

# The United States **Environmental Protection Agency** Region 1

# **AUTHORITY TO CONSTRUCT** NEPTUNE LNG L.L.C. DEEP WATER PORT Permit Number RG1-DPA-CAA-02

EPA Region 1 is issuing this permit pursuant to the Deepwater Port Act (DPA) of 1974, as amended, 33 U.S.C. § 1501 et seq., and in accordance with the provisions of Title I of the Federal Clean Air Act (CAA), 42 U.S.C. §§ 7401 et seq., and applicable rules and regulations approved or promulgated under the CAA, including air permitting rules promulgated by the Massachusetts Department of Environmental Protection (DEP) and approved by the U.S. Environmental Protection Agency (EPA). This permit authorizes Neptune LNG L.L.C., (Permittee or Neptune LLC) to construct and operate the Neptune LLC deepwater port (Neptune) in accordance with the permit application, all supplemental information associated with the permit application, federal regulations, DEP regulations, and the terms and conditions set forth in this permit.

The design, construction and operation of Neptune and the vessels that use Neptune shall be subject to the attached permit conditions and permit limitations. This permit becomes effective on the date of issuance or the date the Permittee obtains an incidental take statement from the National Marine Fisheries Service, whichever comes last, and shall remain in effect only as long as Neptune LLC continues to hold an incidental take statement or until rescinded by or surrendered to EPA. EPA may revoke this permit if the Permittee does not commence construction within two years after receipt of permit issuance or if, during construction, construction is suspended for a period of one year or more. This permit does not relieve the Permittee from the obligation to comply with applicable state and federal air pollution control rules and regulations.

Robert Varney

Regional Administrator

EPA Region 1-New England

7/28/07

# **Acronyms and Abbreviations**

BOG boil off gas

BTU British thermal unit

CFR Code of Federal Regulations

CMR Code of Massachusetts Regulations

CO carbon monoxide

DEP Massachusetts Department of Environmental Protection

DWP Deepwater Port

EPA Environmental Protection Agency

ft<sup>3</sup> cubic feet hr hour kW kilowatt

LNG liquefied natural gas

lb pound

mcf/hr thousand cubic feet per hour MMBtu million British thermal units mmscf million standard cubic feet

Neptune The deepwater port operate by Neptune LNG LLC.

Neptune LLC Neptune LNG L.L.C.

NOx nitrogen oxides OxCat Oxidation Catalyst

PM<sub>10</sub> particulate matter less than 10 microns in diameter PM<sub>2.5</sub> particulate matter less than 2.5 microns in diameter

ppmv parts per million by volume
ppmw parts per million by weight
SCV submerged combustion vaporizer
scfm standard cubic feet per minute
SIP State Implementation Plan

SO<sub>2</sub> sulfur dioxide

SRV Shuttle and regasification vessels

SSMP startup, shutdown, and malfunction plan

tpy tons per year

VOC volatile organic compounds

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# I. PROJECT DESCRIPTION

Neptune is designed to moor liquefied natural gas (LNG) shuttle and regasification vessels (SRVs) with a capacity of approximately 140,000 cubic meters (m³). For the vaporization process, each SRV would be equipped with two natural gas-fired boilers and two power generation engines. The power generation engines are dual fuel engines that would operate in the gas mode (with less than 1% distillate fuel oil) while moored at Neptune.

# II. EQUIPMENT LIST

This permit applies to the following list of equipment aboard any SRV or any Liquid Natural Gas Regasification Vessel (LNGRV) with similar equipment. For all other LNGRVs with different equipment configurations that intend to use Neptune, Neptune LLC must first apply for and receive approval from EPA Region 1 before the LNGRV moors and regasifies at Neptune.

