

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

DEPARTMENT ORDER

Houlton Regional Hospital Aroostook County Houlton, Maine A-208-71-J-R (SM) 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

Houlton Regional Hospital (HRH) 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 20 Hartford Street, Houlton, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Equipment	(MINIDEA/III)	230 gal/hr	Propane, negligible	Manui.	Instan.	Stack #
Boiler #1	20.8	20,194 scf/hr	Natural gas, negligible	1974	1974	1
		148 gal/hr	Distillate fuel, 0.5%			
		230 gal/hr	Propane, negligible			
Boiler #2	20.8	20,194 scf/hr	Natural gas, negligible	1974	1974	1
		148 gal/hr	Distillate fuel, 0.5%			

Generators

<u>Equipment</u>	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack
Generator #1	3.41	350	Distillate fuel, 0.0015%	25	1974	1974	2

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Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, <u>%</u> sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of <u>Install.</u>	Stack #
Generator #2	3.41	350	Distillate fuel, 0.0015%	25	1974	1974	3

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack #
Ethylene Oxide Sterilizer	3.53 oz/load	None	#14 Exhaust Fan

C. Definitions

Distillate Fuel. For the purposes of this license, 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.

D. Application Classification

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

The application for HRH 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.

With the annual fuel limit on Boilers #1 and #2 and the operating hours restriction on Generators #1 and #2, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the 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.

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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.

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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 #1-#2

HRH operates Boilers #1 and #2 for facility hot water and heat. The boilers are rated at 20.8 MMBtu/hr each. Boilers #1 and #2 are licensed to fire distillate fuel, propane, and natural gas. The boilers were both installed in 1974. Both boilers exhaust through a common stack, Stack #1.

BPT Findings

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

<u>Pro</u>		pane		
_	-		-	

PM/PM₁₀ - 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT SO₂ - 0.018 lb/1000 gal based on AP-42 Table 1.5-1 dated 10/96 NO_x - 13 lb/1000 gal based on AP-42 Table 1.5-1 dated 10/96 CO - 7.5 lb/1000 gal based on AP-42 Table 1.5-1 dated 10/96 VOC - 1.0 lb/1000 gal based on AP-42 Table 1.5-1 dated 10/96

Visible – 06-096 C.M.R. ch. 115, BPT

Emissions

Natural Gas

 PM/PM₁₀
 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 – 06-096 C.M.R. ch. 115, BPT

Emissions

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Distillate Fuel

PM/PM₁₀ - 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT SO₂ - based on firing distillate fuel with a maximum sulfur

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content of 0.5% by weight

NO_x - 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 CO - 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 VOC - 0.2 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10

Visible – 06-096 C.M.R. ch. 115, BPT

Emissions

The BPT emission limits for each of the boilers are the following:

<u>Unit</u>	Pollutant	lb/MMBtu
Boilers #1 and #2 (each) Distillate fuel	PM	0.08
Boilers #1 and #2 (each) Propane or natural gas	PM	0.05

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers #1 and #2 (each) (20.8 MMBtu/hr) Distillate fuel	1.66	1.66	10.47	2.97	0.74	0.03
Boilers #1 and #2 (each) (20.8 MMBtu/hr) Propane	1.04	1.04		2.99	1.70	0.23
Boiler #1 and #2 (each) (20.8 MMBtu/hr) Natural gas	1.04	1.04		2.02	1.70	0.11

Visible emissions from Stack #1 when one or both boilers are firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from Stack #1 when one or both boilers are firing propane or natural gas and neither boiler is firing distillate fuel shall not exceed 10% opacity on a six-minute block average basis.

HRH shall be limited to 70,000 MMBtu/year of fuel fired in Boilers #1 and #2 on a 12-month rolling total basis. When converting fuel to MMBtu, HRH shall use heating values of 0.14 MMBtu/gal for distillate fuel, 0.0905 MMBtu/gal of propane, and 0.00103 MMBtu/scf for natural gas.

