

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

#### DEPARTMENT ORDER

Portsmouth Naval Shipyard York County Kittery, Maine A-452-70-K-A

Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #7

# **FINDINGS OF FACT**

After review of the Part 70 License Amendment 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

FACILITY	Portsmouth Naval Shipyard (PNS)
LICENSE TYPE	Part 70 Minor License Modification
NAICS CODES	336611 (Ship Building and Repairing)
NATURE OF BUSINESS	National Security (Submarine repair for U.S. Navy)
FACILITY LOCATION	Kittery, Maine

Portsmouth Naval Shipyard (PNS) is an existing stationary source currently operating under Part 70 License A-452-70-D-R/A issued July 23, 2015; amendments A-452-70-E-A (November 3, 2017), A-452-70-F-A (May 24, 2018), A-452-70-H-A (July 17, 2018), A-452-70-G-A (September 24, 2018), A-452-70-I-A (August 16, 2019), and A-452-70-J-A (January 2, 2020); and licenses to construct issued under the New Source Review (NSR) program as found in *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

PNS has requested an amendment to the facility's Part 70 license to incorporate the terms and conditions of two NSR Licenses:

- 1) A-452-77-14-A, issued on January 15, 2021. This NSR license was issued for the addition of two 1.75 MMBtu/hr natural gas fired boilers and three distillate fuel-fired emergency engines: two at 1,500 kW each and one at 1,000 kW.
- 2) A-452-77-15-A, issued on June 14, 2021. This NSR license was issued for the addition of one distillate fuel-fired 1,000 kW emergency engine.

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### **B.** Emission Equipment

The following emission units are addressed by this Part 70 License Amendment:

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#### Boilers

	Maximum Capacity	Maximum Firing Rate		Date of	Date of	
Equipment	(MMBtu/hr)	(scf/hr)	Fuel Type	Manuf.	Install.	Stack #
Boiler #1509-1	1.75	1,725	Natural Gas	2020	2021	1509-1
Boiler #1509-2	1.75	1,725	Natural Gas	2020	2021	1509-2

### **Stationary Engines**

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW or HP)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
G39	15.2	1,500 kW		110	2006	*2019	130
G40	14.33	1,500 kW	Distillate fuel,	103	2019	2021	131
G41	9.85	1,000 kW	0.0015% S	71.9	2020	2021	132
G42	9.85	1,000 kW	0.0013703	71.9	2021	2021	133

\* Unit was previously a temporary rental unit.

# 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.

# **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.

A Part 70 Minor License Modification is for a license change that meets the following criteria:

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- Does not violate any Applicable requirement;
- Does not involve a significant change to existing monitoring, reporting, or recordkeeping requirements in the license;
- Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impact or a visibility or increment analysis;
- Does not seek to establish or change a Part 70 license term or condition for which there
  is no corresponding underlying Applicable requirement, and that the source has
  assumed to avoid an Applicable requirement to which the source would otherwise be
  subject. Such terms and conditions include a federally enforceable emissions cap
  assumed to avoid classification as a Title I modification or a modification or
  reconstruction under any provision of Section 111, or 112 of the Clean Air Act (CAA);
  and an alternative emissions limit approved pursuant to regulations promulgated under
  section 112(i)(5) of the CAA;
- Is not a Title I modification or a modification or reconstruction under any provision of Section 111 or 112 of the CAA; and
- Is not required by the Department to be processed under Part 70 Significant License Modification procedures.

PNS has requested incorporation into the Part 70 Air License the relevant terms and conditions of the New Source Review (NSR) licenses issued to the PNS pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115: A-452-77-14-A, issued on January 15, 2021, and A-452-77-15-A issued on June 14, 2021.

The incorporation of a minor modification NSR license into a Part 70 license is not considered a Part 70 Significant License Modification provided the minor modification NSR license addressed only addition of new equipment or addition of new requirements (i.e., does not modify previously existing requirements). Therefore, this request is not considered a Part 70 Significant License Modification.

