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

DEPARTMENT ORDER

Acadia Hospital, Corp. **Penobscot County** **Bangor, Maine** **A-234-71-O-N/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **After-the-Fact** **Renewal/Amendment**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

The Air Emission License for Acadia Hospital, Corp. (Acadia Hospital) expired on March 30, 2025. Acadia Hospital has applied to renew their license for the operation of emission sources associated with their mental healthcare facility. The equipment addressed in this license is located at 268 Stillwater Ave, Bangor, Maine.

Acadia Hospital has requested an after-the-fact amendment to their license in order to add three boilers and an additional emergency generator.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1	6.3	45 gal/hr 6,176 scf/hr	Distillate Fuel Natural Gas	1991	1992	1
Boiler #2	6.3	45 gal/hr 6,176 scf/hr	Distillate Fuel Natural Gas	1991	1992	1
Boiler #3* (K-HEATING #1)	1.1	1,090 scf/hr	Natural Gas	2022	2023	K #1 HEATING
Boiler #4* (K-HEATING #2)	1.1	1,090 scf/hr	Natural Gas	2022	2023	K #2 HEATING
Boiler #5* (K-HEATING #3)	1.1	1,090 scf/hr	Natural Gas	2022	2023	K #3 HEATING

* new to the license

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

Boilers Below Licensing Thresholds

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
K-DHW #1	0.53	519 scf/hr	Natural Gas	2021	2023	K #1 DHW
K-DHW #2	0.53	519 scf/hr	Natural Gas	2021	2023	K #2 DHW

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity	Fuel Type	Firing Rate	Date of Manuf.	Date of Install.
Generator #1 (Emergency Generator)	4.02	350 HP	Distillate Fuel	28.7 gal/hr	1992	1992
Generator #2* (K-Emergency Generator)	3.97	609 HP	Distillate Fuel	28.4 gal/hr	2023	2023
CHP #1 (CHP)	0.93	75 kW	Natural Gas	930 scf/hr	2016	2016

* new to the license

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Records or *Logs* mean either hardcopy or electronic records.

D. Application Classification

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

The previous air emission license for Acadia Hospital expired on March 30, 2025. A complete application was not submitted prior to the expiration date; therefore, Acadia Hospital is considered to be an existing source applying for an after-the-fact renewal and

minor modification. The Department has determined the facility is a minor source, and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

E. Facility Classification

With the operating hours restriction on the emergency generators, the facility is licensed as follows:

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

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for an after-the-fact renewal requires an analysis similar to a Best Available Control Technology analysis pursuant to 06-096 C.M.R. ch. 115.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Boilers #1 and #2

Acadia Hospital operates Boilers #1 and #2 for facility heating and hot water needs. Boilers #1 and #2 are rated at 6.3 MMBtu/hr each and fire natural gas with the ability to fire distillate fuel during periods of curtailment or interruption in the gas supply. Boilers #1 and #2 were installed in 1992 and exhaust through a common stack, Stack #1.

Boilers #1 and #2 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. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1 and #2 shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings

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

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

   b. Sulfur Dioxide (SO_2)
   Acadia Hospital fires only natural gas and distillate fuel with a sulfur content not to exceed 0.0015% by weight. The use of these fuels results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

   BPT for SO_2 emissions from Boilers #1 and #2 is the use of natural gas and ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

   c. Nitrogen Oxides (NO_x)
   There are several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), low-NO_x burners, and use of oxygen trim systems.

   Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Boilers #1 and #2.

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

   BPT for NO_x emissions from Boilers #1 and #2 is the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
There are several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boiler in question. These controls were determined to be economically infeasible.

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

e. Emission Limits

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

Distillate Fuel

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

Natural Gas

$PM/PM_{10}/PM_{2.5}$	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
SO_2	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO_x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 101

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

Unit	Pollutant	lb/MMBtu
Boiler #1 - *Natural Gas*	PM	0.05
Boiler #1 - *Distillate Fuel*	PM	0.08
Boiler #2 - *Natural Gas*	PM	0.05
Boiler #2 - *Distillate Fuel*	PM	0.08

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 *Natural Gas*	0.32	0.32	0.32	-	0.61	0.51	0.03
Boiler #1 *Distillate Fuel*	0.50	0.50	0.50	0.01	0.90	0.23	0.02
Boiler #2 *Natural Gas*	0.32	0.32	0.32	-	0.61	0.51	0.03
Boiler #2 *Distillate Fuel*	0.50	0.50	0.50	0.01	0.90	0.23	0.02

2. Visible Emissions

   Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis when either Boiler #1 or #2 is firing distillate fuel.

   Visible emissions from Stack #1 shall not exceed 10% opacity on a six-minute block average basis when only natural gas is being fired in Boilers #1 and #2.

