Florida Gas Transmission Company
Compressor Station 24

Facility ID No.: 0410004
Gilchrist County

Title V Air Operation Permit Renewal

Permit No. 0410004-019-AV
Renewal of Title V Air Operation Permit No. 0410004-017-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Northeast District Office
Permitting Program
8800 Baymeadows Way W., Suite 100
Jacksonville, Florida 32256
Telephone: 904/256-1700
Fax: 904-256-1587

Compliance Authority:

State of Florida
Department of Environmental Protection
Compliance Assurance, Northeast District

8800 Baymeadows Way W., Suite 100
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Section **Page Number**

Florida Department of Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Permittee:
Florida Gas Transmission Company
2405 Lucien Way, Suite 200
Maitland, Florida 32751-7047

Permit No.: 0410004-019-AV
Facility ID No.: 0410004
Compressor Station 24
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Compressor Station 24 is located in Gilchrist County at 5030 North U.S. Highway 129, Trenton, Florida, 32693-5901; UTM Coordinates: 17, 321.3 km East, and 3282.9 km North.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: June 27, 2016
Renewal Application Due Date: November 14, 2020
Expiration Date: June 27, 2021

Richard S. Rachal III, P.G.
Permitting Program Administrator

RSR/JRH/rfs

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

Florida Gas Transmission Company (FGTC) operates existing Compressor Station 24 in Gilchrist County for their natural gas pipeline. The station consists of a 15,000 bhp gas turbine (Engine 2401), a 7,200 bhp gas turbine (Engine 2402), a 20,500 hp gas turbine (Engine 2403), Two Emergency Generators GEN04 and GEN05, and miscellaneous support activities.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Engine 2401: Solar Model Mars 100-T15000S gas turbine rated at 15,000 bhp
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7,200 bhp (ISO)
004	Engine 2403: Solar Model Titan 130-20502SA gas turbine rated at 20,500 hp
005	GEN04 and GEN05: Two Emergency Generators (each 454-hp natural gas-fired, spark ignition (SI), four stroke lean burn (4SLB) Reciprocating internal combustion engines (RICE))

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received March 1, 2016, this facility **is not** a major source of hazardous air pollutants (HAP). The existing facility **is not** a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 003, 004, 005
40 CFR 60, Subpart GG	003
40 CFR 60, Subpart JJJJ	005
40 CFR 60, Subpart KKKK	001, 004
40 CFR 63, Subpart A, NESHAP General Provisions	005
40 CFR 63, Subpart ZZZZ	005
State Rule Citations (Rule 62-212.400(12), FAC)	004
State Rule Citations (Rule 62-4, Rule 62-210, Rule 62-213, Rule 62-296, 62-297, FAC)	001, 003, 004, 005

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated.

[Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

[Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department

[Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement.

[Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas and yards.

b. Chemical (dust suppressants) or water application to:

- Unpaved roads
- Unpaved yard areas.

c. Landscaping or planting of vegetation.

d. Confining abrasive blasting where possible.

e. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C, and, proposed by applicant in Title V air operation permit renewal application received March 1, 2016]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Engine 2401: Solar Model Mars 100-T15000S gas turbine rated at 15,000 bhp Gas Turbine No. 2401. 132.3 MMBtu per hour. *Fuel*: The combustion turbine will fire approximately 127,300 cubic feet per hour of pipeline natural gas (SCC No 2-02-002-01) at maximum permitted capacity based on a heat content of 1040 BTU per SCF of gas. *Capacity*: At 132.3 per hour of heat input, the combustion turbine produces approximately 15,000 bhp. After initial startup, the unit is intended to operate at or near capacity. *Controls*: Natural gas contains little or no ash, sulfur, or other contaminants, which minimizes emissions of particulate matter and sulfur dioxide. The efficient combustion of natural gas at high temperatures results in lower emissions of carbon monoxide and volatile organic compounds. Lean premix combustion technology will minimize the formation of nitrogen oxides. *Stack Parameters*: When operating at capacity, exhaust gases will exit a 58 feet tall stack that is 8.7 feet in diameter with a flow rate of approximately 193,613 acfm at 903° F.

