

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

#### DEPARTMENT ORDER

Inland Hospital Kennebec County Waterville, Maine A-110-71-M-R Departmental Findings of Fact and Order Air Emission License Renewal

# FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

# I. REGISTRATION

#### A. Introduction

Inland Hospital (Inland) has applied to renew their Air Emission License for the operation of emission sources associated with their healthcare facility.

The equipment addressed in this license is located at 200 Kennedy Memorial Drive, Waterville, Maine.

#### B. Emission Equipment

The following equipment is addressed in this air emission license:

Boil	lers

	Max. Capacity	Maximum		Date of	Date of	
Equipment	(MMBtu/hr)	<b>Firing Rate</b>	Fuel Type	Manuf.	Install.	Stack #
Boiler #1	5.3	37.9 gal/hr	Distillate fuel	1972	1972	1
Doller #1	5.5	5,146 scf/hr	Natural gas	1972		1
Boiler #2	5.2	37.9 gal/hr	Distillate fuel	1072	1972	2
Boller #2	5.3	5,146 scf/hr	Natural gas	1972	1972	Z
Boiler #3	3.3	23.6 gal/hr	Distillate fuel	1987	1007	2
Doner #3	3.3	3,204 scf/hr	Natural gas	198/	1987	3

# **Stationary Engine**

	Max. Input Capacity	Rated Output Capacity		Firing Rate	Date of	Date of
Equipment	(MMBtu/hr)	(kW)	Fuel Type	(gal/hr)	Manuf.	Install.
Generator #1	3.5	250	Distillate fuel	25.6	1989	1989

Inland Hospital	Departmental
Kennebec County	<b>Findings of Fact and Order</b>
Waterville, Maine	Air Emission License
A-110-71-M-R	2 Renewal

Inland 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, Inland may operate <u>portable</u> engines used for maintenance or emergencyonly 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. <u>Definitions</u>

*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.

<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

#### D. Application Classification

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

The application for Inland 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 Code of Maine Rules (C.M.R.) ch. 115.

#### E. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because no license restrictions are necessary to 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.

3

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. <u>Boilers #1, #2, and #3</u>

Inland operates Boilers #1, #2, and #3 for heat. Boilers #1 and #2 are each rated at 5.3 MMBtu/hr and were installed in 1972. Boiler #3 is rated at 3.3 MMBtu/hr and was installed in 1988. Boilers #1, #2, and #3 fire both natural gas as well as distillate fuel and vent through a common stack designated Stack #1. Stack #1 is 20 inches by 20 inches square and releases at a height of 64 feet above ground level.

Boilers #1, #2, and #3 are licensed to fire distillate fuel. With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. (0.0015) (A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1, #2, and #3 shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings

The BPT emission limits for Boilers #1, #2, and #3 were based on the following:

Distillate Fuel

PM/PM <sub>10</sub> /PM <sub>2.5</sub>	_	0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
$SO_2$	—	based on firing distillate fuel with a maximum sulfur content of
		0.0015% by weight
NO <sub>x</sub>	—	20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	—	5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	—	0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible	—	06-096 C.M.R. ch. 115, BPT
Emissions		

Inland Hospital Kennebec County Waterville, Maine A-110-71-M-R	4	Departmental Findings of Fact and Order Air Emission License Renewal	
<u>Natural Gas</u>			
	0.05 lb/MMBtu based on	06 006 C M R ch 115 RPT	

$PM/PM_{10}/PM_{2.5}$	—	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	_	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO <sub>x</sub>	_	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	—	06-096 C.M.R. ch. 115, BPT
Emissions		

The BPT emission limits for Boilers #1, #2, and #3 are the following:

Unit	Fuel	Pollutant	lb/MMBtu	
Boiler #1	Natura 1			
Boiler #2	Natural	PM	0.05	
Boiler #3	gas			
Boiler #1	Distillate			
Boiler #2	Distillate fuel	PM	0.08	
Boiler #3	ruer			

		PM	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Unit	Fuel	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Dailen #1	Natural gas	0.27	0.27	0.27	0.01	0.52	0.44	0.03
Boiler #1	Distillate fuel	0.43	0.43	0.43	0.01	0.76	0.19	0.02
De:1e##2	Natural gas	0.27	0.27	0.27	0.01	0.52	0.44	0.03
Boiler #2	Distillate fuel	0.43	0.43	0.43	0.01	0.76	0.19	0.02
Dailar #2	Natural gas	0.17	0.17	0.17	0.01	0.33	0.27	0.02
Boiler #3	Distillate fuel	0.27	0.27	0.27	0.01	0.48	0.12	0.01

Inland previously had a fuel use limit for both distillate fuel and natural gas. This limit is not needed for the facility to remain below a major source thresholds for criteria pollutants, so the fuel use limit will not be included in this renewal.

