UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region 4 Atlanta, Georgia

Permit to Construct Permit No. DPA-EPA-R4001

In accordance with the provisions of 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 Florida Department of Environmental Protection (FDEP),

Port Dolphin Energy LLC 400 North Tampa Street, Suite 1015 Tampa, FL 33602

is hereby authorized to construct and operate air emissions units and to conduct other air pollutant emitting activities at a deepwater port (DWP) at the following location:

outer continental shelf blocks PB-545, PB-546, PB-589 and PB-590, the OCS waters in the Gulf of Mexico. Two unloading buoys will be located at latitude 27° 25' 12.14" N longitude 83° 11' 50.11" W, and latitude 27° 22' 28.73" N longitude 83° 11' 22.49" W, approximately 28 miles off the Florida coast.

Upon initial startup, this DWP shall be constructed and operated in accordance with the terms and conditions set forth in this permit.

This permit shall become effective on: December 1, 2011

This permit shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of federal and state law.

/signed/
Beverly H. Banister
Director
Air, Pesticides, and Toxics
Management Division

Acronyms and Abbreviations

ASTM American Society for Testing and Materials

BTU British thermal unit

CFR Code of Federal Regulations

CO carbon monoxide CO₂ carbon dioxide

CO₂e carbon dioxide equivalent

DWP Deepwater Port

EPA Environmental Protection Agency FAC Florida Administrative Code

ft³ cubic feet g gram

GHGs greenhouse gases H₂SO₄ sulfuric acid mist

hr hour kW kilowatt

LLC Limited Liability Company

LNG liquefied natural gas

lb pound

MMBtu million British thermal units

NO_x nitrogen oxides

OIP Operational Inspection Plan

PM particulate matter

PM₁₀ particulate matter less than 10 microns in diameter PM_{2.5} particulate matter less than 2.5 microns in diameter

Port Dolphin The deepwater port operated by Port Dolphin Energy LLC

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

SO₂ sulfur dioxide

SRV shuttle and regassification vessel

SSMP startup, shutdown, and malfunction plan

tpy tons per year

VOC volatile organic compounds

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I. PROJECT DESCRIPTION

Port Dolphin, owned by Port Dolphin Energy LLC, is a deepwater port (DWP), designed to moor liquefied natural gas (LNG) shuttle and regasification vessels (SRVs) with a capacity of up to 217,000 m³each. Port Dolphin consists of one unloading system comprised of two unloading buoys, each capable of mooring one SRV. The SRV transports natural gas to the site and then vaporizes and meters the natural gas when attached to unloading buoys. When the SRV is not present, the buoys are submerged. The buoys attach to a pipeline end manifold connecting to a riser assembly, via a flow line, to the subsea pipeline for transport of the natural gas to the shore. Each SRV shall include no more than four natural gas-fired boilers that produce steam for LNG vaporization, and three power generation engines.

II. EQUIPMENT LIST

This permit applies to the following equipment aboard any SRV. For all other SRVs with different equipment configurations that intend to use Port Dolphin, Port Dolphin Energy LLC must first apply for and receive approval from the EPA Region 4 before the SRV moors and regasifies at Port Dolphin.

Unit ID Number	Description	
B1, B2, B3, B4	No more than four 278 MMBtu/hr natural-gas boilers	
GE1, GE2	Two 11,400 kW dual fuel power generator engines	
	operating in the gas mode, Wärtsila (or equivalent)	
	model 12V50DF	
GE3	One 5,700 kW dual fuel power generator engine	
	operating in the gas mode, Wärtsila (or equivalent)	
	model 6L50DF	

Up to two SRVs may be moored and operate at Port Dolphin simultaneously. Except as specifically provided otherwise, the requirements of this permit apply to each of these emission units on any SRV while moored and regasifying at Port Dolphin.

