STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



GOVERNOR



PATRICIA W. AHO
COMMISSIONER

PORTSMOUTH NAVAL SHIPYARD
YORK COUNTY
KITTERY, MAINE
A-452-77-6-A

DEPARTMENTAL
FINDINGS OF FACT AND ORDER
NEW SOURCE REVIEW (NSR)
1 NSR #6

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 M.R.S.A, Section 344, Section 590, 06-096 CMR 115, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

| FACILITY | Portsmouth Naval Shipyard (PNS) |
|------------------------|--|
| PART 70 LICENSE NUMBER | A-452-70-C-R |
| LICENSE TYPE | 06-096 CMR 115 New Source Review Amendment |
| NAIC CODES | 336611- Ship Building and Repair |
| NATURE OF BUSINESS | National Security (Submarine Repair for U.S. Navy) |
| FACILITY LOCATION | Kittery, Maine |

B. Amendment Description

PNS has submitted an application to amend its Air Emissions License per 06-096 CMR 115 New Source Review (NSR) requirements. The amendment is for the installation and operation of two new 2.5 MMBtu/hr natural gas low pressure water heating boilers in Building 337. Also, this amendment includes the replacement of the back-up/emergency generator for Building 292 as well as installing long-term temporary back-up generators at various locations of the Shipyard.

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The following equipment is addressed in this air emission license:

Boilers

| Equipment | Maximum Capacity (MMBtu/hr) | Maximum Firing Rate (scf/hr) | Fuel Type | Date of Manuf. | Stack# |
|---------------|-----------------------------------|------------------------------------|-------------|-------------------|--------|
| Boiler #337-1 | 2.5 | 2439 | Natural Gas | 2014 | 112 |
| Boiler #337-2 | 2.5 | 2439 | Natural Gas | 2014 | 112 |

Emergency Generation Equipment *

| Equipment | Power Output (kW) | Maximum Capacity (MMBtu/hr) | Fuel Firing Rate (gal/hr) | Fuel Type | Date of Manufacture | |
|-----------------|-------------------------|-----------------------------------|---------------------------------|--------------|------------------------|--|
| | | | | 21/1/20 | | |
| Emergency | 300 | 3.06 | 22.2 | Distillate | 2014 | |
| Generator (G12) | | | | | | |

* PNS has requested to have the flexibility to add long-term temporary (up to 5 years) emergency generators to its air emissions license without having to reopen the license for each one when the units are needed and/or become available. These units will meet all applicable BACT, NSR, and NSPS requirements and is explained in greater detail in Section II of this amendment.

C. Application Classification

PNS is a major source per the Department's 06-096 CMR 100 regulation. PNS has not requested to increase its current licensed allowed emissions and the installation of the two 2.5 MMBtu/hr boilers and the replacement of an emergency generator will not exceed "Significant Emissions Increase Levels" as defined in the Department's regulations. Therefore, this amendment is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations* 06-096 CMR 115 (as amended) since the changes being made are not addressed or prohibited in the Part 70 air emission license.

Since the new boilers and emergency generator are not currently licensed, all criteria pollutants are subject to Best Available Control Technology (BACT) requirements. An application to incorporate the requirements of this amendment into the Part 70 air emission license shall be submitted no later than 12 months from commencement of the requested operation.

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II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). 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 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boiler #337-1 and Boiler #337-2

PNS has requested to include two new 2.5 MMBtu/hr natural gas low pressure water heating boilers in Building 337. The units have a manufacture date of 2014 and will fire only natural gas which exhausts through a common 34 foot stack.

Due to the size of the boilers, the units are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BACT Findings

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

Natural Gas

| $PM/PM_{10}/PM_{2.5}$ | | 0.05 lb/MMBtu based on 06-096 CMR 115, BACT |
|-----------------------|---|--|
| 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 |

The BACT emission limits for the boilers are the following:

| Unit | PM (lb/hr) | PM10 (lb/hr) | PM2.5 (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---------------|---------------|-----------------|------------------|-------------------------|-------------------------|---------------|----------------|
| Boiler #337-1 | 0.13 | 0.13 | 0.13 | 0.01 | 0.24 | 0.20 | 0.01 |
| Boiler #3372 | 0.13 | 0.13 | 0.13 | 0.01 | 0.24 | 0.20 | 0.01 |

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Visible emissions from each boiler shall not exceed 20% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

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 on line. 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. 40 CFR Part 63 Subpart JJJJJJ

Subpart JJJJJJ is not applicable to units firing gas, therefore Boiler #337-1 and Boiler 337-2 are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ).