This EU is subject to 40 CFR 60, Subpart KKKK -Standards of Performance for Stationary Combustion Turbines and 40 CFR 60, Subpart A– General Provisions

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input rate is 132.3 MMBtu/hr. This maximum heat input rate is based on gas turbine output power of 15,000 hp, heat rate of 8,403 Btu/hp-hr, HHV at ISO conditions (i.e., 59 ºF, 50% relative humidity, and one atmosphere pressure), natural gas heat content of (1040 BTU/scf) HHV, and a 5% margin for measurement variability. Heat input rate will vary with gas turbine characteristics, load and ambient conditions:

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C., Permit No. 0410004-018-AC]

A.2. Authorized Fuel. The combustion turbine shall fire only natural gas with a maximum sulfur content of 10 grains per 100 standard cubic feet of natural gas.

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; 40 CFR 60.4365, Permit No. 0410004-018-AC]

A.3. Hours of Operation. The hours of operation of the combustion turbine are not restricted (8,760 hours/year).

[Rule 62-210.200(PTE), F.A.C.; Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

A.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.

[Rule 62-297.310(3), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for **Condition A.5.** is based on the specified averaging time of the applicable test method.

A.5. The permitted maximum allowable emission rate for each pollutant is as follows:

Pollutant	Standards	Equivalent Maximum Emissions [6]		Rule Basis
		lb/hr	TPY	
CO [1]	50.0 ppmvd @ 15% O_2	16.0	70.2	Rule 62-4.070(3), F.A.C.
NO_x [2]	25.0 ppmvd @ 15% O_2	13.2	57.7	Rule 62-4.070(3), F.A.C.
				40 CFR 60.4320(a) Table 1 Part 60 Subpart KKKK
SO_2 [3]	10 grains of sulfur/100 scf	---	15.9	Rule 62-4.070(3), F.A.C.
	Fuel which contains total potential sulfur emissions ≤0.060 lb SO_2/MMBtu) heat input.	---		40 CFR 60.4330(a)(2)
Opacity [5]	10% opacity, 6-minute average	---	---	Rule 62-4.070(3), F.A.C.
PM/PM_{10} [4]	Lean premix combustion design	---	3.8	Rule 62-4.070(3), F.A.C.
VOC [4]	Lean premix combustion design	---	2.0	Rule 62-4.070(3), F.A.C.

1 Compliance with the CO standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 10.

2 Compliance with the NO_x standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 7E or 20.

3 Maximum SO_2 standards are based on the maximum level specified by Federal Energy Regulatory Commission (FERC), which is 10 grains of sulfur per 100 standard cubic feet of natural gas. Actual fuel sulfur levels are expected to be less than 1 grain per 100 SCF of natural gas.

4 For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions were based on data in Table 3.1-2a in AP-42. Regulated VOC emissions were conservatively assumed to be 10% of the manufacturer's estimated emissions for total hydrocarbons. No testing required.

5 The opacity standard is based on a 6-minute block average, as determined by EPA Method 9. The opacity standard serves as a surrogate standard to show efficient combustion.

{Permitting Note: This standard is established as reasonable assurance of good combustion practices to minimize emissions.}

[6] Equivalent maximum emissions for the gas turbine is provided for informational purposes and are based on: permitted capacity, a turbine inlet air temperature of 59° F, full operation (8760 hours per year), and the permit standards (CO, NO_x, and SO_2) or the maximum expected emissions (PM and VOC). Mass emission rates for SO_2 shall be calculated based on actual fuel sulfur content and fuel flow rate.

[40 CFR 60.4320; 40 CFR 60.4330, Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

General Compliance Requirements

A.6. The stationary combustion turbine, air pollution control equipment, and monitoring equipment must be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[40 CFR 60.4333(a)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.; and, Permit No. 0410004-011-AC]

A.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.; and, Permit No. 0410004-011-AC]

Monitoring of Operations

A.9. Operational Data. Using the automated combustion turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp) and hours of operation for the combustion turbine. Operational information shall be summarized and reported with the required Annual Operating Report.

[Rule 62-4.070(3), F.A.C., Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.10. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}

Method	Description of Method and Comments
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[40 CFR 60.4400, Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60, Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

A.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

A.12. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the combustion turbine shall be tested to demonstrate compliance with the emissions standards for CO, NO_x, and Visible Emissions. The annual compliance tests shall be used to meet the Rule 62-297.310(8)(b), F.A.C. requirement for a compliance test performed prior to obtaining a renewed operation.