III. FACILITY LOCATION

Port Dolphin will be located in federal waters off the shore of Florida approximately 28 miles to the west of the St. Petersburg area, and 42 miles southwest of the pipeline landing at Port Manatee, Florida. The DWP will consist of two unloading buoys located approximately two miles apart. The latitude and longitude of these locations are:

North Buoy Latitude: 27° 25' 12.14" N Longitude: 83° 11' 50.11" W South Buoy Latitude: 27° 22' 28.73" N

Longitude: 83° 11' 22.49" W

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, the EPA regulations, and the Florida Administrative Code (F.A.C).

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; and
- 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 building 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.

Emergency situation

An event resulting in:

- 1. the failure of normal gas/natural gas service to B1-B4 and GE1-GE3, 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 any SRV is set in operation for the first time at Port Dolphin.

Particulate matter

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

Routine shutdown event The ceasing of operation of permitted equipment on the SRV. The

duration of each routine 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.

V. EMISSION AND OPERATION LIMITS

A. Emission Limits:

Emissions of carbon dioxide equivalents (CO₂e) are based on an eight-hour rolling average. All other emission limits are based on a three-hour rolling average, unless otherwise noted.

- 1. The permittee shall not discharge or cause the discharge into the atmosphere in excess of the following limits for each boiler [B1, B2, B3, and B4], except during routine startup and shutdown.
 - a. Nitrogen Oxide (NO_x): 0.012 pounds per million British Thermal Units (lb/MMBtu)
 - b. Carbon Monoxide (CO): 0.015 (lb/MMBtu)
 - c. Sulfur Dioxide (SO₂): 0.0006 (lb/MMBtu)
 - d. Sulfuric Acid Mist (H₂SO₄): 0.34 (lb/hr)
 - e. Volatile Organic Compounds (VOC): 0.0054 (lb/MMBtu)
 - f. Particulate Matter (PM): 0.01 (lb/MMBtu)
 - g. Particulate Matter less than 10 microns/Particulate Matter less than 2.5 microns (PM₁₀/ PM_{2.5}) (including condensable particulate matter): 0.0075 (lb/MMBtu)
 - h. Carbon Dioxide Equivalents (CO₂e): 117 (lb/MMBtu)
- 2. The permittee shall not discharge or cause the discharge into the atmosphere in excess of the following emission limits for each engine [GE1, GE2, and GE3], except during routine startup and shutdown.
 - a. NO_x: 0.20 (g/kW-hr)
 - b. CO: 0.165 (g/kW-hr)
 - c. SO₂: 0.16 (g/kW-hr)
 - d. H₂SO₄: 8.22 (lb/hr)

- e. VOC: 0.15 (g/kW-hr)
- f. PM: 0.0065 (g/kW-hr)
- g. PM₁₀/PM_{2.5} (including condensable particulate matter): 0.0065 (g/kW-hr)
- h. CO₂e (when using natural gas): 181 (g/kW-hr)
- i. CO₂e (when using low sulfur diesel): 253 (g/kW-hr)
- 3. The permittee shall not allow the discharge of ammonia (NH₃) into the atmosphere in excess of 10 ppmv at 3% O₂ (1-hour average) from SCR systems controlling boilers B1-B4 and at 10 ppmv at 15% O₂ (1-hour average) for engines and GE1-GE3.
- 4. Visible emissions from any source of emissions shall not exceed 20% opacity except for one 6-minute period per hour which opacity shall not exceed 27%.