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

   Due to their size, Boilers#1 and #2 are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

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]

   In order to maintain the classification of gas-fired boilers, Acadia Hospital may only fire distillate fuel in Boilers #1 and #2 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 "Period of gas curtailment or supply interruption"), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. Acadia Hospital shall keep records of date, time, and duration of each time distillate fuel is fired in each boiler.

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010, is 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.

C. Boilers #3 - #5

Acadia Hospital operates Boilers #3 - #5 for facility heating. The boilers are rated at 1.1 MMBtu/hr each and fire natural gas. The boilers were installed in 2023 and exhaust through their own stacks, K #1 HEATING, K #2 HEATING, and K #3 HEATING, respectively.

1. BPT Findings

Following is an analysis similar to a BACT analysis for control of emissions from Boilers #3 - #5.

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

BPT for $PM/PM_{10}/PM_{2.5}$ emissions from Boilers #3 - #5 is the use of low-ash content fuel, good operating and maintenance practices, and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
Acadia Hospital fires only natural gas. The use of this fuel results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

BPT for SO_2 emissions from Boilers #3 - #5 is the use of natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
There are several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), low-NO_x burners, and use of oxygen trim systems.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia

or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Boilers #3 - #5.

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

BPT for NO_x emissions from Boilers #3 - #5 is the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

There are several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the boiler in question. These controls were determined to be economically infeasible.

BPT for CO and VOC emissions from Boilers #3 - #5 is the emission limits listed in the tables below.

e. Emission Limits

The BPT emission limits for Boilers #3 - #5 were based on the following:

PM	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
$PM_{10}/PM_{2.5}$	–	7.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
SO_2	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO_x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 101

The BPT emission limits for Boilers #3 - #5 are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.06	0.06	0.06	-	0.11	0.09	0.01
Boiler #4	0.06	0.06	0.06	-	0.11	0.09	0.01
Boiler #5	0.06	0.06	0.06	-	0.11	0.09	0.01

2. Visible Emissions

   Visible emissions from Boilers #3 - #5 shall each not exceed 10% opacity on a six-minute block average basis.

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

   Due to their size, Boilers #3 - #5 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 #3 - #5 are not 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. Natural gas-fired units are exempt from the requirements of this regulation. [40 C.F.R. § 63.11195(e)]

D. Generators #1 and #2 and CHP #1

Acadia Hospital operates two emergency generators and one combined heat and power (CHP) generator. The emergency generators, Generators #1 and #2, are generator sets with each gen set consisting of an engine and an electrical generator. Generators #1 and #2 have engines rated at 4.02 MMBtu/hr and 3.97 MMBtu/hr, respectively, that fire distillate fuel. The emergency generators were manufactured in 1992 and 2023, respectively. The CHP unit (CHP #1) is a non-emergency generator consisting of an engine, an electrical generator, and a heat recovery system to capture excess thermal energy and use it for building heat. CHP #1 has an engine rated at 0.93 MMBtu/hr and a rated output of 75 kW that fires natural gas. CHP #1 was manufactured in 2016. CHP #1 is equipped with a three-way non-selective catalytic reduction emissions control package that includes two catalytic converters, temperature and oxygen sensors, and controls designed to reduce emissions of NO_x, CO, and VOC.

1. BPT Findings

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

   Distillate Fuel

$PM/PM_{10}/PM_{2.5}$	–	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_x	–	3.20 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
CO	–	0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
VOC	–	0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 4/25
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

Natural Gas

$PM/PM_{10}/PM_{2.5}$	–	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
SO_2	–	5.88 E-04 lb/MMBtu from AP-42 Table 3.2-3 dated 10/24
NO_x	–	2.27 lb/MMBtu from AP-42 Table 3.2-3 dated 10/24
CO	–	3.51 lb/MMBtu from AP-42 Table 3.2-3 dated 10/24
VOC	–	2.96 E-02 lb/MMBtu from AP-42 Table 3.2-3 dated 10/24
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Generators #1 and #2 and CHP #1 are the following:

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.48	0.48	0.48	0.01	12.86	3.42	0.36
Generator #2	0.48	0.48	0.48	0.01	12.70	3.37	0.36
CHP #1	0.05	0.05	0.05	-	2.11	3.26	0.03

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time Acadia Hospital shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

a. The duration of the startup shall not exceed 30 minutes per event;
b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
c. Acadia Hospital shall keep records of the date, time, and duration of each startup.

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

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

Visible emissions from Generator #2 shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from CHP #1 shall not exceed 10% opacity on a six-minute block average basis.

Generators #1 and #2 shall each be limited to 100 hours of operation per calendar year, excluding hours operating 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, Acadia Hospital shall keep records of the total hours of operation and the hours of emergency operation for each unit.