C. Emergency Generator (G12)

PNS is replacing the emergency generator (G12) for Building 292 sewage lift station with a new Kohler Model 300REOZJ (300 kW) generator set with a maximum design capacity of 3.06 MMBtu/hr. The engine was manufactured in 2014 and is Tier-3 EPA certified engine which will fire ultra-low sulfur diesel fuel. The new emergency generator provides back-up power to support emergency response critical to Building 292. Emergency Generator (G12) was ordered after July 11, 2005 and manufactured after April 1, 2006; therefore, it is subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

In addition, PNS is looking to rent six (6) 900 kW Cummins generator sets from the Navy's Mobile Utilities Support Equipment (MUSE) program for up to five years. New emergent naval regulations require additional backup power for submarines while at the Shipyard. PNS is looking at renting six ~900 kW mobile generators to provide emergency power to the submarines while they are pier-side and in dry-dock. The diesel generators are Tier-2 certified and would be rented for up to five years while a longer term solution is evaluated. The generators would only provide emergency power to the submarine in the event that the submarines' diesel power is not available and shore power is lost. So the likelihood of its use for emergency purposes is minimal. However, the generators would still be periodically tested/maintained to ensure reliability. The generators may move with the submarine as it moves from pier-side to dry-dock and back to pier-side, however the generators may be in one location for greater than one year (i.e. while in dry-dock). The generators will be used until a longer term solution is

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implemented. Two of the generators are expected to go into service in August 2014. The other generator sets are expected to arrive over the next several months.

All six generator sets are EPA Tier-2 emissions certified Cummins 900 Kw, 900DQFAC generator sets (Engine Model #QST30-G5 NR2) with a manufacturer's date of approximately 2007. Since all these long-term temporary back-up generators were ordered after July 11, 2005 and manufactured after April 1, 2006; the units are subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Therefore the new replacement back-up generator (G12) and the back-up MUSE generators will meet the following state and federal regulations as described as described below:

06-096 CMR 115 of the Department's regulations requires that a BACT analysis be conducted for the back-up generators, and for each pollutant emitted. This BACT analysis addresses the five criteria combustion pollutants emitted from the generator: sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), carbon monoxide (CO), and volatile organic compounds (VOC).

BACT for PM/PM10/PM2.5

Particulate matter emissions from diesel engines are generally controlled through proper operation and maintenance. To meet BACT, the most stringent emission limits of the Tier standards and of those required in 40 CFR Part 60 Subpart IIII will be used therefore PNS shall limit particulate emissions from Generator (G12) to 0.2 lb/hr and from the long-term temporary MUSE back-up engines to 0.4 lb/hr.

BACT for SO₂

The units addressed in this amendment are considered emergency generator sets. PNS will accept the hours of operation restriction specified in 40 CFR Part 60, Subpart IIII. At this low level of operation, the only practical method for limiting sulfur dioxide emissions is through the use of ultra low sulfur fuel. PNS will minimize SO₂ emissions from the generators by using diesel fuel having a sulfur content no greater than 0.0015% by weight to comply with EPA new source performance standards, Subpart IIII.

BACT for NOx

Control technologies sometimes used to reduce NOx emissions from diesel engines include selective catalytic reduction (SCR) and fuel injection timing retard (FITR). For generators used only for emergency back-up, both SCR and FITR would not provide a significant environmental benefit. In fact, each technology could adversely affect the reliability of the generators in power outage situations, and could result in emissions of new pollutants

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(ammonia from SCR) or increased emissions of current pollutants (increased CO, PM, and opacity from FITR). PNS proposes to meet BACT for NOx by meeting an emissions limit of 6.1 lb/hr for Generator (G12) and 18.2 lb/hr from the MUSE back-up engines, which are based on the emission limits required in 40 CFR Part 60 Subpart IIII.