Unit ID Number	Description
B1 and B2	Two 312 MMBtu/hr natural gas-fired boilers
GE1 and GE2	Two 11,400-kw dual fuel power generator engines operating in
	the gas mode

Except as specifically provided otherwise, the requirements of this permit apply to each of these emission units on any SRV or LNGRV while moored and regasifying at Neptune

#### III. FACILITY LOCATION

Neptune will be located off the shore of Massachusetts approximately 22 miles Northeast of Boston. The exact latitude and longitude of this location are:

Latitude: N 42<sup>0</sup> 27' 06.23" - 42<sup>0</sup> 29' 06.28" Longitude: W 70<sup>0</sup>36'20.78" - 70<sup>0</sup> 36' 22.48"

#### IV. **DEFINITIONS**

The following definitions shall be used for the purposes of this permit. Terms not otherwise defined in this permit have the meaning assigned to them in the referenced CAA provisions, EPA regulations, and the DEP regulations.

Breakdown condition

An unforeseeable failure or malfunction of a) any air pollution control equipment which causes a violation of any emission limitation or restriction in the permit, or b) any instack continuous monitoring equipment, provided such failure or malfunction:

- 1. is not the result of neglect or disregard of any air pollution control law, rule or regulation;
- 2. is not the result of an intentional or negligent act or omission on the part of the Permittee;
- 3. is not the result of improper maintenance.

#### Commence construction

#### To either:

- 1. begin, or cause to begin, a continuous program of physical on-site construction of the facility; or
- enter into binding agreements or contractual obligations which cannot be canceled or modified without substantial loss to the owner or operator to undertake a program of construction of the facility to be completed within a reasonable time.

#### Company official

The highest ranking employee of the company:

- 1. having knowledge of and responsibility for equipment on Neptune, and
- 2. duly authorized by the company to prepare and maintain records of emissions from such equipment.

Emergency situation

An event resulting in:

- 1. the failure of normal natural gas/boil off gas (BOG or natural gas) service to B1, B2, GE1 and GE2 and not due to an intentional or negligent act, or omission on the part of the Permittee; or
- 2. the need for emergency pumping of water for either fire protection or flood relief.

Initial startup

The moment at which the first piece of permitted equipment on the SRV is set in operation at Neptune after the first full regasification event for that particular SRV at Neptune.

Particulate matter

Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

Liquid Natural Gas Regasification Vessel

Any vessel that regasifies LNG.

Routine shutdown event

The ceasing of operation of permitted equipment on the SRV. The duration of each routine shutdown event shall not exceed one hour.

Routine startup event

The setting in operation of permitted equipment on the SRV for any purpose any time after initial startup. Routine startup events are marked at the beginning by ignition of the equipment and last until the equipment has reached continuous operating levels. The duration of each routine startup event shall not exceed one hour. Neptune may apply for a longer startup duration based on information obtained during actual operations.

#### V. EMISSION AND OPERATIONAL LIMITS

#### A. Emission Limits:

Nitrogen Oxides (NOx) and Carbon Monoxide (CO) emissions limits are based on a three-hour average. All other emission limits are based on a one-hour average.

- 1. The permittee shall not discharge or cause the discharge into the atmosphere in excess of the following emission limits for each Boiler B1 and B2 during all operations.
  - a. NOx:
     0.012 pounds per million British Thermal Units (lb/MMBtu) or a
     maximum of 3.36 pounds per hour (lb/hr) whichever is more stringent.
  - b. CO:0.015 lb/MMBtu or a maximum of 4.09 lb/hr whichever is more stringent.
  - c. Sulfur Dioxide (SO<sub>2</sub>):
     0.0006 lb/MMBtu or a maximum of 0.17 lb/hr whichever is more stringent.
  - d. Volatile Organic Compounds (VOC):
    0.005 lb/MMBtu or a maximum of 1.41 lb/hr whichever is more stringent.
  - e. Particulate Matter less than 10 microns (PM<sub>10</sub>):
     0.002 lb/MMBtu or a maximum of 0.57 lb/hr whichever is more stringent.
- 2. The permittee shall not discharge or cause the discharge into the atmosphere in excess of the following emission limits for each power generator GE1 and GE2 during all operations.

#### a. NOx:

0.2 Grams per Kilowatt-hour (g/kWh) or a maximum of 4.52 lb/hr whichever is more stringent.

#### b. CO:

0.17 g/kWh or a maximum of 3.85 lb/hr whichever is more stringent

# c. $SO_2$ :

0.003 lb/MMBtu or a maximum of 0.20 lb/hr whichever is more stringent.

