



The United States
Environmental Protection Agency
Region 1

**PROPOSED AUTHORITY TO CONSTRUCT
NORTHEAST GATEWAY ENERGY BRIDGE LLC
DEEPWATER PORT
Permit Number RG1-DPA-CAA- 01**

Pursuant to the Deepwater Port Act of 1974, as amended, 33 U.S.C. § 1501 et seq. (DPA), 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), EPA issues this permit to Northeast Gateway Energy Bridge LLC (Permittee) to construct and operate the Gateway Deepwater Port (NEG) 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 NEG shall be subject to the attached permit conditions and permit limitations. This permit becomes effective on the date of issuance and shall remain in effect until rescinded by or surrendered to EPA. This permit becomes invalid if the Permittee does not commence construction within 18 months after receipt of permit issuance. EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. 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

Date

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Acronyms and Abbreviations

BOG	boil off gas
BTU	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEP	Massachusetts Department of Environmental Protection
DWP	Deepwater Port
EPA	Environmental Protection Agency
EBRV	Energy Bridge Regasification Vessel or any similar vessel that vaporizes LNG while moored at the DWP
ft ³	cubic feet
NEG	the DWP operate by Northeast Gateway Energy Bridge, L.L.C.
hr	hour
kW	kilowatt
LNG	liquefied natural gas
lb	pound
mcf/hr	thousand cubic feet per hour
MMBtu	million British thermal units
NO _x	nitrogen oxides
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
ppmv	parts per million by volume
ppmw	parts per million by weight
psia	pounds per square inch absolute
ROC	reactive organic compounds
SCV	submerged combustion vaporizer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SSMP	startup, shutdown, and malfunction plan
tpy	tons per year
VOC	volatile organic compounds

I. PROJECT DESCRIPTION

NEG's proposed DWP will consist of two subsea Submerged Turret Loading™ (STL™) buoys, each with a flexible riser assembly and a manifold connecting the riser assembly, via a flow line, to the subsea Pipeline Lateral. Northeast Gateway proposes to use a fleet of specially designed Energy Bridge™ Regasification Vessels (EBRVs) to deliver LNG to the Port. EBRVs are purpose-built LNG tankers that incorporate onboard equipment for the vaporization of LNG and delivery of high-pressure natural gas. The first generation EBRVs include three fossil fuel fired combustion units (two main boilers, each with a heat input capacity of 224 MMBtu per hour and a 3650 kW auxiliary generator) to provide energy for the regasification process. During transport, the boilers produce steam for steam turbines that propel the vessels through the water. While moored at the DWP, the boilers provide steam used to vaporize the LNG. The generators are auxiliary equipment for power when one or more of the steam turbines are out of service.

NEG has ordered the first of a second generation of vessels, the Explorer, scheduled for commissioning in March 2008, shortly after the Port is expected to become operational. The second generation vessels will also have a fourth fossil fuel fired combustion unit (a 100 MMBtu per hour auxiliary boiler) allowing an increased regasification rate.

II. EQUIPMENT LIST

Each vessel will include the following emission generating equipment.

Unit ID Number	Description
B1 and B2	Two Mitsubishi Heavy Industries 224 MMBtu/hr natural gas-fired boilers: 1 st and 2 nd generation vessels
Aux1	One 100 MMBtu/hr natural gas-fired boiler: 2 nd Generation Vessel
GE1	MAN/B&W 8L32/40 Diesel engine: 1 st generation Vessel
GE2	Wartsila 12V32DF Dual-fired engine: 2 nd Generation Vessel
In1	2.9 MMBtu/hr Incinerator
EmGen1	620 kW emergency generator
Life1	Two 29 hp engines

Res1	One 144 hp engine
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The requirements of this permit apply to each of these emission units on any EBRV while Moored at the DWP.

III. FACILITY LOCATION

Gateway 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 42⁰ 23' 38.46" - 42⁰ 23' 56.40"
Longitude: W 70⁰ 35' 31.02" - 70⁰ 37' 0.36"

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 in-stack 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 port; or
2. 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 the DWP and
2. duly authorized by the company to prepare and maintain records of emissions from such equipment.