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 control of NO_x emissions for B1-B4 and GE1-GE3.
 - b. Oxidation Catalyst for the control of CO and VOC emissions from GE1-GE3.
 - c. Low NO_x burners for control of NO_x from units B1-B4.
 - d. Tuning, optimization, instrumentation and controls, insulation, and turbulent flow within the firetubes for the control of GHG emissions from B1-B4.
 - e. Gas Detection System, and Audio Visual and Olfactory (AVO) Leak Detection and Repair Program to minimize fugitive emissions.
- 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, and may not be bypassed except in accordance with the EPA approved Startup, Shutdown and Malfunction Plan prepared and submitted pursuant to Condition VI.A.2 of this permit.
- 3. The maximum cumulative heat input from all boilers, B1-B4, at all SRVs at Port Dolphin shall not exceed 4.871 x 10⁶ MMBtu/yr, based on a rolling 12-month total.
- 4. Except as specified elsewhere in this permit, units B1-B4 shall operate only on boil-off gas/natural gas. The natural gas shall not contain sulfur compounds in excess of 1 ppmv, calculated as hydrogen sulfide at standard conditions.
- 5. The maximum cumulative power output for units GE1-GE3 shall not exceed 25,080 kW-hr and 2.197 x 10⁸ kW/yr, based on a rolling 12-month period.

- 6. After startup, diesel fuel shall not exceed 1% of the operating hours, not to exceed a maximum of 87.6 hrs, into each unit GE1, GE2, and GE3, based on a rolling 12-month total.
- 7. The sulfur content of all diesel fuels used at Port Dolphin shall not exceed 0.05% by weight.
- 8. All calculations shall be based on 8,760 hrs/yr of operation.
- 9. The permittee shall maintain all permitted units in accordance with the manufacturers' recommendations.
- 10. During routine startup periods, urea injection shall be initiated immediately after the SCR system catalyst temperature reaches 554 °F (or 290 °C).
- 11. Each routine startup period shall not exceed 1 hour for any one unit, B1-B4 and GE1-GE3.
- 12. The permittee shall not exceed 140 routine startups for all units B1-B4 combined at all SRVs moored at Port Dolphin per rolling 12-month period.
- 13. The permittee shall not exceed 140 routine startups for all engines GE1-GE2 combined at all SRVs moored at Port Dolphin per rolling 12-month period.
- 14. The permittee shall not exceed 70 routine startups for all engines GE3 combined at all SRVs moored at Port Dolphin per rolling 12-month period.
- 15. No more than 70 SRVs per year shall moor and regassify at the Port Dolphin, based on a rolling 12-month period.

VI. MONITORING, PERFORMANCE TESTING, AND RECORDKEEPING REQUIRMENTS

A. Operational Plans

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

1. Operational Inspection Plan (OIP)

The permittee shall submit an OIP to the EPA for review and approval by the EPA in writing. The plan shall pertain to all boiler units, B1-B4, and all engine units, GE1-GE3, and include the following information:

- a. The manufacturer, model number, rated horsepower, and combustion method (*i.e.*, rich-burn, lean-burn) of the engines.
- b. The manufacturer, model number, rated MMBtu, and combustion method (*i.e*, richburn, lean-burn) of the boilers.
- c. A description of the NO_x, CO, VOC, and GHG control systems 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).
- d. The company identification number and location of the boilers and engines by a schematic of the affected facilities.
- e. A specific emission inspection procedure to assure that the boilers and engines are operated in continual compliance with the NO_x, CO, SO₂, H₂SO₄, VOC, PM, PM₁₀/PM_{2.5} and CO₂e limits set forth above. The procedure shall include an inspections schedule.
- f. 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.

Operation of units B1-B4 and GE1-GE3 out of compliance with the most recently approved plan shall be considered a violation of this permit unless a source test of the appropriate unit(s) under identical conditions indicates that the unit(s) is in compliance with the requirements of this permit.

2. Startup, Shutdown and Malfunction Plan (SSMP)

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

- a. Procedures for operating and maintaining the emission units during startup and shutdown periods and breakdown conditions.
- 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, CO, and CO₂
 - a. The permittee shall properly install, maintain in good working order, and operate a gas analyzer to monitor NO_x, CO, and CO₂ emissions from units B1-B4 and GE1-GE3.
 - i. No less than 60 days before initial startup, the permittee shall submit to the 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 permittee shall obtain stack gas volumetric flow rates using a calibrated flow monitor that records data on a continuous basis.

c. The gas analyzer will be used to show compliance with the NO_x, CO, and CO₂ lb/MMBtu emission limits for B1-B4, and NO_x, CO, and CO₂ g/kW-hr emission limits for GE1-GE3.