#### d. VOC:

0.23 g/kWh or a maximum of 5.2 lb/hr whichever is more stringent.

#### e. PM<sub>10</sub>:

0.15 g/kWh or a maximum of 3.5 lb/hr whichever is more stringent.

- 3. The total annual emissions from B1, B2, GE1, and GE2 operating on any SRV while moored shall not exceed 49 TPY for NOx on a 12-month rolling average basis.
- 4. For the first 11 months of operation, the monthly NOx emissions from units B1, B2, GE1, and GE2 shall not exceed 7.5 tons.
- 5. The Permittee shall not allow the discharge of ammonia (NH<sub>3</sub>) into the atmosphere in excess of 10 ppmv at 3% O<sub>2</sub> (1-hour average) from the SCR systems controlling boilers B1 and B2 and at 10 ppmv at 15% O<sub>2</sub> (1-hour average) for engines GE1 and GE2.
- 6. The Permittee shall not discharge into the atmosphere from any single source of emission whatsoever any emissions of smoke with a shade, density or appearance equal to or greater than No. 1 of the Ringelmann Chart for a period in excess of (6) minutes during any one (1) hour,

provided that at no time would visible emissions be equal or greater than No. 2 on the Ringelmann Chart.

# B. Operational Limits

- 1. On or before the date of initial startup and continuously thereafter, the Permittee shall install, operate, and maintain the following:
  - a. SCR for the control of NOx emissions from units B1, B2, GE1 and GE2; and
  - b. Oxidation Catalyst (OxCat) for the control of CO emissions from units GE1 and GE2.
- 2. All air pollution control equipment and emissions monitoring systems must be connected to their respective emission units and properly functioning at all times whenever the emission units are in operation.
- 3. The maximum total heat input to either unit B1 or B2 shall not exceed 281 MMBtu/hr.
- 4. The maximum power output for each unit GE1 and GE2 shall not exceed 10,260 kW-hr.
- 5. Diesel fuel shall not exceed 1% of the heat input into units GE1 and GE2 at any time.
- 6. The sulfur content of the all diesel fuels used shall not exceed 0.3 % by weight.
- 7. The Permittee shall maintain all permitted units in accordance with the manufacturers' recommendations.

# VI. MONITORING, PERFORMANCE TESTING, AND RECORDKEEPING REQUIREMENTS

# A. Operational Plans

No less than 60 days before startup, the Permittee shall prepare the following plans and submit them to EPA for approval. The Permittee shall operate at all times in accordance with the approved plans and shall modify the plans after any change in operation and upon EPA request.

# 1. Operator Inspection Plan (OIP)

The Permittee shall submit an OIP to EPA for review and approval by EPA in writing. The plan shall pertain to units B1, B2, GE1 and GE2 and include the following information:

- a. the manufacturer, model number, rated horsepower, and combustion method (i.e., rich-burn, lean-burn) of the boilers and engines;
- b. a description of the NOx control system installed on the boilers and engines, including type and manufacturer, as well as a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves);
- c. the company identification number and location of the boilers and engines by a schematic of the affected facilities;
- d. a specific emission inspection procedure to assure that the boilers and engines are operated in continual compliance with the NOx and CO limits set forth above. The procedure shall include an inspection schedule; and

> e. each preventative or corrective maintenance procedure or practice that will be used to maintain the boilers and engines and control systems in continual compliance with the limits set forth in this permit.

# 2. Startup, Shutdown and Malfunction Plan (SSMP)

No less than 60 days before initial startup, the Permittee shall submit to EPA a SSMP for review and approval by EPA in writing. The plan shall include:

- a. procedures for operating and maintaining the emission units during startup and shutdown periods and breakdown conditions; and
- b. a program to minimize air pollution, and to implement necessary corrective actions to remedy *breakdown conditions* for equipment, including air pollution control and monitoring equipment used to comply with these permit conditions.

## B. Monitoring Requirements

## 1. Emissions Monitoring for NOx

- a. The permittee shall properly install, maintain in good working order, and operate a gas analyzer that EPA determines to meet the performance specification equivalent to the Siemans Ultramat 23 NOx analyzer to monitor NOx emissions from units B1, B2, GE1 and GE2.
  - i. No less than 60 days before initial startup, the permittee shall submit to EPA a quality assurance plan for the performance and operation of the gas analyzer for approval.
  - ii. The permittee shall install, calibrate and maintain the gas analyzer in accordance with the approved quality assurance plan.