If the turbine's NO_x emissions exceed 75% of the applicable NSPS NO_x standard on the previous performance test, the subsequent compliance test shall be conducted no more than 14 calendar months following the previous performance test.

CO and NO_x emissions shall be tested concurrently at permitted capacity.

Actual SO_2 emissions shall be reported based on the current typical fuel sulfur content and actual natural gas firing rate for each test run.

[Rule 62-297.310(8), F.A.C.; Rule 62-4.070(3), F.A.C., 40 CFR 60.4400(a)]

Recordkeeping and Reporting

A.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

[Rule 62-213.440(1)(b), F.A.C.]

A.14. Performance Testing Report Submittal. For each combustion turbine that performs annual performance tests in accordance with in **Condition A.12.**, you must submit a written report of the results of each performance test Compliance Authority within 45 days after the test has been completed.

[Rule 62-297.310(10), F.A.C., 40 CFR 60.4375, Rule 62-204.800, F.A.C.]

Other Requirements

A.15. Component Replacements. For the replacement of combustion turbine components to facilitate prompt repair and return the unit to its original specifications, the permittee shall comply with the following notification and testing requirements.

a. Components shall only be replaced with functionally equivalent "like-kind" equipment. Replacement components may consist of improved or newer equipment, but such components shall not change operation or increase the capacity (heat input and power output rates) of the combustion turbine. Replacement components that affect emissions shall be designed to achieve the emissions standards specified in all valid air permits and shall achieve these standards or better. After a component replacement, the combustion turbine compressor engine remains subject to the standards of all valid air permits. [Rule 62-210.200(PTE), F.A.C.]

b. The permittee shall notify the Compliance Authority within seven days after beginning any replacement of the gas generator component of the compressor engine. Within seven days of first fire on a replacement gas generator, the permittee shall submit the following information to the Compliance Authority: date of first fire and certification from the vendor that the replacement gas generator is a functionally equivalent "like-kind" component. The vendor certification shall also identify the make, model number, maximum heat input rate (MMBtu/hour), power output (bhp) at ISO conditions, and that the permitted emission rates are achievable with the replacement component. This notification may be made by letter, fax, or email. A copy of the information shall be kept on site at the compressor station. Within 60 days of restarting the unit after a gas generator replacement, the permittee shall conduct stack tests to demonstrate compliance with the applicable emission standards. The permittee shall notify the Compliance Authority in writing at least 15 days prior to conducting these tests.

   If the proposed test schedule must be changed due to valid issues with equipment shakedown or test team schedules, the Compliance Authority may accept a shorter notice. The permittee shall comply with all permit requirements for test notification, test methods, test procedures, and reporting. [Rules 62-4.130, 62-4.160(2), (6), and (15) and 62-297.310(9), F.A.C.]

c. After investigation and for good cause, the Department may require special compliance tests pursuant to Rule 62-297.310(8)(c), F.A.C.

[Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7,200 bhp (ISO) Gas Turbine No. 2402. 68 MMBtu per hour. *Fuel*: The combustion turbine will fire approximately 65,400 cubic feet per hour of pipeline natural gas (SCC No 2-02-002-01) at maximum permitted capacity. *Capacity*: At 68 MMBtu per hour of heat input, the combustion turbine produces approximately 7,200 bhp. After initial startup, the unit is intended to operate at or near capacity. *Controls*: Natural gas contains little or no ash, sulfur, or other contaminants, which minimizes emissions of particulate matter and sulfur dioxide. The efficient combustion of natural gas at high temperatures results in lower emissions of carbon monoxide and volatile organic compounds. Lean premix combustion technology will minimize the formation of nitrogen oxides. *Stack Parameters*: When operating at capacity, exhaust gases will exit a 63 feet tall stack that is 6 feet in diameter with a flow rate of approximately 90,285 acfm at 920° F.

This EU is subject to 40 CFR 60, Subpart GG -Standards of Performance for Stationary Gas Turbines and 40 CFR 60, Subpart A– General Provisions

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum allowable heat input rate is 68 MMBtu/hr. This maximum heat input rate is based on gas turbine output power of 7,200 bhp, heat rate of 8,995 Btu/hp-hr, HHV at ISO conditions (i.e., 59º F, 50% relative humidity, and one atmosphere pressure), natural gas heat content of (1040 BTU/scf) HHV, and a 5% margin for measurement variability. Heat input rate will vary with gas turbine characteristics, load and ambient conditions.