2. Emissions Monitoring for VOC, PM, PM₁₀, and PM_{2.5}

- a. Within fifteen days following the end of each calendar month, the permittee shall calculate the total annual emissions of VOC, PM, PM₁₀, and PM_{2.5} from units B1-B4 and units GE1-GE3 for the previous 12-month period. The emissions shall be calculated as a 12-month rolling total.
 - i. For units B1-B4 and GE1-GE3 the VOC, PM, PM₁₀, and PM_{2.5} calculations shall be based on the results of the most recent performance test conducted in accordance with <u>Condition VI.C</u> of this permit.
- 3. Emissions Monitoring Plan for NO_x, CO, SO₂, H₂SO₄, VOC, PM, PM₁₀, PM_{2.5} and CO₂

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, CO, SO₂, H₂SO₄, VOC, PM, PM₁₀, PM_{2.5} and CO₂ to the EPA for approval. 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 operation 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 the EPA.

4. Fuel Consumption

- a. The permittee shall install and operate totalizing flow meters to measure and record in a permanent format the volume of natural gas consumed on an hourly basis by units B1-B4 and GE1-GE3. The meters shall be configured to indicate the flow of natural gas to units B1-B4 as a group and to units GE1-GE3 as another group. 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 totalizing flow meters to measure the amount of diesel used in GE1-GE3.

5. Engine Use

- a. The permittee shall install and maintain non-resettable elapsed operating hour meters to accurately indicate the elapsed operating time of GE1- GE3.
- b. The permittee shall install and maintain meters to measure and record the kW-hr produced by GE1-GE3.

6. Boil-off Gas/Natural Gas Sulfur Content

a. The permittee shall have the sulfur content of the boil-off gas/natural gas analyzed upon EPA request.

- b. The sulfur content shall be determined by American Society for Testing and Materials (ASTM) D1072, Standard Test Method for total sulfur in fuel gases.
- c. 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 the EPA.

7. 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 and the outlet of the catalysts in the SCR systems serving units B1-B4 and GE1-GE3.
- b. The permittee shall install and maintain a device to accurately measure and record the differential pressure of the exhaust across the catalysts in the SCR systems serving units B1-B4 and GE1-GE3.

8. Oxidation Catalyst Temperature and Pressure

- c. The permittee shall install and maintain a device to accurately measure and record the temperature of the exhaust at the inlet and the outlet of the catalysts in the oxidation catalyst systems serving units GE1-GE3.
- d. The permittee shall install and maintain a device to accurately measure and record the differential pressure of the exhaust across the catalysts in the oxidation catalyst systems serving units GE1-GE3.

C. Performance Tests

1. The permittee shall conduct the following initial and subsequent performance tests to show compliance with emission limits in Condition VI.A:

a. Initial Performance Tests:

i. Within 120 days after the end of the initial startup period for each SRV, the permittee shall conduct the following performance tests on the exhaust stack gases form units B1-B4 and GE1-GE3 for each SRV.

Emission Units	Pollutants	Fuel
B1, B2, B3, B4	NO _x , CO,VOC, PM, PM ₁₀ , PM _{2.5} , CO ₂ , ammonia	Natural gas/boil-off gas
GE1,GE2, GE3	NO _x , CO, VOC, PM, PM ₁₀ , PM _{2.5} , CO ₂ , ammonia	Natural gas and low sulfur diesel fuel (0.05% sulfur by weight)