- b. The analyzer will be used to show compliance with the lb/MMBtu emission limits for B1, B2, GE1 and GE2.
- c. Within fifteen days following the end of each calendar month, the Permittee shall determine monthly emissions of NOx from units B1, B2, GE1 and GE2 for the first 11 months of operation. Thereafter, the permittee shall calculate annual NOx emissions for the previous 12-month period on a 12-month rolling basis within 15 days following the end of each calendar month. In no case shall NOx emissions exceed 49 tons for any 12-month period.
  - i. The permittee shall determine total NOx emissions using the following equation:

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For B1 and B2:

(fuel usage (mmscf)) x (1,041.4 MMBtu/mmscf) x

(0.012 lb NOx/MMBtu) x (Tons/2000 lbs)
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For GE1 and GE2:
(power output (kw-h)) x (0.002205 lb/grams)
(tons/2000 lbs) x (0.2g/kW-h)
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NOx emissions = 
$$B1 + B2 + GE1 + GE2$$

- ii. If the permittee experiences an unexpected cold startup or shutdown during operations, the permittee shall determine the NOx emitted during the startup or shutdown and include the emissions in the above equation. The emission factor for cold startup shall be based on stack testing conducted during commissioning.
- iii. If the gas analyzer instrument or any other creditable evidence indicates that any emissions unit is not meeting its emissions limit, the permittee shall calculate the NOx emissions during any such period based on the actual emission rate.

# 2. Emissions Monitoring for NOx, CO, VOC, SO<sub>2</sub>, PM<sub>10</sub>

In addition to the gas analyzer, no less than 60 days before initial startup, the permittee shall submit a parametric monitoring plan for NOx, VOC, SO<sub>2</sub>, and PM<sub>10</sub> to EPA for approval before start up. The plan will relate the monitor operations to the on-going compliance with emission limits for each of these pollutants. The plan will use a range of parameters that relate to operations occurring during stack testing at commissioning. The plan may include the following operational parameters factors: flue gas oxygen concentration, flue gas temperature, pressure differential at the SCR catalyst interfaces, or other factors as approved by EPA.

# 3. Fuel Consumption

- a. The permittee shall install and operate non-resettable totalizing flow meters to measure the volume of natural gas used by units B1, B2, GE1, and GE2. The flow meters must meet one of the procedures specified in 40 CFR Part 60, Appendix A as appropriate for the type of meter installed.
- b. The permittee shall install and operate a fuel meter to measure the amount of diesel used in GE1 and GE2.

# 4. Engine Use

- a. The permittee shall install and maintain non-resettable elapsed operating hour meters to accurately indicate the elapsed operating time of GE1 and GE2.
- b. The permittee shall install and maintain meters to measure and record the kW-hr produced by GE1 and GE2

#### 5. BOG Sulfur Content

The permittee shall have the sulfur content of the BOG analyzed upon written request from EPA

- a. The sulfur content shall be determined by ASTM D1072, Standard Test Method for Total Sulfur in Fuel Gases.
- b. The permittee may use the colorimetric method ASTM D4810 for the measurement of the sulfur content only if prior written approval has been granted by EPA.
- 6. SCR Catalyst Temperature and Pressure
  - a. The permittee shall install and maintain a device to accurately measure and record the temperature of the exhaust at the inlet to the catalysts in the SCR systems serving units B1, B2, GE1 and GE2.
  - b. The permittee shall install and maintain a device to accurately measure and record the pressure of the inlet and outlet of the SCR systems serving units B1, B2, GE1 and GE2.

#### C. Performance Tests

1. The Permittee shall conduct the following initial and subsequent performance tests:

#### a. Initial Performance Tests:

i. During the commissioning stage for each SRV, the Permittee shall conduct the following performance tests on the exhaust stack gases from units B1, B2, GE1 and GE2.