BACT for CO and VOC

CO and VOC emissions from diesel engines are generally controlled through proper operation and maintenance. Oxidation catalysts have been used on large prime power applications to reduce CO and VOC emission levels in the exhaust. Like SCR technology, use of an oxidation catalyst on an engine of such limited use would not provide a significant environmental benefit, and could adversely affect the reliability of the unit. PNS proposes to meet BACT by meeting CO and VOC emission limits of 2.3 lb/hr and 0.9 lb/hr, respectively for Generator (G12). BACT for CO and VOC emissions from the back-up MUSE generator sets is 6.9 lb/hr and 2.6 lb/hr respectively.

A summary of the BACT analysis for back-up Generator set G12 (300 kW) and back-up MUSE generator sets (900 kW each) is the following:

- 1. The back-up generator sets shall fire only distillate fuel with a maximum sulfur content not to exceed 15 ppm by weight.
- 2. G12 and MUSE generator sets shall each be limited to 100 hr/yr of non-emergency operation for purposes such as maintenance checks and readiness testing. Compliance shall be demonstrated by a written log of each generator's operating hours.
- 3. G12 and the MUSE generator sets shall be equipped with a non-resettable hour meter.
- 4. PM emission limits from 40 CFR Part 60 Subpart IIII and Tier II for the MUSE generator sets are streamlined into the PM BACT emission limits. The PM₁₀ limits are derived from the PM limits.
- 5. NO_x, CO, and VOC emission limits are based upon 40 CFR Part 60 Subpart IIII and Tier II for the MUSE generator sets.
- 6. PNS shall operate and maintain G12 and the MUSE generator sets in accordance with the manufacturer's written instructions. PNS shall not change settings that are not approved in writing by the manufacturer.
- 7. Visible emissions from each of the emergency generator sets shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.
- 8. The BACT emission limits for each of the generator sets are based on the following:

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PM/PM<sub>10</sub> - 0.2 g/kW-hr (EPA Certified Tier requirements & 40 CFR Part 60 Subpart IIII);

SO<sub>2</sub> - based on firing 0.0015% sulfur;

NOx - 9.2 g/kW-hr (EPA Certified Tier III & 40 CFR Part 60 Subpart IIII);
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CO – 3.5 g/kW-hr (EPA Certified Tier requirements & 40 CFR Part 60 Subpart IIII);

VOC – 1.3 g/kW-hr (EPA Certified Tier III & 40 CFR Part 60 Subpart IIII);

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| Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | PM2.5 (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---------------------------|---------------|-----------------------------|------------------|----------------------------|-------------------------|---------------|----------------|
| Emergency Generator (G12) | 0.2 | 0.2 | 0.2 | 0.1 | 6.1 | 2.3 | 0.9 |
| MUSE Generators (each) | 0.4 | 0.4 | 0.4 | 0.2 | 18.2 | 6.9 | 2.6 |

40 CFR Part 60, Subpart IIII

The federal regulation 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is applicable to emergency generator set (G12) and the long-term temporary emergency MUSE generator sets listed above since the units were ordered after July 11, 2005 and manufactured after April 1, 2006. By meeting the requirements of 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 CFR Part 63, Subpart ZZZZ.

a. Emergency Definition:

<u>Emergency stationary ICE</u> means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) Paragraph (1) above notwithstanding, the emergency stationary ICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
 - (i) 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 beyond 100 hours per calendar year.

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- (ii) Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Paragraphs (1) and (2) above notwithstanding, emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving, non-emergency 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, except if the following conditions are met:

- (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR §60.4211(f) and §60.4219]

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b. 40 CFR Part 60, Subpart IIII Requirements:

(1) Manufacturer Certification Requirement

The generators shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement

The fuel fired in the generators shall not exceed 15 ppm sulfur (0.0015% sulfur by weight), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on each of the generators. [40 CFR §60.4209(a)]

(4) Operation and Maintenance Requirements

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

(5) Annual Time Limit for Maintenance and Testing

The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency 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 unless the conditions in §60.4211(f)(3)(i) are met). [40 CFR §60.4211(f)]

(6) Initial Notification Requirement

No initial notification is required for emergency engines. [40 CFR §60.4214(b)]

(7) Recordkeeping

PNS shall keep records that include maintenance conducted on the engines and the hours of operation of the engines recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a

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period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4211(f)(3)(i), PNS shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §60.4214(b)]

Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 New Source Review amendment shall apply to the facility upon amendment issuance. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended), Section 1(C)(8), for a modification that has undergone NSR requirements or been processed through 06-096 CMR 115, the source must then apply for an amendment to the Part 70 license within one year of commencing the proposed operations as provided in 40 CFR Part 70.5.