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Fuel Sulfur Content Requirements

Boilers #1 and #2 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 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, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boilers #1 and #2 shall not exceed 0.0015% by weight (15 ppm).

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2. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use and associated total heat input values both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, as applicable.

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

Due to the years of manufacture of the boilers, they 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

Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJJ. However, boilers which fire 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. [40 C.F.R. § 63.11237]

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010, will be considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

Listed below is a summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements for these boilers when being operated outside of the "gas-fired boiler" definition above. At this time, the Department has not taken delegation of this federal rule promulgated by EPA; however, HRH is still subject to the requirements. Notification forms and additional rule information can be found on the

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following website: https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source.

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- a. Compliance Dates, Notifications, and Work Practice Requirements
 - (1) Notification of Fuel Change

If a change in fuel type used results in the applicability of a different subcategory within subpart JJJJJJ, in a boiler becoming subject to subpart JJJJJJ, or in a boiler switching out of subpart JJJJJJ, notification shall be provided to EPA within 30 days of the change. The notification must identify:

- (i) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, and the date of the notice.
- (ii) The date upon which the fuel switch occurred. [40 C.F.R. § 63.11225(g)]
- (2) Initial Notification of Compliance

An Initial Notification submittal to EPA is due no later than 120 days after becoming subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

- (3) Boiler Tune-Up Program
 - (i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]
 - (ii) 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
Boiler Category	Frequency
New or Existing Oil, Biomass and Coal fired boilers that are not designated	Every 2 years
as "Boilers with Less Frequent Tune-up Requirements"	Every 2 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

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- scheduled shutdown is permitted for up to 72 months from the previous inspection for boilers with oxygen trim systems. [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, 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 boilers with oxygen trim systems. [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, if requested, submitted to EPA. 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)]
- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than 180 days after becoming subject to the standard. [40 C.F.R. § 63.11210(h) and 40 C.F.R. § 63.11214(b)]

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(4) Compliance Report

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)]

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- (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."

(5) Energy Assessment

Boilers #1-#2 are subject to the energy assessment requirement as follows:

- (i) A one-time energy assessment shall be performed by a qualified energy assessor on the applicable boilers no later than 180 days after becoming subject to the standard. [40 C.F.R. § 63.11210(h)]
- (ii) The energy assessment was required to 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 energy use 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;

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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 C.F.R. Part 63, Subpart JJJJJJ, Table 2(16)]

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(iii) A Notification of Compliance Status shall be submitted to EPA no later than 180 days after becoming subject to the standard. [40 C.F.R. § 63.11210(h) and 40 C.F.R. § 63.11214(c)]

b. Recordkeeping

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.

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

C. Generators #1-#2

HRH operates two emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. The emergency generators have engines rated at 3.41 MMBtu/hr each which fire distillate fuel. The emergency generators were both manufactured in 1974.

BPT Findings

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

PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103

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 - 0.35 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 generators are the following:

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Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12
Generator #2	PM	0.12

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (3.41 MMBtu/hr) Distillate fuel	0.41	0.41	0.01	15.04	3.24	1.19
Generator #2 (3.41 MMBtu/hr) Distillate fuel	0.41	0.41	0.01	15.04	3.24	1.19

Visible emissions from each of the distillate fuel-fired emergency generators shall not exceed 20% opacity on a six-minute block average basis.

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, HRH 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. New Source Performance Standards (NSPS)

Due to the dates of manufacture of the compression ignition emergency engines listed above, the engines are not subject to the New Source Performance Standards (NSPS) Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE), 40 C.F.R. Part 60, Subpart IIII since the units were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

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3. 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 the emergency engines listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source. However, they are considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since they are categorized as institutional emergency engines and they do not operate or are not contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii).

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

D. Process Equipment

The Ethylene Oxide Sterilizer at HRH is subject to applicable requirements in the National Emission Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, Subpart WWWW. HRH must demonstrate continuous compliance with the management practice standard in § 63.10390 by recording the date and time of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from a hospital central services staff, a hospital administrator, or a physician that the less-than-full load was medically necessary.