A minor modification NSR license is not a Title I modification. The facility is not proposing substantial changes to existing monitoring and testing requirements, nor is it proposing the relaxation of existing license conditions.

Therefore, the facility's request to incorporate NSR requirements is classified as a Part 70 Minor License Modification and has been processed under *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

### **II. AMENDMENT DESCRIPTION**

#### A. NSR License Description

The Department issued NSR License A-452-77-14-A to PNS on January 15, 2021. The license authorized installation and operation of two 1.75 MMBtu/hr natural gas fired boilers (Boiler #1509-1 and Boiler #1509-2) and three distillate fuel-fired emergency engines: two rated at 1,500 kW each (Emergency Generators G39 and G40), and one at 1,000 kW (Emergency Generator G41). In addition, the Department issued NSR License A-452-77-15-A on June 14, 2021, to install a distillate fuel-fired emergency engine rated at 1,000 kW (Emergency Generator G42).

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The NSR licenses were issued pursuant to federal NSR Prevention of Significant Deterioration (PSD) requirements and the Department's air licensing requirements for minor modifications at major stationary sources.

#### **B.** 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 as well as for those sources located in designated non-attainment areas.

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

The BACT analyses for Boilers #B-1509-1 and #B-1509-2 and Emergency Generators G39, G40, and G41 were documented in NSR License A-452-77-14-A (January 15, 2021) and the BACT analysis for Emergency Generator G42 was documented in NSR License A-452-77-15-A (June 14, 2021).

The BACT requirements are included in this license.

### C. Boilers #1509-1 and #1509-2

PNS operates two Lochinvar Crest Condensing Boilers, Boilers #1509-1 and #1509-2, for steam or heat. Each boiler is rated at 1.75 MMBtu/hr and fires only natural gas. The boilers were installed in winter of 2020/2021 and exhaust through individual stacks.

1. Emission Limits

The BACT emission limits for Boiler #1509-1 and Boiler #1509-2 were based on the following:

Natural Gas		
$PM/PM_{10}$	_	0.05 lb/MMBtu, 06-096 C.M.R. ch. 115, BACT
$SO_2$	_	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO <sub>x</sub>	_	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	_	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	_	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	_	06-096 C.M.R. ch. 115, BACT

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The BACT emission limits for Boilers #1509-1 and #1509-2 are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1509-1	0.09	0.09	0.001	0.17	0.14	0.01
Boiler #1509-2	0.09	0.09	0.001	0.17	0.14	0.01

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

2. Periodic Monitoring

The PNS facility-wide natural gas fuel use limit of 2.26 billion cubic feet per year will not change as a result of bringing these units online. Periodic monitoring shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used.

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

Due to their size, the boilers 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 #1509-1 and #1509-2 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. Subpart JJJJJJ is not applicable to boilers

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firing natural gas; therefore, Boilers #1509-1 and #1509-2 are not subject to this subpart. [40 C.F.R. § 63.11195(e)]

### D. Emergency Generators G39, G40, G41, and G42

PNS applied to install and operate four distillate fuel-fired emergency generators. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. Emergency Generator G39, rated at 15.2 MMBtu/hr and manufactured in 2006, was brought onsite as a portable rental unit; PNS decided to purchase the unit and add it to their license. Emergency Generator G40 was manufactured in 2019 and has an engine rated at 14.33 MMBtu/hr. Emergency Generators G41 and G42 have engines manufactured in 2020 and 2021, respectively, and are both rated at 9.85 MMBtu/hr.