Energy Bridge Regasification Vessel (EBRV)

Energy Bridge Regasification Vessel or any similar vessel that vaporizes LNG while moored at the DWP

Emergency situation

An event resulting in:

1. the failure of normal natural gas/boil off gas (BOG) service to B1, B2, 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 EBRV is set in operation for the first time.

Particulate matter

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

Routine shutdown event

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

Routine startup event

The setting in operation of permitted equipment on the EBRV 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.

V. EMISSION AND OPERATIONAL LIMITS

A. Emission Limits: All emission limits are based on a 1-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 at all times:
 - a. Nitrogen Oxides (NO_x):
0.018 Pounds per million British Thermal Units (lb/MMBtu) or a maximum of 4.0 pounds per hour (lb/hr) whichever is more stringent.
 - b. Carbon Monoxide (CO):
0.044 lb/MMBtu or a maximum of 9.8 lb/hr whichever is more stringent.
 - c. Sulfur Dioxide (SO₂):
0.0006 lb/MMBtu or a maximum of 0.13 lb/hr whichever is more stringent.
 - d. Volatile Organic Compounds (VOC):
0.005 lb/MMBtu or a maximum of 1.2 lb/hr whichever is more stringent.
 - e. Particulate Matter less than 10 microns (PM₁₀):
0.0075 lb/MMBtu or a maximum of 1.7 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 the auxiliary boiler Aux1 at all times.
 - a. NO_x:

- 0.018 lb/MMBtu or a maximum of 1.8 lb/hr whichever is more stringent.
- b. CO:
0.044 lb/MMBtu or a maximum of 4.4 lb/hr whichever is more stringent.
 - c. SO₂:
0.0006 lb/MMBtu or a maximum of 0.06 lb/hr whichever is more stringent.
 - d. VOC:
0.005 lb/MMBtu or a maximum of 0.5 lb/hr whichever is more stringent.
 - e. PM₁₀:
0.0075 lb/MMBtu or a maximum of 0.7 lb/hr whichever is more stringent.
3. The Permittee shall not discharge or cause the discharge into the atmosphere in excess of the following emission limits for the engine GE1 at all times.
- a. NO_x
12.1 Grams/Kilowatt-Hour (g/kWh) or a maximum of 97.4 lb/hr whichever is more stringent.
 - b. CO
0.95 lb/MMBtu or a maximum of 26.9 lb/hr whichever is greater.
 - c. SO₂
0.69 lb/MMBtu or a maximum of 19.8 lb/hr whichever is greater.
 - d. VOC
0.36 lb/MMBtu or a maximum of 10.2 lb/hr whichever is greater.
 - e. PM₁₀
0.12 lb/MMBtu or a maximum of 3.4 lb/hr whichever is greater.
4. The Permittee shall not discharge or cause the discharge into the atmosphere in excess of the following emission limits for the engine GE2 at all times.

- a. NO_x
1.6 g/kWh or a maximum of 10.5 lb/hr whichever is more stringent.
 - b. CO
0.57 lb/MMBtu or a maximum of 15.3 lb/hr whichever is greater.
 - c. SO₂
0.04 lb/MMBtu or a maximum of 1.0 lb/hr whichever is greater.
 - d. VOC
0.24 lb/MMBtu or a maximum of 6.5 lb/hr whichever is greater.
 - e. PM₁₀
0.12 lb/MMBtu or a maximum of 3.4 lb/hr whichever is greater.
5. The total NO_x emissions from units B1, B2, Aux1, GE1, GE2, IN1, EmGen1, Life1 and Res1 shall not exceed 49 TPY on a 12-month rolling average basis.
6. The total CO emissions from units B1, B2 and Aux1 shall not exceed 99 tpy on a 12-month rolling basis.
7. For the first 11 months of operation, the monthly NO_x emission from units B1, B2, Aux1, GE1, GE2, IN1, EmGen1, Life1 and Res1 shall not exceed 4.1 tons.
8. For the first 11 months of operation, the monthly CO emission from units B1, B2, Aux1 shall not exceed 8.25 tons.
9. The Permittee shall not allow the discharge of ammonia (NH₃) into the Atmosphere in excess of 10 parts per million by volume on a wet basis (ppmvw) @ 3% O₂(1-hour average) from the SCR systems controlling B1 and B2.