2. Visible Emissions

Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis whenever at least one of the boilers that vent through it is firing distillate fuel. At all other times, visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis.

Inland Hospital	Departmental
Kennebec County	Findings of Fact and Order
Waterville, Maine	Air Emission License
A-110-71-M-R	5 Renewal

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

Due to their size, Boilers #1, #2, and #3 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]

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

Boilers #1, #2, and #3 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. The units are considered existing oil boilers. [40 C.F.R. §§ 63.11193 and 63.11195]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements include the following. Additional rule information can be found on the following website: <u>https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source</u>.

- a. Compliance Dates, Notifications, and Work Practice Requirements
  - (1) Boiler Tune-Up Program
    - (i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]
    - (ii) Tune-ups shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

	Tune-Up
Boiler Category	<b>Frequency</b>
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
Boilers #1, and #2	
New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune	e-up Requirements
Oil fired boilers with a heat input capacity of ≤5MMBtu/hr	Externa 5 xxeena
Boiler #3	Every 5 years
[40 C E P + 62 + 11222(a) and Table 2]	•

[40 C.F.R. § 63.11223(a) and Table 2]

- (iii)The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
  - 1. <u>As applicable</u>, 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)]

6

- 2. Inspect the flame pattern, <u>as applicable</u>, 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, <u>as applicable</u>, 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)]
- (iv)<u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, submitted to the Department and/or EPA upon request. The report shall contain the following information:
  - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
  - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

(2) Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> biennially for Boilers #1 and #2 and every five years for Boiler #3, which covers the previous two years for Boilers #1, and #2, and the previous five calendar years for Boiler #3. 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  $\S$  63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

7

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii)A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv)The following certifications, as applicable:
  - 1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - 2. "No secondary materials that are solid waste were combusted in any affected unit."
  - 3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
- b. Recordkeeping
  - (1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
    - (i) Copies of notifications and reports with supporting compliance documentation;
    - (ii) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
    - (iii)Records of the occurrence and duration of each malfunction of each applicable boiler; and
    - (iv)Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Inland Hospital Kennebec County Waterville, Maine A-110-71-M-R

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

8

#### C. Generator #1

Inland operates one emergency generator. Generator #1 consists of an engine and an electrical generator. Generator #1 has an engine rated at 3.5 MMBtu/hr firing distillate fuel. Generator #1 was manufactured in 1989.

1. BPT Findings

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

PM/PM <sub>10</sub> /PM <sub>2.5</sub>	_	0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
$SO_2$	_	Combustion of distillate fuel with a maximum sulfur content
		not to exceed 15 ppm (0.0015% sulfur by weight)
NO <sub>x</sub>	—	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	—	06-096 C.M.R. ch. 115, BPT
Emissions		

The BPT emission limits for the generator are the following:

Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12

Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #1	0.42	0.42	0.42	0.01	15.44	3.36	1.26

2. Visible emissions from Generator #1 shall each not exceed 20% opacity on a six-minute block average basis. During periods of startup, this unit must meet the normal operating visible emissions standard or may elect to comply with the following work practice standards and alternative visible emissions standard. Use of the following work practice

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	9	Renewal

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

- (a) The duration of the startup shall not exceed 30 minutes per event;
- (b) Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- (c) Records shall be maintained documenting the date, time, and duration of each event during which the work practice standards and alternate emission standard are used in lieu of the normal operation visible emissions standard.
- 3. Generator #1 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, Inland shall keep records of the total hours of operation and the hours of emergency operation for each unit.
- 4. Generator #1 is only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Generator #1 is 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.
- 5. Chapter 169

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

6. New Source Performance Standards (NSPS)

Due to its date of manufacture, Generator #1 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 IIII since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

 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 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

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	10	Renewal

is categorized as an institutional emergency engine <u>and</u> it does not operate or 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 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements.

### D. Fugitive Emissions

Inland shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter.

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

#### E. General Process Emissions

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

#### F. <u>Annual Emissions</u>

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:

- Operating the boilers for 8,760 hr/yr each; and
- Operating Generator #1 for 100 hrs/yr.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Inland Hospital	Departmental
Kennebec County	<b>Findings of Fact and Order</b>
Waterville, Maine	Air Emission License
A-110-71-M-R 1	1 Renewal

# **Total Licensed Annual Emissions for the Facility**

(used to calculate the annual license fee)							
$\begin{array}{ c c c c c c } \hline PM & PM_{10} & PM_{2.5} & SO_2 & NO_x & CO & VOC \\ \hline \end{array}$							
Boilers #1, #2, #3	5.0	5.0	5.0	0.2	8.8	5.1	0.4
Generator #1	0.1	0.1	0.1	0.1	0.8	0.2	0.1
Total TPY	5.1	5.1	5.1	0.3	9.6	5.3	0.5

Tons/year

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 <sub>2.5</sub>	15
$SO_2$	50
NO <sub>x</sub>	50
СО	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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

#### ORDER

12

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-110-71-M-R subject to the following conditions.

