



DEPARTMENT ORDER

Portsmouth Naval Shipyard  
York County  
Kittery, Maine  
A-452-77-10-A

Departmental  
Findings of Fact and Order  
New Source Review  
NSR #10

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

<b>FACILITY</b>	<b>Portsmouth Naval Shipyard (PNS)</b>
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	336611 (Ship Building and Repairing)
NATURE OF BUSINESS	National Security (Submarine repair for U.S. Navy)
FACILITY LOCATION	Kittery, Maine

B. NSR License Description

Portsmouth Naval Shipyard (PNS, the Shipyard) has requested a New Source Review (NSR) license for the installation of three new 1,000 kW emergency generators and three new 300 kW emergency generators.

C. Emission Equipment

The following equipment is addressed in this NSR license:

**Emergency Generators**

<u>Equipment</u>	<u>Max. Heat Input Capacity (MMBtu/hr)</u>	<u>Max. Firing Rate (gal/hr)</u>	<u>Output (kW)</u>	<u>Fuel Type, % sulfur</u>	<u>Mfr. Date</u>	<u>Install. Date</u>
Emergency Generator G29	10.0	71.9	1,000	Distillate fuel, 0.0015%	2018	2018
Emergency Generator G30	10.0	71.9	1,000	Distillate fuel, 0.0015%	2018	2018

Equipment	Max. Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output (kW)	Fuel Type, % sulfur	Mfr. Date	Install. Date
Emergency Generator G31	10.0	71.9	1,000	Distillate fuel, 0.0015%	2018	2018
Emergency Generator G32	3.1	22.7	300	Distillate fuel, 0.0015%	2018	2018
Emergency Generator G33	3.1	22.7	300	Distillate fuel, 0.0015%	2018	2018
Emergency Generator G34	3.1	22.7	300	Distillate fuel, 0.0015%	2018	2018

D. Definitions

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

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

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 modification of a major source is considered a major or minor modification based on whether or not expected emissions increases for the project exceed the “Significant Emission Increase” levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases for the project are determined by subtracting the baseline actual emissions from the projected actual emissions, as follows:

Pollutant	Projected Actual Emissions for Emergency Generators G29-G34* (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	0.24	25
PM <sub>10</sub>	0.24	15
PM <sub>2.5</sub> **	0.26	10
SO <sub>2</sub>	0.01	40
NO <sub>x</sub>	6.79	40
CO	1.70	100
VOC	0.29	40
CO <sub>2</sub> e***	323	75,000

\*Based on non-emergency operating hours restrictions of 100 hours/year each for all six emergency generators

\*\*Upon review of available emission factors for condensable PM<sub>2.5</sub>, EPA's AP-42, Table 1.3-2 (5/2010) identifies a condensable PM<sub>2.5</sub> emission factor of 1.3 lb/1,000 gallons for distillate fuel fired in external combustion sources. AP-42 identifies no emission factor for condensable PM<sub>2.5</sub> for internal combustion sources such as these units. Estimating both filterable and condensable PM<sub>2.5</sub> emissions from the new, distillate fuel-fired Emergency Generators G29 through G34 assuming all filterable PM is PM<sub>2.5</sub> and using this emission factor to quantify condensable PM<sub>2.5</sub>, the total is 0.26 ton/year, well below the significant emissions increase level for PM<sub>2.5</sub>.

Secondary formation of PM<sub>2.5</sub> due to the precursor emission of NO<sub>x</sub> and SO<sub>2</sub> are considered in Table III-1 of "*Guidance for PM<sub>2.5</sub> Permit Modeling*" (USEPA, 2014), which presents Significant Emission Rate (SER) values for primary PM<sub>2.5</sub> as well as for precursor pollutants. Since the proposed increases for this modification are well below the identified SERs for direct PM<sub>2.5</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, the Department considers secondary formation of PM<sub>2.5</sub> does not contribute appreciably to the total. The Department concludes that this modification is not major for PM<sub>2.5</sub>, and this pollutant will not be addressed further in this license.

\*\*\*CO<sub>2</sub>e = carbon dioxide equivalents

The above values are for Emergency Generators G29 through G34 only. None of the other equipment at the facility is affected by this NSR license. Therefore, 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 since the changes being made are not addressed or prohibited in the Part 70 air emission license. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted to the Department.