B. Operational Limits

1. On or before the date of initial startup and continuously thereafter, the Permittee shall install, operate, and maintain an Selective Catalytic Reduction (SCR) for the control of NO_x emissions from units B1 and B2.

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 224 MMBtu/hr.
4. The maximum total heat input to Aux1 shall not exceed 100 MMBtu.
5. The maximum power output from GE1 and GE2 shall not exceed 3650 kw.
6. The maximum hourly operations for GE1 and GE2 together shall not exceed 370 hrs on a 12-month rolling average basis.
7. GE2 shall be restricted to burning boil off natural gas and diesel fuel oil.
8. Diesel fuel oil shall not exceed 1% of the heat input into GE2.
9. The sulfur content of diesel fuel oil used in GE1 shall not exceed 4.5% by weight.
10. The sulfur content of diesel fuel oil used in GE2 shall not exceed 0.5% by weight.
11. In1, EmGen1, Life1 and Res1 shall not exceed the following operational limits while the EBRVs are moored at Gateway:
 - a. In1: 60 minutes/day
 - b. EmGen1: 30 minutes/week
 - c. Life1: 30 minutes/week
 - d. Res1: 30 minutes/week
- L. 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 initial 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)

- a. The Permittee shall submit an OIP plan to EPA for review and approval by EPA in writing. The plan shall pertain to units B1, B2, Aux1, GE1 and GE2 and include the following information:
 - i. the manufacturer, model number, rated horsepower, and combustion method (i.e., rich-burn, lean-burn, or diesel) of the boilers and engines;
 - ii. a description of the NO_x control system installed on the boilers, 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);
 - iii. the company identification number and location of the boilers and engines by a schematic of the affected facilities;
 - iv. a specific emission inspection procedure to assure that the boilers and engines are operated in continual compliance with the emission limits set forth above. The procedure shall include an inspection schedule; and
 - v. 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 routine 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 NO_x and CO

- a. The Permittee shall properly install, maintain in good working order, and operate a gas analyzer with a performance specification equivalent to the Siemens Ultramat 23 analyzer to monitor NO_x and CO emissions from units B1, B2, and Aux1.
 - i. No less than 60 days before initial startup, the Permittee shall submit to EPA a quality assurance plan for the certification 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 gas analyzer will be used to show compliance with the NO_x and CO lb/MMBtu emission factors for B1, B2 and Aux1.
- c. Within fifteen days following the end of each calendar month, the Permittee shall determine monthly emissions of NO_x from units B1, B2, Aux1, GE1, GE2, IN1, EmGen1, Life1 and Res1 for the first 11 months of operation. Thereafter, the Permittee shall calculate annual NO_x 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 NO_x emissions exceed 49 tons for any 12-month period.

- d. The Permittee shall determine total monthly and annual NOx emissions using the following equation:

For B1 and B2:

$$\begin{aligned} &(\text{fuel usage (mmscf)}) \times (1,041.4 \text{ MMBtu/mmscf}) \times \\ &(0.018 \text{ lb/MMBtu}) \times (\text{Tons}/2000 \text{ lbs}) \end{aligned}$$

For Aux1 :

$$\begin{aligned} &(\text{fuel usage (mmscf)}) \times (1,041.4 \text{ MMBtu/mmscf}) \times \\ &(0.018 \text{ lb/MMBtu}) \times (\text{Tons}/2000 \text{ lbs}) \end{aligned}$$

For GE1 :

$$\begin{aligned} &(\text{power output(kw-hr)}) \times (12.1 \text{ g/kw-hr}) \\ &(0.002205 \text{ grams/lbs}) \times (\text{tons}/2000 \text{ lbs}) \end{aligned}$$

For GE2:

$$\begin{aligned} &(\text{power output(kw-hr)}) \times (1.6 \text{ g/kw-hr}) \\ &(0.002205 \text{ grams/lbs}) \times (\text{tons}/2000 \text{ lbs}) \end{aligned}$$

$$\begin{aligned} \text{Total NOx emissions} &= \text{B1} + \text{B2} + \text{Aux1} + \text{GE1} + \text{GE2} \\ &+ \text{IN1} + \text{EmGen1} + \text{Life1} + \text{Res1} \end{aligned}$$

Note : If the gas analyzer instruments 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. In addition, if the Permittee exceeds the operational restrictions listed for IN1, EmGen1, Life1 and Res1, the Permittee shall calculate the NOx emissions during any such period based on the actual emission rate for those emission units.