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

2. Chapter 169

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

Generator #2 is subject to Chapter 169. It is an emergency generator powered by an engine with a rated output of less than 1,000 brake horsepower (747 kW). Chapter 169 identifies emission standards for generator engines subject to this chapter and stack height requirements for certain generator engines subject to this chapter.

a. Chapter 169 Emission Standards Requirements

For Generator #2, Acadia Hospital shall comply with applicable Ch. 169 emission standards by complying with the applicable standards contained in 40 C.F.R. Part 63, Subpart ZZZZ. [06-096 C.M.R. ch. 169, § 4(B)(1)]

b. Chapter 169 Stack Height Requirements

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

There are no stack height requirements in Chapter 169 applicable to Generator #2 because it exhausts through its own stack and its rated output is less than 1,000 brake horsepower (747 kilowatts). [06-096 C.M.R. ch. 169, § 6]

3. New Source Performance Standards (NSPS) - Generator #1

Due to the date of manufacture of Generator #1, the engine is not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE),* 40 C.F.R. Part 60, Subpart IIII since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

4. New Source Performance Standards (NSPS) - Generator #2

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Generator #2 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

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

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or

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

(2) Non-Emergency Situation Operation

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

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

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

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

[40 C.F.R. §§ 60.4211(f) and 60.4219]

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

(1) Manufacturer Certification Requirement
Generator #2 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)] A copy of the certification has been provided to the Department.

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

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on Generator #2. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements
Generator #2 shall be operated and maintained according to the manufacturer's emission-related written instructions. Acadia Hospital may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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

(5) Annual Time Limit for Maintenance and Testing
As an emergency engine, Generator #2 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

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

(7) Recordkeeping
Acadia Hospital shall keep records that include the hours of operation of Generator #2 recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time.

[40 C.F.R. § 60.4214(b)]

5. New Source Performance Standards (NSPS) - CHP #1

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is applicable to CHP #1 since the unit was ordered after June 12, 2006, and manufactured after January 1, 2009. [40 C.F.R. § 60.4230] By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart JJJJ requirements is listed below.

a. Manufacturer Certification Requirement
CHP #1 shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. § 60.4233(e)] A copy of the certification has been provided to the Department.

b. Operation and Maintenance Requirement
CHP #1 shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Acadia Hospital that are approved by the engine manufacturer. Acadia Hospital may only change those settings that are permitted by the manufacturer. Additionally, Acadia Hospital shall maintain and operate the air-to-fuel ratio controller appropriately in order to minimize emissions at all times. [40 C.F.R. § 60.4243(b)(1) and § 60.4243(g)]

Acadia Hospital shall have available for review by the Department a copy of the manufacturer's written instructions or procedures developed by Acadia Hospital that are approved by the engine manufacturer for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

c. Recordkeeping
Acadia Hospital shall keep records that include maintenance conducted on CHP #1, the quantity of fuel fired in CHP #1, manufacturer certification that CHP #1 meets the emission standards found in 40 CFR Part 60, Subpart JJJJ, Table 1, and all notifications related to CHP #1, including supporting documentation. [40 C.F.R. § 60.4245(a)]
Acadia Hospital shall have available for review by the Department a copy of the manufacturer's certification that CHP #1 meets the emission standards found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [06-096 C.M.R. ch. 115, BPT]

6. National Emission Standards for Hazardous Air Pollutants (NESHAP):
   40 C.F.R. Part 63, Subpart ZZZZ – Generator #1

   National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is not applicable to Generator #1. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at an area HAP source. However, it is considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since it is categorized as an institutional emergency engine and 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 40 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements.

E. General Process Emissions

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

F. Fugitive Emissions

Acadia Hospital shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Acadia Hospital 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.

G. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant

activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Operating Generator #1 and Generator #2 for 100 hrs/yr each of non-emergency operation;
- Operating CHP #1 for 8,760 hr/yr firing natural gas; and
- Operating the boilers for 8,760 hr/yr each.

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

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boiler #1	2.2	2.2	2.2	-	3.9	2.3	0.3
Boiler #2	2.2	2.2	2.2	-	3.9	2.3	0.3
Boiler #3	0.2	0.2	0.2	-	0.5	0.4	-
Boiler #4	0.2	0.2	0.2	-	0.5	0.4	-
Boiler #5	0.2	0.2	0.2	-	0.5	0.4	-
Generator #1	-	-	-	-	0.6	0.2	-
Generator #2	-	-	-	-	0.6	0.2	-
CHP #1	0.2	0.2	0.2	-	9.3	14.3	0.1
Total TPY	**5.2**	**5.2**	**5.2**	**0.1***	**19.8**	**20.5**	**0.7**

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

Pollutant	Tons/year
Single HAP	7.9
Total HAP	19.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
$PM_{2.5}$	15

Pollutant	Tons/Year
SO_2	50
NO_x	50
CO	250

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

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

ORDER

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

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

The Department hereby grants Air Emission License A-234-71-O-N/A subject to the following conditions.