#### 1. Emission Limits

The BACT emission limits for Emergency Generator G39 were based on the following:

PM/PM <sub>10</sub>	- 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
$SO_2$	combustion of distillate fuel with a maximum sulfur content
	of 15 ppm (0.0015% sulfur by weight)
NO <sub>x</sub>	- 3.2 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
CO	- 0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
VOC	- 0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
Visible Emissions	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Emergency Generator G40 were based on the following:

$PM/PM_{10}$	- 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
$SO_2$	- combustion of distillate fuel with a maximum sulfur content
	of 15 ppm (0.0015% sulfur by weight)
NO <sub>x</sub>	- 4.97 g/hp-hr based on manufacturer's data
CO	- 0.45 g/hp-hr based on manufacturer's data
VOC	- 0.11 g/hp-hr based on manufacturer's data
Visible Emissions	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Emergency Generator G41 and G42 were based on the following:

PM/PM <sub>10</sub>	- 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
$SO_2$	- combustion of distillate fuel with a maximum sulfur content
	of 15 ppm (0.0015% sulfur by weight)
NO <sub>x</sub>	- 5.97 g/hp-hr based on manufacturer's data
CO	- 0.24 g/hp-hr based on manufacturer's data
VOC	- 0.03 g/hp-hr based on manufacturer's data
Visible Emissions	- 06-096 C.M.R. ch. 115, BACT

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Unit	Pollutant	lb/MMBtu
Emergency Generator G39	PM	0.12
Emergency Generator G40	PM	0.12
Emergency Generator G41	PM	0.12
Emergency Generator G42	PM	0.12

The BACT emission limits for the generators are the following:

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	PM	<b>PM</b> <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	СО	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Emergency Generator G39	1.82	1.82	0.02	48.64	12.92	1.37
Emergency Generator G40	1.72	1.72	0.02	22.03	2.00	0.49
Emergency Generator G41	1.18	1.18	0.02	17.65	0.71	0.09
Emergency Generator G42	1.18	1.18	0.02	17.65	0.71	0.09

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

2. Fuel Use Restriction

The fuel fired in Emergency Generators G39, G40, G41, and G42 shall be included in the facility's distillate fuel limit of 4,900,000 gallons/year, based on a 12-month rolling total.

3. 40 C.F.R. Part 60, Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to the emergency engines listed above since the units were 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 units also meet 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.

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(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 or equipment failure;
- 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
  - Manufacturer Certification Requirement The engines 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)]

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- (2) Ultra-Low Sulfur Fuel Requirement The fuel fired in the engines 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 each engine.
   [40 C.F.R. § 60.4209(a)]
- (4) Operation and Maintenance Requirements Each engine shall be operated and maintained according to the manufacturer's emission-related written instructions. PNS may only change those emissionrelated settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]
- (5) Annual Time Limit for Maintenance and Testing
  - As emergency engines, the units shall each 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

PNS shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through its 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 each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

4. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

*NESHAP for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Emergency Generators G39, G40, G41, and G42. The units are considered new, emergency stationary reciprocating internal combustion engines at an area HAP source. However, the units are also subject to New Source Performance Standards. By meeting the requirements of *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII the units also meet the requirements found in 40 C.F.R. Part 63, Subpart ZZZZ.

5. Control Equipment

There is no control equipment required for Emergency Generators G39, G40, G41, and G42.

6. Periodic Monitoring

The fuel used in Emergency Generators G39, G40, G41, and G42 shall be included in the facility's distillate fuel limit of 4,900,000 gallons/year based on a 12-month rolling total. Compliance shall be demonstrated by records of total distillate fuel use kept on a monthly and 12-month rolling total basis.

### E. Facility Annual Emissions

The facility's licensed annual emissions totals are not changing as a result of this license amendment and shall remain as currently licensed.

# **III.AMBIENT AIR QUALITY ANALYSIS**

PNS previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-452-70-A-I, issued on March 1, 2000). An additional ambient air quality analysis is not required for this Part 70 License Amendment.