- e. Within fifteen days following the end of each calendar month, the Permittee shall determine monthly emissions of CO emissions from units B1, B2, and Aux1 during the first 11 months of operation. Thereafter, the Permittee shall calculate annual CO 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 CO emissions exceed 99 tons for any 12-month period.

- f. The Permittee shall determine total monthly and annual CO emissions using the following equation:

For B1 and B2:

$$\begin{aligned} &(\text{fuel usage (mmscf)}) \times (1,041.4 \text{ MMBtu/mmscf}) \times \\ &(0.044 \text{ lb/MMBtu}) \times (\text{Tons}/2000 \text{ lbs}) \end{aligned}$$

For Aux1:

$$\begin{aligned} &(\text{fuel usage (mmscf)}) \times (1,041.4 \text{ MMBtu/mmscf}) \times \\ &(0.044 \text{ lb/MMBtu}) \times (\text{Tons}/2000 \text{ lbs}) \end{aligned}$$

$$\text{Total CO emissions} = \text{B1} + \text{B2} + \text{Aux1}$$

Note 1: If the gas analyzer instruments or any other credible evidence indicates that any emissions unit is not meeting its emissions limit, the Permittee shall calculate the CO emissions during any such period based on the actual emission rate.

2. Emissions Monitoring for NO_x, CO, VOC, SO₂, PM₁₀

In addition to the gas analyzer, no less than 60 days before initial startup, the Permittee shall submit a parametric monitoring plan for NO_x, VOC, SO₂ and PM₁₀ to EPA for approval before start up. The plan will relate the monitor operations to the on-going compliance 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 interface, 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, Aux 1 and GE2. The flow meters must meet one of the procedures specified in 40 CFR Part 75 Appendix D 2.1.5.1, as appropriate for the type of meter installed.

- b. The Permittee shall install and operate a non-resettable 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 within 30 days for each EBRV delivery.

- 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 and Aux1.
- b. The Permittee shall install and maintain a device to accurately measure and record the pressure at of the inlet and outlet of the SCR systems serving units B1, B2 and, Aux1.

7. Operations for EmGn1, In1, Lif1 and Res1: The Permittee shall maintain operational records for these emission units that records minutes of operation each day while the EBRV is moored to the DWP.

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 EBRV, the Permittee shall conduct the following performance tests on the exhaust stack gases from units B1, B2, Aux1, GE1 and GE2.

Emission Units	Pollutants	Fuel
B1, B2 and Aux1	NO _x , VOC, CO, PM ₁₀ , ammonia	BOG or regasified LNG
GE1	NO _x , VOC, CO, SO ₂ , PM ₁₀	4.5% sulfur by weight diesel fuel .
GE2	NO _x , VOC, CO, PM ₁₀	BOG or regasified LNG and 0.5% sulfur by weight fuel oil at 1% heat input

ii. The following test methods shall be used:

A. Performance tests for emissions of NO_x shall be conducted using EPA Methods 1-4 and 7E.

B. Performance tests for emissions of VOC shall be conducted using EPA Method 25A. 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 EPA Method 10, 10A, or 10B or ASTM D6522-00.

D. Performance tests for emissions of PM₁₀ shall be conducted by using EPA Method 5 and Method 202.

E. Performance tests for emissions of ammonia shall be conducted in accordance with the EPA conditional test method 27.

F. Performance tests for emissions of SO₂ shall be conducted in accordance with the EPA Method 20.

G. Measurement of volumetric flow rate and velocity shall be conducted by 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.
- 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 45 days after the completion of the tests required above, a report of the test results shall be submitted to EPA. The test report shall indicate:
- A. the emissions of NO_x, VOC, PM₁₀, SO₂, and CO in lb/MMBtu and lbs/hr;
 - B. the emissions of ammonia in ppmv and tpy corrected to 3% oxygen by volume;
 - C. the fuel flow rate for B1, B2 Aux1, GE1 and GE2 under which the tests were conducted. The values shall be expressed in gallons for

diesel and standard cubic feet for BOG;

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 ppmw.