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C., Permit No. 0410004-010-AC, Permit No. 0410004-018-AC]

B.2. Authorized Fuel. The combustion turbine shall fire only natural gas with a maximum sulfur content of 10 grains per 100 standard cubic feet of natural gas. The permittee shall take no allowance for fuel bound nitrogen (F-value = 0) when demonstrating compliance with the NSPS Subpart GG NO_x standard. Based on these restrictions, no monitoring for the fuel nitrogen and sulfur contents is required. This is also described in Appendix GG of this permit.

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0410004-006-AC, Permit No. 0410004-010-AC, 40 CFR 60.334]

B.3. Hours of Operation. The hours of operation of the combustion turbine are not restricted (8,760 hours/year). Except for startup and shutdown, operation below 50% base load is prohibited.

[Rule 62-210.200(PTE), F.A.C.; Permit No. 0410004-006-AC, Permit No. 0410004-010-AC]

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.

[Rule 62-297.310(3), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for **Condition B.5.** is based on the specified averaging time of the applicable test method.

B.5. The permitted maximum allowable emission rate for each pollutant is as follows:

Pollutant	Standards	Equivalent Maximum Emissions [6]		Rule Basis
		lb/hr	TPY	
CO [1]	50.0 ppmvd @ 15% O_2	7.0	30.5	Rule 62-4.070(3), F.A.C.
NO_x [2]	25.0 ppmvd @ 15% O_2	5.7	25.0	Rule 62-4.070(3), F.A.C.
	Refer to Equation cited in 40 CFR 60 Subpart GG	---	---	40 CFR 60.332(a)(2)
SO_2 [3]	10 grains of sulfur/100 scf	1.9	8.2	Rule 62-4.070(3), F.A.C.
	>0.015% by volume @ 15% O_2 on dry basis or Burn fuel which contains total sulfur > 0.8% by weight (8000 ppmw)	---	---	40 CFR 60.333(a) or (b)
Opacity [5]	10% opacity, 6-minute average	---	---	Rule 62-4.070(3), F.A.C.
PM/PM_{10} [4]	Lean premix combustion design	0.45	2.0	Rule 62-4.070(3), F.A.C.
VOC [4]	Lean premix combustion design	1.5	6.5	Rule 62-4.070(3), F.A.C.

1 Compliance with the CO standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 10.

2 Compliance with the NO_x standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 7E or 20.

3 Maximum SO_2 standards are based on the maximum level specified by Federal Energy Regulatory Commission (FERC), which is 10 grains of sulfur per 100 standard cubic feet of natural gas. Actual fuel sulfur levels are expected to be less than 1 grain per 100 SCF of natural gas.

4 The PM and VOC emissions are minimized by the equipment specification of "lean premix combustion design" of the gas turbine. The equivalent maximum emissions are provided for informational purposes only. PM emissions are based on data in Table 3.1-2a in AP-42 (Factor: 0.0066 lb/MMbtu). Regulated VOC emissions are based on available vendor data of 10 ppmvd and exclude emissions of methane and ethane. No testing or other compliance demonstration is required for emissions of PM or VOC.

5 The opacity standard is based on a 6-minute block average, as determined by EPA Method 9.

6 Equivalent maximum emissions for the gas turbine are based on: permitted capacity, a turbine inlet air temperature of 59° F, full operation (8760 hours per year), and the permit standards (CO, NO_x, and SO_2) or the maximum expected emissions (PM and VOC). For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates versus the turbine inlet temperatures. Each test report shall include measured mass emission rates for CO, NO_x and SO_2. Mass emission rates for SO_2 shall be calculated based on actual fuel sulfur content and fuel flow rate. For tests conducted at 59° F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 59° F, measured mass emission rates shall be compared to the

tabled mass emission rates provided by the manufacturer based on turbine inlet temperatures.

[Rule 62-212.400(12) F.A.C., Permit No. 0410004-006-AC, Permit No. 0410004-010-AC, Permit No. 0410004-018-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

B.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

B.7. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.8. Operational Data. Using the automated combustion turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp) and hours of operation for the combustion turbine. Operational information shall be summarized and reported with the required Annual Operating Report.

