, and G-2 may be subject to the requirements of an energy assessment if they fire fuel oil.

- (a) A one-time energy assessment shall be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(3)]

- (b) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR Part 63, Table 2(4)]
- (c) A Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

C. Annual Emissions

1. Husson shall be restricted to the following annual emissions, based on a calendar year. The tons per year limits were calculated based on a maximum annual heat input to the boilers of 84,000 MMBtu combined for #2 fuel oil and natural gas. Emissions are based on the worst-case scenario of firing only #2 fuel oil for PM, SO₂, and NO_x and the firing of only natural gas for CO and VOC.

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers	3.36	3.36	21.15	6.00	3.42	0.22
Total TPY	3.36	3.36	21.15	6.00	3.42	0.22

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Husson is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

<u>Pollutant</u>	<u>Tons/Year</u>
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

Based on the total facility licensed emissions, Husson is below the emissions level required for modeling.

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-551-71-J-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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.A. §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 CMR 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 CMR 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 CMR 115]

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR 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 CFR 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 CMR 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 such test results, 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 CFR 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 CMR 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 Part 70 license requirement. [06-096 CMR 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 CMR 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 CMR 115].

SPECIFIC CONDITIONS

(16) Boilers

A. Fuel

1. Each of Husson's boilers may fire either #2 fuel oil or natural gas. [06-096 CMR 115, BPT]
2. Husson shall be limited to the fuel use equivalent of 84,000 MMBtu/year (on a calendar year basis) firing #2 fuel oil, natural gas, or a combination of fuels in the boilers. For conversion purposes, fuel oil shall be considered to have a heating value of 0.14 MMBtu/gal and natural gas shall be considered to have a heating value of 0.00103 MMBtu/scf. [06-096 CMR 115, BPT]
3. Prior to January 1, 2016, the #2 fuel oil fired in the boilers shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
4. Beginning January 1, 2016, #2 fuel oil fired in the boilers shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Beginning January 1, 2018, #2 fuel oil fired in the boilers shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
6. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, the percent sulfur of the fuel delivered (if applicable), and the corresponding total MMBtu/year. Records of annual fuel use and total MMBtu fuel heat input shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
All boilers firing #2 fuel oil	PM	0.08	06-096 CMR 115, BPT
All boilers firing natural gas	PM	0.05	06-096 CMR 115, BPT

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler H-1 (10.2 MMBtu/hr) #2 fuel oil	0.82	0.82	5.14	1.46	0.36	0.01
Boiler H-1 (10.2 MMBtu/hr) natural gas	0.51	0.51	0.01	0.99	0.83	0.05
Boiler H-2 (10.2 MMBtu/hr) #2 fuel oil	0.82	0.82	5.14	1.46	0.36	0.01
Boiler H-2 (10.2 MMBtu/hr) natural gas	0.51	0.51	0.01	0.99	0.83	0.05
Boiler P-1 (8.1 MMBtu/hr) #2 fuel oil	0.65	0.65	4.08	1.16	0.29	0.02
Boiler P-1 (8.1 MMBtu/hr) natural gas	0.41	0.41	0.01	0.79	0.66	0.04
Boiler P-2 (8.1 MMBtu/hr) #2 fuel oil	0.65	0.65	4.08	1.16	0.29	0.02
Boiler P-2 (8.1 MMBtu/hr) natural gas	0.41	0.41	0.01	0.79	0.66	0.04
Boiler G-1 (14.1 MMBtu/hr) #2 fuel oil	1.13	1.13	7.10	2.01	0.50	0.02
Boiler G-1 (14.1 MMBtu/hr) natural gas	0.71	0.71	0.01	1.37	1.15	0.08
Boiler G-2 (14.1 MMBtu/hr) #2 fuel oil	1.13	1.13	7.10	2.01	0.50	0.02
Boiler G-2 (14.1 MMBtu/hr) natural gas	0.71	0.71	0.01	1.37	1.15	0.08
Boiler C-1 (2.2 MMBtu/hr) #2 fuel oil	0.18	0.18	1.11	0.31	0.08	0.01
Boiler C-1 (2.2 MMBtu/hr) natural gas	0.11	0.11	0.01	0.21	0.18	0.01
Boiler C-2 (2.2 MMBtu/hr) #2 fuel oil	0.18	0.18	1.11	0.31	0.08	0.01
Boiler C-2 (2.2 MMBtu/hr) natural gas	0.11	0.11	0.01	0.21	0.18	0.01
Boiler MH-1 (3.1 MMBtu/hr) #2 fuel oil	0.25	0.25	1.56	0.44	0.11	0.1
Boiler MH-1 (3.1 MMBtu/hr) natural gas	0.16	0.16	0.01	0.30	0.25	0.02
Boiler MH-2 (3.1 MMBtu/hr) #2 fuel oil	0.25	0.25	1.56	0.44	0.11	0.1
Boiler MH-2 (3.1 MMBtu/hr) natural gas	0.16	0.16	0.01	0.30	0.25	0.02

- D. Visible emissions from each stack shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 115, BPT]
- E. NSPS 40 CFR Part 60 Subpart Dc

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

1. Husson shall keep monthly records of the amounts of each fuel combusted. Records showing the amount of each fuel delivered to the property (on a monthly basis) are sufficient to meet the requirements of this section. [40 CFR §60.48c(g)]
2. Husson shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period. [40 CFR §60.48c]
3. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk
USEPA Region 1
5 Post Office Sq. Suite 100
Boston, MA 02109-3912

Husson University
Penobscot County
Bangor, Maine
A-551-71-J-R (SM)

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**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

- (17) Husson 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.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 9 DAY OF April, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PATRICIA W. AHO, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/16/12

Date of application acceptance: 3/26/12

Date filed with the Board of Environmental Protection:

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