- ii. The following test methods shall be used:
 - a) Performance tests for the concentrations of NO_x shall be conducted using 40 CFR Part 60, Appendix A, Methods 1-4 and 7E;
 - b) Performance tests for concentrations of VOC shall be conducted using 40 CFR Part 60, Appendix A, Method 25A. Method 18 may be used to subtract out methane and other non-reactive VOC;
 - c) Performance tests for concentrations of CO shall be conducted using 40 CFR Part 60, Appendix A, Method 10 or 10B or ASTM D6522-00;
 - d) Performance tests for PM concentrations shall be conducted using 40 CFR Part 60, Appendix A, Method 5;
 - e) Performance tests for PM₁₀ and PM_{2.5} concentrations shall be conducted using 40 CFR Part 51, Appendix M, Method 201 or 201A;
 - f) Performance tests for condensable particulate concentrations shall be conducted using 40 CFR 51, Appendix M, Method 202;
 - g) Performance tests for emissions of CO₂ shall be conducted using 40 CFR Part 60, Appendix A, Method 3A;
 - h) Performance tests for emissions of ammonia shall be conducted in accordance with EPA Conditional Test Method 027, available from the EPA Technology Transfer Network Emission Measurement Center, Conditional Test Methods website:

 http://www.epa.gov/ttn/emc/ctm.html;
 - i) Measurement of molecular weight, moisture control, and velocity shall be conducted by 40 CFR Part 60, Appendix A, Method 1-4.
- iii. Performance tests using the 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 the EPA of the tests in writing and provide the EPA with a test plan at least 45 days prior to such tests. The permittee shall revise the plan upon the EPA's request.
- v. Within 45 days after the completion of the tests required above, a report of the test results shall be submitted to the EPA. The test report shall indicate:
 - a) The emissions of NO_x, VOC, CO, PM, PM₁₀, PM_{2.5}, and CO₂ in lb/MMBTU and lb/hr;
 - b) The emissions of ammonia in ppmv corrected to 3% oxygen by volume for boilers B1-B4;

- c) The emissions of ammonia in ppmv corrected to 15% oxygen by volume for engines GE1-GE3;
- d) The power output of GE1-GE3 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;
- f) The sulfur content of diesel fuel in weight percent;
- g) The general condition of the SCR and oxidation catalyst control devices, their normal operating parameters, and their operating parameters during each test run:
- h) A sketch of the duct and the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances;
- i) The date, starting time, and duration of each sample run;
- j) The type, manufacturer, and configuration of the sampling equipment used:
- k) Data related to the required calibration test equipment used;
- 1) Data related on the identification, processing and weights of all filters used:
- m) Data on the types and amounts of any chemical solutions used;
- n) Data on the amount of pollutant collected from each sampling probe, the filters and impingers are reported separately for the compliance test;
- o) The names of the individuals, who furnished the process variable data, conducted the test, and analyzed the sample and prepared the report;
- p) All measured and calculated data required to be determined by each applicant test procedure for each run;
- q) The detailed calculations for one run that relate the collected data to the calculated emission rate:
- r) The applicable emission standard and the resulting maximum allowable emission rate for the emission unit, plus the test result in the same form and unit of measure;
- s) A certification that, to the knowledge of the permittee, all data submitted is true and correct. The person who conducts the test shall provide the certification with respect to the test procedures used. Port Dolphin shall certify that all data required and provided to the person conducting the test are true and accurate.