E. Annual Emissions

1. Total Annual Emissions

HRH shall be restricted to the following annual emissions, based on a 12-month rolling total basis. The tons per year totals were calculated based on the following:

- · Firing 70,000 MMBtu/year of fuel in the boilers and the higher emission factor for distillate fuel, propane, or natural gas.
- · Operation of the generators for 100 hours per year each.
- · An average 70 cycles/year of the ethylene oxide sterilizer.

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Total Licensed Annual Emissions for the Facility Tons/year

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(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	<u>CO</u>	VOC	HAP
Boilers	2.8	2.8	17.6	5.0	2.9	0.4	
Generator #1	0.1	0.1	0.1	0.8	0.2	0.1	
Generator #2	0.1	0.1	0.1	0.8	0.2	0.1	
Ethylene Oxide Sterilizer							0.1
Total TPY	3.0	3.0	17.8	6.6	3.3	0.6	0.1

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 C.F.R. Part 52, Subpart A, § 52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, 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).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limits;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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:

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

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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.

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-208-71-J-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 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

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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

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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.

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- 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 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 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 Part 70 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

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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]

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(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]

SPECIFIC CONDITIONS

(16) **Boilers** #1-#2

A. Fuel

- 1. Total fuel use for Boilers #1 and #2 combined shall not exceed 70,000 MMBtu/year input from distillate fuel, propane, and natural gas on a 12-month rolling total basis. When converting fuel to MMBtu, HRH shall use heating values of 0.14 MMBtu/gal for distillate fuel, 0.0905 MMBtu/gal of propane, and 0.00103 MMBtu/scf for natural gas. [06-096 C.M.R. ch. 115, BPT]
- 2. Prior to July 1, 2018, distillate fuel fired by the facility shall not exceed a maximum sulfur content of 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]
- 3. Beginning July 1, 2018, the facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
- 4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use and associated total heat input values shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority		
Boilers #1 and #2 (each) Distillate fuel	PM	0.08	06-096 C.M.R. ch. 115, BPT		
Boilers #1 and #2 (each) Propane or natural gas	PM	0.05	06-096 C.M.R. ch. 115, BPT		

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

Emission <u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers #1 and #2 (each) Distillate fuel	1.66	1.66	10.47	2.97	0.74	0.03
Boilers #1 and #2 (each) Propane	1.04	1.04		2.99	1.70	0.23
Boilers #1 and #2 (each) Natural gas	1.04	1.04		2.02	1.70	0.11

- D. When one or both boilers are firing propane or natural gas and neither is firing distillate fuel, 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. When one or both boilers are firing distillate fuel, visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- F. When not operating under the definition of gas-fired boilers, HRH shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boilers #1 and #2. [incorporated under 06-096 C.M.R. ch. 115, BPT]

(17) **Generators #1-#2**

- A. Each of the emergency generators 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. HRH shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]
- C. The fuel sulfur content for Generators #1-#2 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 C.M.R. ch. 115, BPT]

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D. Emissions shall not exceed the following:

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

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

<u>Unit</u>	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Generator #1 and #2 (each) (3.41 MMBtu/hr) distillate fuel	0.41	0.41	0.01	15.04	3.24	1.19

F. Visible Emissions

Visible emissions from each of the distillate fuel-fired generators shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

G. 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]

(18) Process Equipment

HRH must demonstrate continuous compliance with the management practice standard for the Ethylene Oxide Sterilizer in § 63.10390 by recording the date and time of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from a hospital central services staff, a hospital administrator, or a physician that the less-than-full load was medically necessary.

[40 C.F.R. Part 63 Subpart WWWWW]

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Departmental Findings of Fact and Order Air Emission License Renewal

(19) HRH shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 25 DAY OF September , 2017

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: May aller Kolert Core for PAUL MERCER, 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: 1/13/2017

Date of application acceptance: 1/17/2017

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

Filed

SEP 2 5 2017

State of Maine Board of Environmental Protection