[Rule 62-4.070(3), F.A.C., Permit No. 0410004-006-AC, Permit No. 0410004-010-AC]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.9. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[40 CFR 60.335, Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60, Permit No. 0410004-006-AC, Permit No. 0410004-010-AC]

B.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

B.11. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the combustion turbine shall be tested to demonstrate compliance with the emissions standards for CO, NO_x, and Visible Emissions. The annual compliance tests shall be used to meet the Rule 62-297.310(8)(b), F.A.C. requirement for a compliance test performed prior to obtaining a renewed operation.

CO and NO_x emissions shall be tested concurrently at permitted capacity.

Actual SO_2 emissions shall be reported based on the vendor analysis of fuel sulfur content and actual natural gas firing rate for each test run.

[Rule 62-297.310(8), F.A.C.; Rule 62-4.070(3), F.A.C., Permit No. 0410004-006-AC, Permit No. 0410004-010-AC]

Recordkeeping and Reporting

B.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

[Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

B.13. Component Replacements. For the replacement of combustion turbine components to facilitate prompt repair and return the unit to its original specifications, the permittee shall comply with the following notification and testing requirements.

a. Components shall only be replaced with functionally equivalent "like-kind" equipment. Replacement components may consist of improved or newer equipment, but such components shall not change operation or increase the capacity (heat input and power output rates) of the combustion turbine. Replacement components that affect emissions shall be designed to achieve the emissions standards specified in all valid air permits and shall achieve these standards or better. After a component replacement, the combustion turbine compressor engine remains subject to the standards of all valid air permits. [Rule 62-210.200(169), F.A.C.]

b. The permittee shall notify the Compliance Authority within seven days after beginning any replacement of the gas generator component of the compressor engine. Within seven days of first fire on a replacement gas generator, the permittee shall submit the following information to the Compliance Authority: date of first fire and certification from the vendor that the replacement gas generator is a functionally equivalent "like-kind" component. The vendor certification shall also identify the make, model number, maximum heat input rate (MMBtu/hour), power output (bhp) at ISO conditions, and that the permitted emission rates are achievable with the replacement component. This notification may be made by letter, fax, or email. A copy of the information shall be kept on site at the compressor station. Within 60 days of restarting the unit after a gas generator replacement, the permittee shall conduct stack tests to demonstrate compliance with the applicable emission standards. The permittee shall notify the Compliance Authority in writing at least 15 days prior to

conducting these tests.

If the proposed test schedule must be changed due to valid issues with equipment shakedown or test team schedules, the Compliance Authority may accept a shorter notice. The permittee shall comply with all permit requirements for test notification, test methods, test procedures, and reporting. [Rules 62-4.130, 62-4.160(2), (6), and (15) and 62-297.310(9), F.A.C.]

c. After investigation and for good cause, the Department may require special compliance tests pursuant to Rule 62-297.310(8)(c), F.A.C.

[Permit No. 0410004-010-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
004	Engine 2403: Solar Model Titan 130-20502SA gas turbine rated at 20,500 hp Gas Turbine No. 2403. 174.5 MMBtu per hour. *Fuel*: The combustion turbine will fire approximately 167,800 cubic feet per hour of pipeline natural gas (SCC No 2-02-002-01) at maximum permitted capacity. *Capacity*: At 174.5 MMBtu per hour of heat input, the combustion turbine produces approximately 20,500 bhp. After initial startup, the unit is intended to operate at or near capacity. *Controls*: Natural gas contains little or no ash, sulfur, or other contaminants, which minimizes emissions of particulate matter and sulfur dioxide. The efficient combustion of natural gas at high temperatures results in lower emissions of carbon monoxide and volatile organic compounds. Lean premix combustion technology will minimize the formation of nitrogen oxides. *Stack Parameters*: When operating at capacity, exhaust gases will exit a 55 feet tall stack that is 7.5 feet x 8 feet in diameter with a flow rate of approximately 232,782 acfm at 944° F.