b. Subsequent Performance Tests

- i. The permittee shall conduct annual performance tests on NO_x, VOC, CO, PM, PM₁₀, PM_{2.5} and CO₂ from units B1- B4, and GE1-GE3. The tests shall be conducted in a manner consistent with <u>Conditions VI.C.1.a.ii</u>, <u>Conditions VI.C.1.a.ii</u>, Conditions <u>VI.C.1.a.iv</u>, and <u>Conditions VI.C.1.a.v</u>. After 3 annual source tests, source test frequency may be reduced upon written approval by the EPA.
- ii. The permittee shall conduct annual inspections for visible emissions from B1-B4 and GE1-GE3, and as requested by the EPA.
 - a) The test method for visible emissions shall be Florida Department of Environmental Protection (DEP) Method 9. The inspections shall be conducted for a minimum of 30 minutes by a Method 9 certified observer and shall be conducted in accordance with EPA Method 9 except for data reduction. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. The test results shall be the highest valid six-minute average for the set of observations taken.
- iii. The tests shall be conducted during each federal fiscal year (October 1 September 30).
- iv. For performance test purposes, the permittee shall provide sampling ports, platforms, and access to the exhaust systems for units B1-B4 and GE1-GE3 in accordance with 40 CFR 60.8 (e), and any written requests made by the EPA to provide additional facilities as are reasonably necessary, in accordance with FAC 62-297.310.

D. Recording 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 state of Florida. 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. The permittee must notify the EPA within 15 days of relocating the records.
 - 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;
- iv. The date, time, and duration of any periods which the gas analyzer instrument is inoperative and the identity of such device.
- b. The results of the calculations required by <u>Conditions VI.B.1</u> and <u>VI.B.2</u>.
- 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. A representative fuel analysis or exhaust analysis along with modeling data to ensure that compliance with <u>Condition V.A.1.c</u>, <u>Condition V.A.2.c</u>, <u>Condition V.A.1.d</u>, and <u>Condition V.A.2.d</u> is being maintained.
- f. The kW-hr produced individually by units GE1-GE3.
- g. The volume of natural gas consumed on an hourly basis by units B1-B4 and GE1-GE3.
- h. The volume of diesel fuel used each month by units GE1-GE3.
- i. The results of the tests performed to determine the sulfur content of the natural gas.
- j. For each diesel fuel delivery documents from the fuel supplier certifying compliance with the fuel sulfur content limit.
- k. The operating hours of units B1-B4 and GE1-GE3 during each calendar month.
- 1. The temperature of the exhaust at the inlet and the outlet to the catalysts in the SCR systems serving units B1-B4 and GE1-GE3.
- m. The pressure at the inlet and the outlet ports of the SCR systems serving units B1-B4 and GE1-GE3.
- n. The temperature of the exhaust at the inlet and the outlet to the catalysts in the oxidation catalyst systems serving units GE1-GE3.
- o. The pressure at the inlet and the outlet ports of the oxidation catalyst systems serving units GE1-GE3.
- p. The VOC concentrations at the inlet and outlet ports of the oxidation catalyst serving units GE1-GE3 from emission tests, and how these concentrations were determined.
- q. The date of last change of the catalyst bed of the SCR systems serving units B1-B4 and GE1-GE3.
- r. The destruction or removal efficiency for VOC and NO_x of the SCR systems serving units B1-B4 and GE1-GE3, calculated as the weight per unit time of VOC and NO_x

entering the SCR systems minus the weight per unit time of that VOC and NO_x exiting the SCR systems, divided by the weight per unit time of VOC and NO_x entering the SCR systems, expressed as a percentage.

- s. The occurrence and duration of any routine startup event, routine shutdown event, breakdown condition, or emergency situation.
- t. Any information required by SSMP.
- u. Results of the AVO Leak Detection and Repair Program. 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.
- v. The number of SRVs per year that dock at the DWP.
- w. An inspection log containing, at a minimum, the following data for units GE1, GE2, and GE3:
 - i. Identification and location of units;
 - ii. Date and results of each inspection performed according to the OIP;
 - iii. A summary of any corrective maintenance taken;
 - iv. Any additional information required in the OIP.
- 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 analysis;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses;
 - f. The operating conditions existing at the time of sampling or measurement.