## 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 Generators

PNS has requested approval to install three new 1,000 kW (10 MMBtu/hr input) emergency generators, Emergency Generators G29-G31, and three new 300 kW (3.1 MMBtu/hr input) emergency generators, Emergency Generators G32-G34, at the facility. The 1,000 kW emergency generators are gensets with Caterpillar Model C32 engines, and the 300 kW emergency generators are gensets with Caterpillar Model C9 engines. All six units are distillate fuel-fired and have Caterpillar brand electrical generators. All six units will be manufactured and installed at the facility in 2018.

Emergency Generators G29 through G34 will meet the following state and federal regulations as described below.

##### 1. BACT Findings

###### a. Particulate Matter (PM & PM<sub>10</sub>)

Particulate matter emissions from distillate fuel-fired engines are generally controlled through proper operation and maintenance. Additionally, these engines will be subject to 40 C.F.R. Part 60, Subpart IIII, which means they will be required to meet EPA emission standards for emergency stationary engines as discussed below. Given the operating hours restrictions included in 40 C.F.R. Part 60, Subpart IIII, the use of add-on controls for particulate matter is not economically feasible. BACT for PM and PM<sub>10</sub> emissions from the emergency generators shall be proper operation and maintenance of the units, installation of EPA certified emergency stationary engines as required in 40 C.F.R. § 60.4205(b), and emission limits of 1.20 lb/hr each for Emergency Generators G29-G31, 0.37 lb/hr each for Emergency Generators G32-G34, and 0.12 lb/MMBtu each for all six emergency generators.

###### b. Sulfur Dioxide (SO<sub>2</sub>)

For emergency engines that fire distillate fuel and operate for only short periods of time, the use of wet scrubbers or other additional SO<sub>2</sub> add-on control methods would not be economically feasible considering the minimal emissions due to the limited use of the engines. The most practical method for limiting SO<sub>2</sub> emissions of such engines is the use of ultra-low sulfur fuel, such as distillate fuel with a sulfur content no greater than 0.0015% by weight. BACT for SO<sub>2</sub> emissions from the emergency generators shall be the use of distillate fuel with a sulfur content no

greater than 0.0015% by weight, installation of EPA certified emergency stationary engines as required in 40 C.F.R. § 60.4205(b), and emission limits of 0.02 lb/hr each for Emergency Generators G29-G31 and 0.01 lb/hr each for Emergency Generators G32-G34.

c. Nitrogen Oxides (NO<sub>x</sub>)

Potentially available control options for reducing emissions of NO<sub>x</sub> from distillate fuel-fired generators include combustion controls, selective catalytic reduction (SCR), and non-selective catalytic reduction (NSCR). Combustion controls are typically implemented through design features such as electronic engine controls, injection systems, combustion chamber geometry, and turbocharging systems. Most new engines are designed with these features as standard equipment.

SCR and NSCR are both post-combustion NO<sub>x</sub> reduction technologies. SCR uses ammonia to react with NO<sub>x</sub> in the gas stream in the presence of a catalyst to form nitrogen and water. NSCR uses a catalyst to convert CO, NO<sub>x</sub>, and hydrocarbons into carbon dioxide, nitrogen, and water without the use of an additional reagent, and requires strict air-to-fuel control to maintain high reduction effectiveness without increasing hydrocarbon emissions. For a unit of this usage (emergency back-up engine), neither SCR nor NSCR would be economically feasible considering the minimal emissions due to the limited use of the engines.

BACT for NO<sub>x</sub> emissions from the emergency generators shall be the use of good combustion controls, proper operation and maintenance of the units, installation of EPA certified emergency stationary engines as required in 40 C.F.R. § 60.4205(b), and emission limits of 32.00 lb/hr each for Emergency Generators G29-G31 and 13.67 lb/hr each for Emergency Generators G32-G34.