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

# **STANDARD CONDITIONS**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

Inland Hospital		Departmental
Kennebec County		<b>Findings of Fact and Order</b>
Waterville, Maine		Air Emission License
A-110-71-M-R	13	Renewal

- (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]

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	14	Renewal

- (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]

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	15	Renewal

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

# **SPECIFIC CONDITIONS**

#### (17) **Boilers #1, #2, and #3**

A. Fuel

- 1. Boilers #1, #2, and #3 are licensed to fire natural gas and distillate fuel. [06-096 C.M.R. ch. 115, BPT]
- 2. Inland shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
- 3. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered or fuel used (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following:

Unit	Fuel	Pollutant	lb/MMBtu	Origin and Authority	
Boiler #1	Natural				
Boiler #2		PM	0.05	06-096 C.M.R. ch. 115, BPT	
Boiler #3	gas				
Boiler #1	Distillate				
Boiler #2	Distillate fuel	PM	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #3	Idel				

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

		PM	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Unit	Fuel	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Boiler #1	Natural gas	0.27	0.27	0.27	0.01	0.52	0.44	0.03
Boller #1	Distillate fuel	0.43	0.43	0.43	0.01	0.76	0.19	0.02
Boiler #2	Natural gas	0.27	0.27	0.27	0.01	0.52	0.44	0.03
Boller #2	Distillate fuel	0.43	0.43	0.43	0.01	0.76	0.19	0.02
Boiler #3	Natural gas	0.17	0.17	0.17	0.01	0.33	0.27	0.02
Boller #5	Distillate fuel	0.27	0.27	0.27	0.01	0.48	0.12	0.01

D. Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis whenever at least one of the boilers that vent through it is firing distillate

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	16	Renewal

fuel. At all other times, visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

- E. Inland shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #1, #2, #3 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]
  - 1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
    - a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Tune-Up <u>Frequency</u>
Every 2 years
e-up Requirements
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) <u>As applicable</u>, 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, <u>as applicable</u>, 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, <u>as applicable</u>, 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)]

17

- (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. <u>Tune-Up Report</u>: 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 tuneup of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]
- 2. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> biennially for Boilers #1 and #2 and every five years for Boiler #3, which covers the previous two years for Boilers #1, and #2, and the previous five calendar years for Boiler #3. The reports shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The reports must include the items contained in  $\S$  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."

18

- 3. Recordkeeping
  - a. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
    - (1) Copies of notifications and reports with supporting compliance documentation;
    - (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
    - (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
    - (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
  - b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

#### (18) Generator #1

- A. Generator #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]
- B. Inland shall keep records that include maintenance conducted on Generator #1 and the hours of operation of Generator #1 recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	19	Renewal

- C. The fuel sulfur content for Generator #1 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
- D. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #	0.58	0.58	0.58	0.01	15.36	4.08	0.44

- F. Visible emissions from Generator #1 shall each not exceed 20% opacity on a six-minute block average basis. During periods of startup, these unit must meet the normal operating visible emissions standard or may elect to comply with the following work practice standards and alternative visible emissions standard. Use of the following work practice standards and alternative visible emissions standard in lieu of the normal operating visible emissions standard is limited to no more than once per day.
  - 1. The duration of the startup shall not exceed 30 minutes per event;
  - 2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
  - 3. Records shall be maintained documenting the date, time, and duration of each event during which the work practice standards and alternate emission standard are used in lieu of the normal operation visible emissions standard.

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

# (19) **Fugitive Emissions**

- 1. Inland shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter.
- 2. Inland shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

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

Inland Hospital		Departmental
Kennebec County		Findings of Fact and Order
Waterville, Maine		Air Emission License
A-110-71-M-R	20	Renewal

#### (20) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

(21) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Inland may be required to submit additional information. Upon written request from the Department, Inland 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  $2^{nd}$  day of JANUARY, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 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.]

for

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 11/10/23Date of application acceptance: 11/14/23

Date filed with the Board of Environmental Protection:

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

FILED

JAN 02, 2024

State of Maine Board of Environmental Protection