VII. REQUIRED NOTIFICATIONS AND REPORTS

The permittee shall notify the EPA of each event listed in this section. Each notification shall be signed by a company official of Port Dolphin. 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 notifications, reporting or other communications relating to this permit shall be submitted to:

Chief Air & EPCRA Enforcement Branch Air, Pesticides and Toxics Management Division U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303

In addition, electronic copies of the above-referenced notifications and communications shall be submitted to the following individuals at their corresponding email address:

<u>Name</u>	<u>Email</u>	<u>Phone</u>
David Lloyd	<u>lloyd.david@epa.gov</u>	404-562-9216
Jason Dressler	dressler.jason@epa.gov	404-562-9208
Gregg Worley	worley.gregg@epa.gov	404-562-9141

A. Commencement of Construction and Initial Startup

The permittee shall notify the 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 (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 schematic diagram 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 Port Dolphin (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 of LNG and the start of natural gas service to Port Dolphin.
- 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 monitoring system in writing to the EPA within 96 hours of each occurrence. A full written report on the malfunctions shall be submitted in the semi-annual report.

C. Breakdown Conditions

- 1. The permittee shall notify the EPA 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 the 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 reasons or causes of the occurrence sufficient to enable the EPA to determine whether the occurrence was a breakdown condition;
 - c. A description of the corrective measures to be 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; the 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 the 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 corrective actions taken, and the preventive measure adopted;
 - b. The date, time, and duration of each period during which the continuous monitoring system was inoperative, except for zero and span checks;
 - c. A description of monitoring system repairs or adjustments made during the reporting period;
 - d. The averaging period used for data reporting;
 - e. 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
each year	period from January
	through June
On or before January 31 of	The previous 6-month
each year	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-B4 and GE1-GE3;
 - b. The total fuel consumption and hours of operation of units B1-B4 and GE1-GE3;
 - c. The total annual hours of startup for units B1-B4;
 - d. The total kW-hr for units GE1-GE3;
 - e. A written statement showing the actual emissions in tons per year of NO_x, CO, SO₂, H₂SO₄, VOC, PM, PM₁₀, PM_{2.5} and CO₂e from units B1-B4, GE1-GE3, and process piping fugitive emissions.
 - f. Number of SRVs that moored at Port Dolphin.

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 from emergency situations and breakdown conditions shall be included in all emission limits in this permit.
- C. A copy of this permit must be posted on all SRVs moored at Port Dolphin and the original permit shall be kept at an onshore location in mainland Florida that is accessible to EPA authorized representatives and inspectors.

IX. RIGHT OF ENTRY

The permittee shall allow all authorized representatives of the EPA, 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 the terms and conditions of 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 the substances or parameters for the purpose of assuring compliance with this permit.

The EPA will make reasonable effort 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 Port Dolphin, 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.

XII. EXPIRATION OF PERMIT TO CONSTRUCT

This approval to construct shall become invalid if construction is not commenced within 18 months after the effective date of this permit, construction is discontinued for a period of 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified.

XIII. MODIFICATIONS AND OBLIGATION TO APPLY FOR OPERATING PERMITS

- A. Within thirty (30) days of any minor administrative changes requiring corrections to information previously provided to the EPA, the owner or operator shall notify the EPA of such changes in writing. Such changes shall include:
 - 1. Any change in the name, address, or phone number of the facility or authorized representative not associated with a change in ownership or with a physical relocation of the facility or any emissions units or operations comprising the facility; or
 - 2. any other similar minor administrative change at the facility.
- B. No emissions unit shall be constructed or modified without obtaining an air construction permit from the EPA. Such a permit shall be obtained prior to beginning construction or modification. as defined in 40 CFR 52.21(2), and Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.
- C. The permittee shall submit an application for a title V operating permit within 12 months following initial startup.

XIV. OTHER APPLICABLE REGULATIONS

The permittee shall construct and operate Port Dolphin in compliance with all other applicable provisions of federal and state regulations including, but not limited to, the following: 40 CFR 60, Subpart 60 Subpart Db; 62-4, 62-210.550, 62-210.650, 62-210.700, 62.210.900, 62-212.400, 62-296.500 of the F.A.C.