<b>Emission Units</b>	Pollutants -	Fuel
B1 and B2	NOx, CO, ammonia	Natural
		gas/BOG
GE1 and GE2	NOx, CO, Ammonia	Natural
		gas/BOG
		and 0.3%
		sulfur by
		weight
		fuel oil at
,		1% heat
		input.

- ii. The following test methods shall be used:
  - A. Performance tests for emissions of NOx shall be conducted using 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.
  - B. Performance tests for emissions of VOC shall be conducted using 40 CFR Part 60, Appendix A, Method 25A. 40 CFR Part 60, Appendix A, Method 18 may be used to subtract out methane and other non-reactive VOCs.
  - C. Performance tests for emissions of CO shall be conducted using 40 CFR Part 60, Appendix A, Method 10, 10A, or 10B or ASTM D6522-00.
  - D. Performance tests for emissions of PM<sub>10</sub> shall be conducted by

using 40 CFR Part 60, Appendix A, Method.5.

- E. Performance tests for emissions of ammonia shall be conducted in accordance with the EPA conditional test method 27.
- F. Performance test for the Condition V.A.6 visible emissions limit shall be conducted using 40 CFR Part 60, Appendix A method 9.
- G. Measurement of volumetric flow rate and velocity shall be conducted by 40 CFR Part 60, Appendix A, Method 2, 2F, or 2G.
- iii. Performance tests using EPA methods shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The test shall include a cold start-up and shutdown scenario to determine NOx emission rate for these operations.
- iv. The Permittee shall notify EPA of the tests in writing and provide EPA with a test plan at least 45 days prior to such tests. The Permittee shall revise the plan upon EPA request.
- v. Within 60 days after the completion of the tests required above for each SRV, a report of the test results shall be submitted to EPA. The test report shall indicate:
  - A. The emissions of NOx, and CO in lb/MMBtu and lbs/hr;
  - B. The emissions of ammonia in ppmv corrected to 3% O<sub>2</sub> by volume for boilers B1 and B2 and to 15% O<sub>2</sub> by volume for engines GE1 and GE2;
  - C. The fuel flow rate for B1 and B2 under which the tests were conducted. The values shall be expressed in standard cubic

feet for BOG/natural gas;

- D. The power output of GE1 and GE2 under which the tests were conducted. The values shall be expressed in kW-hr;
- E. the exhaust flow rate in scfm under which the tests were conducted; and
- F. the sulfur content of each fuel in percent sulfur by weight.
- G. The report will also include the operational parameters recorded during stack testing and explanation of how those parameters will be used in the parametric plan in section VI.B.2.
- H. The report shall present the emission limits to be used in Section VI.B.1.c.ii and iii to calculate NOx emissions during startup and shutdown.

## b. Subsequent Performance Tests:

The Permittee shall conduct performance tests on the exhaust stack gases from units B1, B2, GE1, and GE2 for all pollutants regulated under this permit upon written request from EPA.

- 2. For performance test purposes, the Permittee shall provide sampling ports, platforms, and access to the exhaust systems for units B1 and B2 in accordance with 40 CFR 60.8(e).
- 3. The permittee will allow access to all emission control equipment and monitoring instrumentation.

# D. Recordkeeping Requirements

1. The permittee shall keep records of the following parameters or items.

Unless otherwise specified, the records shall be maintained for a period of five years following the date of such measurements, purchases, maintenance activities, or reports. The original records shall be kept at an on-shore location within the Commonwealth of Massachusetts and the permittee shall arrange to provide reasonable access to the records. At a minimum, the records maintained on-shore shall be updated on a monthly basis. The original records and the copies must be in a permanent form suitable for review and inspection.

- a. The gas analyzer records containing the following:
  - i. all emissions measurements taken by any gas analyzer instrument,
  - ii. the date and results of all calibration checks, tests, adjustments, and maintenance,
  - iii. the date, time, and duration of any routine startup or shutdown events and breakdown conditions, and
  - iv. the date, time, and duration of any periods during which the Ultramat instrument (or equivalent) is inoperative and the identity of such device.
- b. The results of the calculations required by VI.B.1.c.i and ii.
- c. Results of all performance tests.
- d. Results of the annual visible emissions inspections. The records shall include the date and time of the inspections, the emission units inspected, and the identity of the person or persons conducting the inspections.
- e. The kW-hr produced individually by units GE1 and GE2.
- f. The volume of BOG consumed on an hourly basis by units B1 and B2.