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 IV.B.2.a.

b. Subsequent Performance Tests

i. The Permittee shall conduct performance tests on the exhaust stack gases from units B1, B2, Aux1, GE1 and, GE2 upon written request from EPA

ii. For performance test purposes, the Permittee shall provide sampling ports, platforms, and access to the exhaust systems for units B1, B2, GE1, GE2 and Aux1 in accordance with 40 CFR 60.8(e).

iii. 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 onboard the EBRVs or such other on-shore location within the Commonwealth of Massachusetts as the Permittee might arrange to provide reasonable access to the records. At a minimum, the records maintained onshore 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 gas analyzer instrument is inoperative and the identity of such device.
- b. The results of the calculations required by VI.B.1.d and f.
- c. Results of all performance tests.
- d. The kW-hr produced individually by units GE1 and GE2.
- e. The volume of BOG consumed on an hourly basis by units B1, B2 Aux 1 and GE2.
- f. The volume of diesel fuel used each month by units GE1 and GE2.
- g. The results of the tests performed to determine the sulfur content of the BOG.
- h. The documents from the fuel supplier certifying compliance with the fuel sulfur content limit.
- i. The operating hours of units B1 and B2 during each calendar month.
- j. The temperature of the exhaust at the inlet to the catalysts in the SCR systems serving units B1, B2, and Aux1.
- k. The pressure at the inlet and outlet ports of the SCR systems serving units B1, B2 Aux1.

- l. The hours of operation each day for units EmGen1, In1, Life1 and Res1.
 - m. The occurrence and duration of any routine startup event, routine shutdown event, breakdown condition, or emergency situation.
 - n. Any information required by the SSMP.
 - o. The time and date of arrival and departure for each EBRV.
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 REPORTING

The Permittee shall notify EPA of each event listed in this section. Each notification shall be signed by a company official of Gateway. 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

1. The Permittee shall notify EPA in writing of the:
 - a. actual date it commenced construction. The notification shall be made within thirty (30) days after such date;

- b. 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 Ultramat monitors, and shall include a plan depicting the location and ID numbers of such units, devices, and monitors for each EBRV or class of similar EBRV's;
- c. actual date of initial startup and steady state operation of NEG (i.e., the end of the initial startup period) within fifteen (15) days after the 1st day of steady state operations;
- d. date of receipt of the first shipment to the DWP;
- e. location where records required by this permit will be maintained.

B. Exceedances

- 1. 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:
 - a. the time at which the breakdown condition was discovered,
 - b. the specific location, and
 - c. 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 any gas analyzer was inoperative, except for zero and span checks;
 - c. a description of monitoring system repairs or adjustments made during the reporting period; and

- d. the averaging period used for data reporting.
 - e. results of the NOx limit calculation for each 12 month period completed in the report
 - f. results of the CO limit calculation for each 12 month period completed in the report
 - g. 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 each year	The previous 6-month period from January through June
On or before January 31 of each year	The previous 6-month period from 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, Aux1, GE1 and GE2;.
 - b. the total fuel consumption and hours of operation of units B1, B2, Aux1, GE1 and GE2;
 - c. the total Kw-Hr for units GE1 and GE2;
 - d. a written statement showing the actual emissions of NOx and CO from units B1, B2, and Aux1; and

- e. the total hours of operation for units EmGen1, In1, Life1 and Res1.

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 EBRVs mooring at the DWP and the original permit shall be maintained by Region 1.
- D. Any EBRV while moored at the DWP must comply with this permit, and this permit applies only while the EBRV is moored to the DWP.

IX. RIGHT OF ENTRY

The Permittee shall allow all authorized representatives of EPA, upon presentation of credentials, to enter upon or through any premises of the Permittee, including EBRVs 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 EBRVs with the U.S. Coast Guard.

X. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of the Gateway Port, 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

The Permittee shall construct and operate Gateway in compliance with all other applicable provisions of federal and state regulations including, but not limited to, the following: 310 CMR 7.09; 310 CMR 7.10; and 310 CMR 8.00 of the Code of Massachusetts Regulations.

XIV. 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