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

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

The Department hereby grants the Part 70 License Amendment A-452-70-K-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Air Emission License A-452-70-D-R/A; in amendments A-452-70-E-A, A-452-70-F-A, A-452-70-G-A, A-452-70-H-A, A-452-70-I-A, and A-452-60-J-A; and the following conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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

# **SPECIFIC CONDITIONS**

### The following are new Conditions to Air Emission License A-452-70-D-R/A (July 23, 2015):

### (42) **Boilers #1509-1 and #1509-2**

A. Fuel

- 1. Boilers #1509-1 and #1509-2 shall fire natural gas only.
- 2. The fuel fired in Boilers #1509-1 and #1509-2 shall be included in the PNS facilitywide natural gas fuel use limit of 2.26 billion cubic feet per year.

 Periodic monitoring shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. [A-452-77-14-A (January 15, 2021), BACT]

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- B. Boilers #1509-1 and #1509-2 shall be equipped and operated with low NO<sub>x</sub> burners. [A-452-77-14-A (January 15, 2021), BACT]
- C. Emissions shall not exceed the following [A-452-77-14-A (January 15, 2021), BACT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1509-1	0.09	0.09	0.001	0.17	0.14	0.01
Boiler #1509-2	0.09	0.09	0.001	0.17	0.14	0.01

D. Visible emissions from each boiler shall not exceed 10% opacity on a six-minute block average basis. [A-452-77-14-A (January 15, 2021), BACT]

# (43) Emergency Generators G39, G40, G41, G42

- A. Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.
  [A-452-77-14-A (January 15, 2021) for G39, G40, and G41;
  A-452-77-15-A (June 14, 2021) for G42; BACT]
- B. Fuel Use Restriction

The fuel fired in Emergency Generators G39, G40, G41, 42 shall be included in the facility's distillate fuel limit of 4,900,000 gallons/year, based on a 12-month rolling total.

C. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Emergency	PM	0.12	06-096 C.M.R. ch. 103,
Generator G39			§ (2)(B)(1)(a)
Emergency	PM	0.12	06-096 C.M.R. ch. 103,
Generator G40			§ (2)(B)(1)(a)
Emergency	PM	0.12	06-096 C.M.R. ch. 103,
Generator G41			§ (2)(B)(1)(a)
Emergency	PM	0.12	06-096 C.M.R. ch. 103,
Generator G42			§ (2)(B)(1)(a)

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D. Emissions shall not exceed the following [A-452-77-14-A (January 15, 2021) for G39, G40, and G41; A-452-77-15-A (June 14, 2021) for G42; BACT]:

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Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Emergency Generator G39	1.82	1.82	0.02	48.64	12.92	1.37
Emergency Generator G40	1.72	1.72	0.02	22.03	2.00	0.49
Emergency Generator G41	1.18	1.18	0.02	17.65	0.71	0.09
Emergency Generator G42	1.18	1.18	0.02	17.65	0.71	0.09

E. Visible Emissions

Visible emissions from each of the emergency generators and shall not exceed 20% opacity on a six-minute block average basis. [A-452-77-14-A (January 15, 2021) for G39, G40, and G41; A-452-77-15-A (June 14, 2021) for G42; BACT]

- F. Emergency Generators G39, G40, G41, and G42 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:
  - 1. Manufacturer Certification

Each engine 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)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the engines 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 tank containing the fuel to be fired. [40 C.F.R. § 60.4207(b) and A-452-77-14-A (January 15, 2021) for G39, G40, and

G41; A-452-77-15-A (June 14, 2021) for G42; BACT]

- Non-Resettable Hour Meter A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 60.4209(a)]
- 4. Annual Time Limit for Maintenance and Testing As emergency engines, the units shall each 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 A-452-77-14-A (January 15, 2021) for G39, G40, and G41; A-452-77-15-A (June 14, 2021) for G42; BACT]

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5. Operation and Maintenance

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

6. Recordkeeping

PNS shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through its 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 each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

DONE AND DATED IN AUGUSTA, MAINE THIS  $29^{th}$  day of SEPTEMBER, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-452-70-D-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>April 3, 2020</u> Date of application acceptance: <u>April 6, 2020</u>

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

FILED

SEPT 29, 2021

State of Maine Board of Environmental Protection