



**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-452-77-22-A**

**Departmental  
 Findings of Fact and Order  
 Air Emission License  
 NSR #22**

**Findings of Fact**

After review of the air emission license 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 (the Department) finds the following facts:

**I. Registration**

A. Introduction

Facility	Portsmouth Naval Shipyard
License Type	06-096 C.M.R. ch. 115, Minor Modification
NAICS Codes	336611 (Ship Building and Repair)
Nature of Business	National Security (Submarine repair for U.S. Navy)
Facility Location	Kittery, Maine

B. NSR License Description

Portsmouth Naval Shipyard (PNSY) has requested a New Source Review (NSR) license to install a new 500 kW emergency distillate fuel-fired generator.

C. Emission Equipment

The following equipment is addressed in this NSR license:

**Generator**

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type	Mfr. Date	Install. Date
G62	4.8	35.3	500 kW	Distillate fuel	2026	2026

D. 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.

E. 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 the emergency generator does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

The modification of a major source is considered a major or minor modification based on whether or not expected emissions increases exceed the “Significant Emission Increase” levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. For a major stationary source, the expected emissions increase from each new, modified, or affected unit may be calculated as equal to the difference between the post-modification projected actual emissions and the baseline actual emissions for each NSR regulated pollutant.

1. Baseline Actual Emissions

Baseline actual emissions (BAE) for existing affected emission units are equal to the average annual emissions from any consecutive 24-month period within the ten years prior to submittal of a complete license application. The selected 24-month baseline period can differ on a pollutant-by-pollutant basis. However, there are no existing emission units which are considered “affected” by this project.

2. Projected Actual Emissions

New emission units must use potential to emit (PTE) emissions for projected actual emissions (PAE). Those emissions are presented in the following table.

**Projected Actual Emissions**

Equipment	PM (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	CO (tpy)	VOC (tpy)
G62	0.03	0.03	0.03	--	0.77	0.21	0.02
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>--</b>	<b>0.77</b>	<b>0.21</b>	<b>0.02</b>

3. Emissions Increases

Emissions increases are calculated by subtracting BAE from the PAE. The emission increase is then compared to the significant emissions increase levels.

Pollutant	Baseline Actual Emissions (ton/year)	Projected Actual Emissions (ton/year)	Emissions Increase (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	0	0.03	0.03	25
PM <sub>10</sub>	0	0.03	0.03	15
PM <sub>2.5</sub>	0	0.03	0.03	10
SO <sub>2</sub>	0	--	--	40
NO <sub>x</sub>	0	0.77	0.77	40
CO	0	0.21	0.21	100
VOC	0	0.02	0.02	40

4. Classification

Since emissions increases do not exceed significant emissions increase levels, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

This NSR license is not licensing a new major stationary source of an NSR pollutant that is not greenhouse gases (GHG) nor is it authorizing a major modification for an NSR pollutant to an existing major stationary source. Therefore, greenhouse gases are not considered subject to regulation in this license pursuant to 40 C.F.R. §§ 51.166(b)(48)(iii - iv).

PNSY has submitted an application to incorporate the requirements of this NSR license into the facility's Part 70 air emission license.

## 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 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.

### B. Emergency Generator G62

PNSY has proposed the installation of a new emergency generator, designated G62. The emergency generator is a generator set consisting of an engine and an electrical generator. The emergency generator will have an engine rated at 4.8 MMBtu/hr and will fire distillate fuel. The emergency generator will be manufactured in 2026.

#### 1. BACT Findings

The BACT emission limits for the emergency generator G62 are based on the following:

- PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
- SO<sub>2</sub> – Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO<sub>x</sub> – 3.2 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. 101

The BACT emission limits for G62 are the following:

Unit	Pollutant	lb/MMBtu
G62	PM	0.12

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
G62	0.58	0.58	0.58	0.01	15.36	4.08	0.43

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

BACT for the emergency generator includes recordkeeping of all maintenance conducted on the engine.

## 2. Chapter 169

*Stationary Generators*, 06-096 C.M.R. ch. 169 (Chapter 169), is applicable to G62. 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 G62, PNSY shall comply with the emission standards for emergency generators by complying with the applicable standards contained in 40 C.F.R. Part 60, Subpart IIII. [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 G62 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

*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII is applicable to the emergency engine listed above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200]

A summary of 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 of this subpart 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

The engine 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)]

(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 the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements

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

PNSY 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, the unit 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

PNSY shall keep records that include the hours of operation of the engine 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)]

C. Incorporation Into the Part 70 Air Emission License

Pursuant to *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted to the Department.

D. Annual Emissions

PNSY is currently licensed with facility-wide limits of 2.26 billion cubic feet of natural gas per year and 4,900,000 gallons of distillate fuel per year, both based on a 12-month rolling total. Neither of these limits nor the licensed annual emissions based on them will change as a result of the installation of emergency generator G62.

**III. Ambient Air Quality Analysis**

PNSY previously submitted an ambient air quality impact analysis outlined in air emission license A-452-70-A-I (dated March 1, 2000) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (AAQS). An additional ambient air quality impact analysis is not required for this NSR 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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants New Source Review License A-452-77-22-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

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.

### Specific Conditions

#### (1) Emergency Generator G62

A. PNSY shall keep records of all maintenance conducted on the engine associated with G62. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
G62	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
G62	0.58	0.58	0.58	0.01	15.36	4.08	0.43

D. Visible Emissions

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

E. G62 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:  
[incorporated under 06-096 C.M.R. ch. 115, BACT and 169]

1. Manufacturer Certification

The 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 engine 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, BACT]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on *the* engine.  
[40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

a. As an emergency engine, the unit 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, BACT]

b. PNSY shall keep records that include the hours of operation of the engine 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

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

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PNSY 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, BACT]

(2) **Approval to Construct**

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]

Done and Dated in Augusta, Maine this 1<sup>st</sup> day of JUNE, 2026.

Department of Environmental Protection

BY:

  
\_\_\_\_\_ for Melanie Loyzim, Commissioner

**Please note attached sheet for guidance on appeal procedures.**

Date of initial receipt of application: March 4, 2026

Date of application acceptance: March 17, 2026

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