This EU is subject to 40 CFR 60, Subpart KKKK -Standards of Performance for Stationary Combustion Turbines and 40 CFR 60, Subpart A– General Provisions

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum allowable heat input rate is 174.53 MMBtu/hr. This maximum heat input rate is based on gas turbine output power of 20,500 bhp, heat rate of 8,105 Btu/hp-hr, HHV at ISO conditions (i.e., 59 ºF, 50% relative humidity, and one atmosphere pressure), natural gas heat content of (1040 BTU/scf) HHV, and a 5% margin for measurement variability. Heat input rate will vary with gas turbine characteristics, load and ambient conditions.

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C., Permit No. 0410004-018-AC]

C.2. Authorized Fuel. The combustion turbine shall fire only natural gas with a maximum sulfur content of 10 grains per 100 standard cubic feet of natural gas.

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; 40 CFR 60.4365; Permit No. 0410004-016-AC, Permit No. 0410004-018-AC]

C.3. Hours of Operation. The hours of operation of the combustion turbine are not restricted (8,760 hours/year). Except for startup and shutdown, operation below 50% base load is prohibited.

[Rule 62-210.200(PTE), F.A.C.; Permit No. 0410004-016-AC, Permit No. 0410004-018-AC]

C.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.

[Rule 62-297.310(3), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging time(s) for **Condition C.5.** is based on the specified averaging time of the applicable test method.

C.5. The permitted maximum allowable emission rate for each pollutant is as follows:

Pollutant	Standards	Equivalent Maximum Emissions [6]		Rule Basis
		lb/hr	TPY	
CO [1]	25.0 ppmvd @ 15% O_2	9.5	41.7	Rule 62-212.400(12), F.A.C
NO_x [2]	15.0 ppmvd @ 15% O_2	9.4	41.1	Rule 62-212.400(12), F.A.C
	25.0 ppmvd @ 15% O_2	---	---	40 CFR 60.4320(a) Table 1 Part 60 Subpart KKKK
SO_2 [3]	10 grains of sulfur/100 scf	4.8	21.0	Rule 62-212.400(12), F.A.C
	Fuel which contains total potential sulfur emissions ≤0.060 lb SO_2/MMBtu) heat input.	---	---	40 CFR 60.4330(a)(2)
Opacity [5]	10% opacity, 6-minute average	---	---	Rule 62-4.070(3), F.A.C.
PM/PM_{10} [4]	Lean premix combustion design	---	5.0	Rule 62-4.070(3), F.A.C.
VOC [4]	Lean premix combustion design	---	2.4	Rule 62-4.070(3), F.A.C.

1 Compliance with the CO standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 10.

2 Compliance with the NO_x standards shall be demonstrated based on the average of three test runs conducted at permitted capacity as determined by EPA Method 7E or 20.

3 Maximum SO_2 standards are based on the maximum level specified by Federal Energy Regulatory Commission (FERC), which is 10 grains of sulfur per 100 standard cubic feet of natural gas. Actual fuel sulfur levels are expected to be less than 1 grain per 100 SCF of natural gas.

4 For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions were based on data in Table 3.1-2a in AP-42. Regulated VOC emissions were conservatively assumed to be 10% of the manufacturer's estimated emissions for total hydrocarbons. No testing required.

5 The opacity standard is based on a 6-minute block average, as determined by EPA Method 9. The opacity standard serves as a surrogate standard to show efficient combustion.

{Permitting Note: This standard is established as reasonable assurance of good combustion practices to minimize emissions.}

6 Equivalent maximum emissions for the gas turbine is provided for informational purposes and are based on: permitted capacity, a turbine inlet air temperature of 59° F, full operation (8760 hours per year), and the permit standards (CO, NO_x, and SO_2) or the maximum expected emissions (PM and VOC). Mass emission rates for SO_2 shall be calculated based on

actual fuel sulfur content and fuel flow rate.

[40 CFR 60.4320, 40 CFR 60.3330, Rule 62-212.400(12) F.A.C., Permit No. 0410004-016-AC, Permit No. 0410004-018-AC]

General Compliance Requirements

C.6. The stationary combustion turbine, air pollution control equipment, and monitoring equipment must be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[40 CFR 60.4333(a)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

C.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.;]

C.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.;]

Monitoring of Operations

C.9. Operational Data. Using the automated combustion turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp) and hours of operation for the combustion turbine. Operational information shall be summarized and reported with the required Annual Operating Report.