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

STANDARD CONDITIONS

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

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

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

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

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

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

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

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

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
[06-096 C.M.R. ch. 115]

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

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

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

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

C. Submit a written report to the Department within thirty (30) days from date of test completion.

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

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

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

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

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

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

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of

establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]

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

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

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

SPECIFIC CONDITIONS

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

A. Fuel

1. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
2. Compliance shall be demonstrated by fuel records showing the quantity, type, and percent sulfur of the fuel delivered. 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:

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

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.50	0.50	0.50	0.01	0.90	0.51	0.03
Boiler #2	0.50	0.50	0.50	0.01	0.90	0.51	0.03

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

E. Visible emissions from Boilers #1 and #2 shall not exceed 10% opacity on a six-minute block average basis from Stack #2, when only natural gas is being fired. [06-096 C.M.R. ch. 101, § 4(A)(3)]

F. Operational Limitation

Acadia Hospital shall only fire distillate fuel in Boilers #1 and #2 during periods of gas curtailment or supply interruption (as defined in 40 C.F.R. § 63.11237 "Period of gas curtailment or supply interruption"), startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Acadia Hospital shall keep records of date, time, and duration of each time distillate fuel is fired in each boiler.
[06-096 C.M.R. ch. 115, BPT]

(18) **Boilers #3 - #5**

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.06	0.06	0.06	-	0.11	0.09	0.01
Boiler #4	0.06	0.06	0.06	-	0.11	0.09	0.01
Boiler #5	0.06	0.06	0.06	-	0.11	0.09	0.01

B. Visible emissions from Boilers #3 - #5 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

(19) **Generators #1 and #2 and CHP #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. Acadia Hospital shall keep records that include maintenance conducted on Generator #1 and the hours of operation of the 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 and #2 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

D. Acadia Hospital shall keep records of all maintenance conducted on the engine associated with Generator #2. [06-096 C.M.R. ch. 115, BPT]

E. 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)
Generator #2	PM	0.12	

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.48	0.48	0.48	0.01	12.86	3.42	0.36
Generator #2	0.48	0.48	0.48	0.01	12.70	3.37	0.36
CHP #1	0.05	0.05	0.05	-	2.11	3.26	0.03

G. Visible Emissions

1. Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Acadia Hospital

shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

a. The duration of the startup shall not exceed 30 minutes per event;
b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
c. Acadia Hospital shall keep records of the date, time, and duration of each startup.

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

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

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

3. Visible emissions from CHP #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

H. 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. Emergency generators and/or fire pumps are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity. [06-096 C.M.R. ch. 115, BPT]

I. Generator #2 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. Manufacturer Certification
Generator #2 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)] A copy of the certification has been provided to the Department.

2. Ultra-Low Sulfur Fuel
The fuel fired in the Generator #2 shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or

testing of the fuel in the tank on-site. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on Generator #2. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. As an emergency engine, Generator #2 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]

   b. Acadia Hospital shall keep records that include the hours of operation of Generator #2 recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
   Generator #2 shall be operated and maintained according to the manufacturer's emission-related written instructions. Acadia Hospital may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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

J. CHP #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart JJJJ, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. Manufacturer Certification
   CHP #1 shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. A copy of the certification has been provided to the Department.

2. Operation and Maintenance
   CHP #1 shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Acadia Hospital that are approved by the engine manufacturer. Acadia Hospital may only change those settings that are permitted by the manufacturer. Additionally, Acadia Hospital shall maintain and operate the air-to-fuel ratio controller appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 C.F.R. § 60.4243(b)(1) and § 60.4243(g)]

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

3. Recordkeeping
   Acadia Hospital shall keep records that include maintenance conducted on the CHP #1, the quantity of fuel fired in CHP #1, manufacturer certification that CHP #1 meets the emission standards found in 40 CFR Part 60, Subpart JJJJ, Table 1, and all notifications related to CHP #1, including supporting documentation. [40 CFR § 60.4245(a)]

   Acadia Hospital shall have available for review by the Department a copy of the manufacturer's certification that CHP #1 meets the emission standards found in 40 CFR Part 60, Subpart JJJJ, Table 1. [06-096 C.M.R. ch. 115, BPT]

(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, § 4(B)(4)]

(21) **Fugitive Emissions**

A. Acadia Hospital shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

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

[06-096 C.M.R. ch. 101, § 4(C)]

(22) 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, Acadia Hospital may be required to submit additional information. Upon written request from the Department, Acadia Hospital 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 24th DAY OF JULY, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 29, 2025
Date of application acceptance: June 5, 2025

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