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 Minor Modification, Air Emission License A-452-77-6-A, subject to the conditions found in Air Emission License A-452-70-C-R, subsequent amendments, and in the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License 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

The following are new conditions:

(1) Boilers #337-1 and #337-2

A. Fuel

Boiler #337-1 and Boiler #337-2 shall fire natural gas only. The PNS facility-wide natural gas fuel limit of 2.26 billion cubic feet per year will not change as a result of

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bringing these units on line. 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. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

| Unit | Pollutant | lb/MMBtu | Origin and Authority |
|---------------|-----------|----------|----------------------|
| Boiler #337-1 | PM | 0.05 | 06-096 CMR 115, BACT |
| Boiler #337-2 | PM | 0.05 | 06-096 CMR 115, BACT |

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

| Emission Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|------------------|---------------|-----------------------------|----------------------------|----------------------------|---------------|----------------|
| Boiler #337-1 | 0.13 | 0.13 | 0.01 | 0.24 | 0.20 | 0.01 |
| Boiler #337-2 | 0.13 | 0.13 | 0.01 | 0.24 | 0.20 | 0.01 |

D. Visible Emissions

Visible emissions from each boiler firing natural gas shall not exceed 10% opacity on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period. [06-096 CMR 101]

(2) Emergency Generator Set (G12) and MUSE generator sets

A. The Emergency Generator set (G12) and emergency MUSE generator sets shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.

[06-096 CMR 115]

B. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

| Unit | PM (lb/hr) | PM ₁₀ (lb/hr) | SO ₂ (lb/hr) | NO _x (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---------------|-----------------------------|-------------------------|----------------------------|---------------|----------------|
| Emergency Generator (G12) (3.06 MMBtu/hr) | 0.2 | 0.2 | 0.1 | 6.1 | 2.3 | 0.9 |
| Emergency MUSE generators (each at ~900 kW) | 0.4 | 0.4 | 0.2 | 18.2 | 6.9 | 2.6 |

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C. Visible Emissions

Visible emissions from each emergency generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

D. The emergency generators shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:

1. Manufacturer Certification

The generators shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the generators shall not exceed 15 ppm sulfur (0.0015% sulfur by weight), 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 CFR §60.4207(b) and 06-096 CMR 115, BACT]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

a. The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency 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 unless the conditions in §60.4211(f)(3)(i) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of the generator operating hours. [40 CFR §60.4211(f) and 06-096 CMR 115, BACT]

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b. PNS shall keep records that include maintenance conducted on the generators and the hours of operation of the engines recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generator is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4211(f)(3)(i), then PNS shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes.

5. Operation and Maintenance

The generators 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 CFR §60.4211(a)]

6. Recordkeeping

PNS shall keep records that include maintenance conducted on the engines and the hours of operation of the engines recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4211(f)(3)(i), PNS shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §60.4214(b)]

- (3) PNS shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605-C).
- (4) PNS shall submit an application to incorporate this amendment into the Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 CMR 140, Section 1(C)(8)]

| PORTSMOUTH NAVAL SHIPYARD |) | DEPARTMENTAL |
|---------------------------|----|----------------------------|
| YORK COUNTY |) | FINDINGS OF FACT AND ORDER |
| KITTERY, MAINE |) | NEW SOURCE REVIEW (NSR) |
| A-452-77-6-A | 14 | NSR #6 |
| | | |

DONE AND DATED IN AUGUSTA, MAINE THIS 20 DAY OF August , 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mair allen Robert Coro PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 19, 2014

Date of application acceptance: June 2, 2014

Date filed with the Board of Environmental Protection:

This Order prepared by Edwin Cousins, Bureau of Air Quality