[Rule 62-4.070(3), F.A.C., Permit No. 0410004-011-AC, Permit No. 0410004-018-AC]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.10. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

Method	Description of Method and Comments
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[40 CFR 60.4400, Rule 62-204.800, F.A.C.; Appendix A of 40 CFR 60, Permit No. 0410004-016-AC, Permit No. 0410004-018-AC]

C.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

C.12. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the combustion turbine shall be tested to demonstrate compliance with the emissions standards for CO, NO_x, and Visible Emissions. The annual compliance tests shall be used to meet the Rule 62-297.310(8)(b), F.A.C. requirement for a compliance test performed prior to obtaining a renewed operation.

If the turbine's NO_x emissions exceed 75% of the applicable NSPS NO_x standard on the previous performance test, the subsequent compliance test shall be conducted no more than 14 calendar months following the previous performance test.

CO and NO_x emissions shall be tested concurrently at permitted capacity.

Actual SO_2 emissions shall be reported based on the current typical fuel sulfur content and actual natural gas firing rate for each test run.

[Rule 62-297.310(8), F.A.C.; Rule 62-4.070(3), F.A.C., 40 CFR 60.4400(a), Permit No. 0410004-016-AC]

Recordkeeping and Reporting

C.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

[Rule 62-213.440(1)(b), F.A.C.]

C.14. Performance Testing Report Submittal. For each combustion turbine that performs annual performance tests in accordance with in **Condition C.12.**, you must submit a written report of the results of each performance test Compliance Authority within 45 days after the test has been completed.

[Rule 62-297.310(10), F.A.C., 40 CFR 60.4375, Rule 62-204.800, F.A.C.]

Other Requirements

C.15. Component Replacements. For the replacement of combustion turbine components to facilitate prompt repair and return the unit to its original specifications, the permittee shall comply with the following notification and testing requirements.

a. Components shall only be replaced with functionally equivalent "like-kind" equipment. Replacement components may consist of improved or newer equipment, but such components shall not change operation or increase the capacity (heat input and power output rates) of the combustion turbine. Replacement components that affect emissions shall be designed to achieve the emissions standards specified in all valid air permits and shall achieve these standards or better. After a component replacement, the combustion turbine compressor engine remains subject to the standards of all valid air permits. [Rule 62-210.200(169), F.A.C.]

b. The permittee shall notify the Compliance Authority within seven days after beginning any replacement of the gas generator component of the compressor engine. Within seven days of first fire on a replacement gas generator, the permittee shall submit the following information to the Compliance Authority: date of first fire and certification from the vendor that the replacement gas generator is a functionally equivalent "like-kind" component. The vendor certification shall also identify the make, model number, maximum heat input rate (MMBtu/hour), power output (bhp) at ISO conditions, and that the permitted emission rates are achievable with the replacement component. This notification may be made by letter, fax, or email. A copy of the information shall be kept on site at the compressor station. Within 60 days of restarting the unit after a gas generator replacement, the permittee shall conduct stack tests to demonstrate compliance with the applicable emission standards. The permittee shall notify the Compliance Authority in writing at least 15 days prior to conducting these tests.

   If the proposed test schedule must be changed due to valid issues with equipment shakedown or test team schedules, the Compliance Authority may accept a shorter notice. The permittee shall comply with all permit requirements for test notification, test methods, test procedures, and reporting. [Rules 62-4.130, 62-4.160(2), (6), and (15) and 62-297.310(9), F.A.C.]

c. After investigation and for good cause, the Department may require special compliance tests pursuant to Rule 62-297.310(8)(c), F.A.C.

[Permit No. 0410004-016-AC, Permit No. 0410004-018-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
005	GEN04: Generac Model SG300 Emergency Generator powered by a four-stroke cycle, lean burn, 6-cylinder, spark ignition natural gas engine. GEN05: Generac Model SG300 Emergency Generator powered by a four-stroke cycle, lean burn, 6-cylinder, spark ignition natural gas engine *Fuel*: Each emergency generator engine will fire pipeline natural gas. *Capacity*: Each emergency generator engine is rated at 0.3 MW of electrical output and 454 brake horsepower mechanical output at 100 percent load. *Controls*: Each emergency generator engine utilizes non-selective catalytic reduction as its primary control technology. *Stack Parameters*: Exhaust gases from each emergency generator will exit a 20 feet tall stack that is 0.67 feet in diameter with a flow rate of approximately 2911 acfm at 1490° F.