- g. The volume of diesel fuel used each month by units GE1 and GE2.
- h. The results of the tests performed to determine the sulfur content of the BOG.
- i. The documents from the fuel supplier certifying compliance with the fuel sulfur content limit.
- j. The operating hours of units B1 and B2 during each calendar month.
- k. The temperature of the exhaust at the inlet to the SCR systems serving units B1, B2, GE1 and GE2.
- 1. The pressure of the inlet and outlet ports of the SCR systems serving units B1, B2, GE1 and GE2.
- m. The occurrence and duration of any startup or shutdown event, breakdown condition, or emergency situation.
- n. Any information required by the SSMP.
- 2. In addition to any recordkeeping requirement specified elsewhere in this permit, the Permittee shall keep records of all required monitoring and testing information, where applicable, that include:
  - a. the date, place, and time of sampling or measurements,
  - b. the date(s) analyses were performed,
  - c. the company or entity that performed the analyses,
  - d. the analytical techniques or methods used,

- e. the results of such analyses, and
- f. the operating conditions existing at the time of sampling or measurement.

# VII. REQUIRED NOTIFICATIONS AND REPORTS

The Permittee shall notify EPA of each event listed in this section. Each notification shall be signed by a company official of Neptune. Compliance with these notification provisions shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation. All reports must be submitted electronically to Region 1 in PDF format or other formats acceptable to EPA.

## A. Commencement of Construction and Initial Startup

The Permittee shall notify EPA in writing of the:

- 1. actual date it commenced construction. The notification shall be made within thirty (30) days after such date;
- 2. anticipated date of initial startup. This notification shall not be made more than sixty (60) days or less than thirty (30) days prior to such date. The notification shall identify all emission units, air pollution control devices and monitors, and shall include a plan for each SRV, or class of similar SRV depicting the location and ID numbers of such units, devices, and monitors;
- 3. actual date of initial startup and steady state operation of Neptune (the end of the initial startup period) within fifteen (15) days after the end of the initial startup period;
- 4. date of receipt of the first shipment to Neptune;
- 5. location where records required by this permit will be maintained.

#### B. Exceedances

The permittee shall report any violation of any emission limit as indicated by the gas analyzer or the parametric monitoring plan in writing to EPA within 96 hours of each occurrence.

## C. Breakdown Conditions

- 1. The permittee shall notify EPA by facsimile or electronic mail of any occurrence which constitutes a breakdown condition. Such notification shall be made no later than four hours after its detection and shall identify:
  - the time at which the breakdown condition was discovered,
  - the specific location, and
  - the equipment involved.
- 2. Within one week after a breakdown condition has been corrected, the Permittee shall submit a written report to EPA which includes:
  - a. a statement that the occurrence has been corrected, together with the date of correction and proof of compliance,
  - b. a specific statement of the reasons or causes of the occurrence sufficient to enable EPA to determine whether the occurrence was a breakdown condition,
  - c. a description of the corrective measures undertaken to mitigate the emissions and restore normal operations,
  - d. a description of the measures to be undertaken to avoid such an occurrence in the future; EPA may, at the request of the Permittee, for good cause, extend up to 30 days the deadline for submitting the description of the future measures,

- e. the period of time over which emissions were increased due to the breakdown condition.
- f. an estimate of the emissions released in excess of those allowed by this permit, and
- g. pictures of the equipment or controls that failed, if available.

# D. Semi-annual Reporting

- 1. Semi-annually, the Permittee shall submit a written report to EPA that includes the following information:
  - a. specific identification of each instance in which any emission or operational limit in this permit was exceeded, including during routine startup and shutdown events and breakdown conditions. The report shall include the date, time, duration, and magnitude of excess emissions, the nature and cause of the excess, the corrective actions taken, and the preventive measures adopted;
  - b. the date, time, and duration of each period during which the gas analyzer was inoperative, except for zero and span checks;
  - c. a description of continuous monitoring system repairs or adjustments made during the reporting period;
  - d. the averaging period used for data reporting;
  - e. results of the NOx limit calculation for each 12 month period completed in the report; and
  - f. a negative declaration when no emission or operational limits were exceeded during a reporting period.