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

CO and VOC emissions are a result of incomplete combustion, caused by conditions such as insufficient residence time or limited oxygen availability. CO and VOC emissions from distillate fuel-fired generators are generally controlled through proper operation and maintenance. Oxidation catalysts have been used on large generators to reduce CO and VOC emission levels in the exhaust, but, like SCR and NSCR, use of an oxidation catalyst on emergency engines with limited yearly use would not provide a significant environmental benefit and would not be economically feasible. BACT for CO and VOC emissions from the emergency generators shall be proper operation and maintenance of the units, installation of EPA certified emergency stationary engines as required in 40 C.F.R. § 60.4205(b), and the following emission limits:

<u>Units</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Emergency Generators G29-G31 [each]	8.50	0.90
Emergency Generators G32-G34 [each]	2.95	1.09

e. Greenhouse Gases (GHG)

Emissions of greenhouse gases from emergency engines are minimized through proper operation and maintenance of the units and maintaining each unit's efficiency. There are no specific GHG emission requirements for the emergency generators at this time.

f. Visible Emissions

BACT for visible emissions from each of the emergency generators shall be the following:

Visible emissions from each emergency generator shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility shall comply with the following work practice standards:

- (1) The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
- (2) The units shall be operated in accordance with the manufacturer's emission-related operating instructions;
- (3) The unit operator shall minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and
- (4) The units, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.

g. Fuel Use Restriction

The fuel fired in the emergency generators shall also be included in the facility's distillate fuel limit of 4,900,000 gallons/year, based on a 12-month rolling total.

2. Emission Limits

The BACT emission limits for Emergency Generators G29 through G31 are based on the following:

- PM/PM<sub>10</sub> - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103, § 2.B.(1)(a)
- 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 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 Generators G32 through G34 are based on the following:

- PM/PM<sub>10</sub> - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103, § 2.B.(1)(a)
- 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> - 4.41 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
- CO - 0.95 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
- VOC - 0.35 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Emergency Generators G29 through G34 are the following:

Unit	Pollutant	lb/MMBtu
Emergency Generators G29-G34 [each]	PM	0.12

Units	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 Generators G29-G31 [each]	1.20	1.20	0.02	32.00	8.50	0.90
Emergency Generators G32-G34 [each]	0.37	0.37	0.01	13.67	2.95	1.09

Visible emissions from each emergency generator shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility shall comply with the following work practice standards:

- a. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
- b. The units shall be operated in accordance with the manufacturer's emission-related operating instructions;
- c. The unit operator shall minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and
- d. The units, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.

### 3. Periodic Monitoring

The fuel used in Emergency Generators G29 through G34 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.

### 4. 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 generators since all six 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. 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 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

(1) 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)]

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the engines shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [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

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by PNS that are approved by the engine manufacturer. PNS may only change those emission-related 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 the emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping

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

C. Incorporation Into the Part 70 Air Emission License

The requirements in this 06-096 C.M.R. ch. 115 New Source Review license shall apply to the facility upon issuance. Per *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. PNS submitted an application to incorporate the requirements of this New Source Review license into their Part 70 license on April 23, 2018.

D. Facility Annual Emissions and Fuel Use Cap

PNS is currently licensed to a facility-wide limit of 2.26 billion cubic feet of natural gas and 4,900,000 gallons of distillate fuel, based on a 12-month rolling total. Neither these limits nor the licensed annual emissions based on them will change as a result of the installation of the new emergency generators.

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 March 1, 2000). An additional ambient air quality 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-452-77-10-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the standard and special 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 Generators G29-G34**

A. Emergency Generators G29 through G34 shall each 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. Emissions shall not exceed the following:

<u>Units</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Emergency Generators G29-G34 [each]	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]:

<u>Units</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Emergency Generators G29-G31 [each]	1.20	1.20	0.02	32.00	8.50	0.90
Emergency Generators G32-G34 [each]	0.37	0.37	0.01	13.67	2.95	1.09

- D. Visible emissions from each emergency generator shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility shall comply with the following work practice standards:
1. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
  2. The units shall be operated in accordance with the manufacturer's emission-related operating instructions;
  3. The unit operator shall minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engines, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and
  4. The units, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.  
[06-096 C.M.R. ch. 115, BACT]
- E. Emergency Generators G29 through G34 shall all meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:
1. **Manufacturer Certification**  
The engines 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 Distillate Fuel**  
The distillate fuel fired in the engines shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [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 each engine.  
[40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

- a. 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 06-096 C.M.R. ch. 115, BACT]
- b. PNS shall keep records that include maintenance conducted on each engine and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

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

DONE AND DATED IN AUGUSTA, MAINE THIS 9 DAY OF July, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Corne for  
PAUL MERCER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 23, 2018

Date of application acceptance: May 3, 2018

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