2. The semi-annual reports shall be submitted according to the schedule below:

Required Submittal Date	Reporting Period
On or before July 31 of	The previous 6-month period from
each year	January through June
On or before January 31	The previous 6-month period from
of each year	July through December

- 3. In addition to the information above, the semi-annual report submitted in January of each year shall also include the following information for the previous calendar year:
  - a. a summary of the corrective maintenance performed on units B1, B2, GE1, and GE2;
  - b. the total fuel consumption and hours of operation of units B1 and B2;
  - c. the total annual hours of startup for units B1 and B2;
  - d. the total kw for units GE1 and GE2; and
  - e. a written statement showing the actual emissions of NOx from units B1, B2, GE1, and GE2.

# VIII. GENERAL FACILITY REQUIREMENTS

A. At all times, including during routine startup and shutdown events, breakdown conditions, and emergency situations, the Permittee shall, to the extent practicable, maintain and operate all equipment, including associated air pollution control and emissions monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions.

- B. All emissions, including those associated with emergency situations and breakdown conditions shall be included in all emissions calculations and demonstrations of compliance with the annual mass emission limits in this permit.
- C. A copy of this permit must be posted on all SRVs mooring at Neptune and the original permit shall be maintained by Region 1.
- D. Any SRV while moored at Neptune must comply with this permit, and this permit applies only when the SRV is moored and regasifying at Neptune. In addition, the requirements of the following sections apply when any SRV is moored at Neptune and not regasifying.
  - i. V.A.1.a.
  - ii. V.A.2.a.
  - iii. V.B.1.a.
  - iv. V.B.2.
  - v. VI.B.6.
  - vi. VI.D.1.k. & l.

#### IX. RIGHT OF ENTRY

The Permittee shall allow all authorized representatives of the Administrator, upon presentation of credentials, to enter upon or through any premises of the permittee, including SRVs and other facilities and areas where records required under this permit are kept. The Permittee shall allow such authorized representatives, at reasonable times,

- to access and copy any records that must be kept under this permit,
- to inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit, and,
- to sample or monitor substances or parameters for the purpose of assuring compliance with this permit.

EPA will make reasonable efforts to coordinate any entry on the SRV with the U.S. Coast Guard.

#### X. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of Neptune, this permit shall be binding on all subsequent owners and operators. The Permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions. Notification shall be by letter with a copy forwarded to the EPA.

#### XI. SEVERABILITY

The provisions of this permit are severable, and, if any provision of the permit is held invalid, the remainder of this permit will not be affected thereby.

#### XII. OTHER APPLICABLE REGULATIONS

A. The Permittee shall construct and operate Neptune in compliance with all other applicable provisions of federal and state regulations including, but not limited to, the following:

Federal New Source Performance Standard 40 CFR 60, Subpart 60 Subpart Db;

- 310 CMR 7.02(8)(H) Particulate Emission Limitation for New Fossil Fuel;
- 310 CMR 7.05 Sulfur Content of Fuels;
- 310 CMR 7.06 Visibility;
- 310 CMR 7.09 Dust, Odor, Construction and Demolition;
- 310 CMR 7.10 Noise;
- 310 CMR 7.22 Sulfur Dioxide Emission Reduction for the Purpose of Reducing Acid Rain;
- 310 CMR 7.24 Organic Material Storage and Distribution;
- 310 CMR 7.28 NOx Allowance Trading Program; and
- 310 CMR 8.00 Prevention and Abatement of Emergency episodes.

B. The Permittee shall provide EPA a copy of the incidental take statement from the National Marine Fisheries Service which the Permittee must obtain. The Permittee's receipt of the incidental take statement is sufficient to make this permit effective, and the Permittee must supply EPA a copy within 2 business days of receiving it.

# XIII. AGENCY ADDRESSES

All correspondence required by this permit shall be forwarded to:

Air Compliance Clerk (SEA) U.S. EPA New England One Congress St, Suite 1100 Boston, MA 02114-2023