Each Emergency Generator Engine is subject to 40 CFR 60, Subpart JJJJ - Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60 NSPS Subparts A -General Provisions and 40 CFR 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Compliance with the requirements of 40 CFR 63, Subpart ZZZZ will be met by meeting the requirements of 40 CFR 60, Subpart JJJJ. No further requirements of 40 CFR 63, Subpart ZZZZ shall apply for these engines. Each engine is a certified engine.

The following table provides important details for this emissions unit:

Engine ID	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last modification or reconstruction
GEN04	454 0.3 MW	01/04/2010	2010	Natural Gas	Emergency 4SLB SI	2.15	Unknown	N/A
GEN05	454 0.3 MW	01/04/2010	2010	Natural Gas	Emergency 4SLB SI	2.15	Unknown	N/A

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. Each engine shall have a maximum 454 brake horsepower mechanical output at 100 percent load (approximate design heat input rate is 4.25 MMBtu/hour equivalent to 4,086 cubic feet of natural gas per hour at 1,040 MMBtu/MMscf).

[Rules 62-4.070(3), 62-204.800, 62-212.200(PTE), F.A.C., Permit No. 0410004-016-AC]

D.2. Method of Operation - Emergency Stationary ICE. Each emergency stationary ICE shall be operated according to the requirements in paragraphs (1) through (3) of this Condition. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this Condition, is prohibited.

If the engine is not operated according to the requirements in paragraphs (1) through (3) of this Condition, the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and must meet all requirements for non-emergency engines.

(1) Emergency Situations. There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for the purposes specified in paragraph (2)(i) of this Condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this Condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) Maintenance and Testing. The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) *Vacatur Mandate*[1].

(iii) *Vacatur Manadate*[1].

(3) Non-Emergency Situations. The emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (2) of this Condition. Except as provided in paragraph (3)(i) of this Condition, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

[1] May 1, 2015 US Court of Appeals for District of Columbia Circuit stayed the mandate effectuating the vacatur of paragraphs 40 CFR 60.4243(d)(2)(ii)-(iii) until May 1, 2016.

[40 CFR 60.4243(d); Rule 62-204.800(8), F.A.C.]

D.3. Authorized Fuel. Each engine shall be fired with pipeline natural gas only.

[Permit No. 0410004-016-AC; and Rule 62-210.200(PTE), F.A.C.]

Emissions Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging time(s) for **Condition D.7.** is based on the specified averaging time of the applicable test method.

D.4. NESHAP, 40 CFR 63 Subpart ZZZZ Applicability. Each natural gas fired engine is classified as a new, stationary Reciprocating Internal Combustion Engines (RICE). In accordance with 40 CFR 63.6590(c)(1), each unit must meet the requirements of 40 CFR 63 Subpart ZZZZ by complying with the 40 CFR 60 Subpart JJJJ standards. No further 40 CFR 63 Subpart ZZZZ standards shall apply to the engine.

[40 CFR 63.6675(def); 40 CFR 63.6585(a) & (c); 40 CFR 63.6590(a)(2)(iii); 40 CFR 63.6590(c)(1), Rule 62-204.800(8), F.A.C.]

D.5. NSPS, 40 CFR 60, Subpart JJJJ Applicability. Each engine is classified as emergency stationary internal spark ignition (SI) engine and is subject to the standards of 40 CFR 60 Subpart JJJJ.

[40 CFR 60.4230(a)(4)(iv); Rule 62-204.800(8), F.A.C.]

D.6. 40 CFR 60, Subpart A-General Provision. Table 3 to 40 CFR 60 Subpart JJJJ shows which parts of the General Provisions in §§ 60.1 through 60.19 are applicable. *Refer to Appendix*.

[40 CFR 60.4246; Table 3 to 40 CFR 60 Subpart JJJJ, Rule 62-204.800(8), FAC]

D.7. Each engine shall not exceed the following standards of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compound (VOC) emissions. The owner or operator shall comply with these emission standards over the entire life of the engine.

	Emission Standards g/HP-hr		
Engine	**NO_x**	**CO**	**VOC [1]**
HP ≥ 130	2.0	4.0	1.0

[1] For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[40 CFR 60.4233(e); 40 CFR 60.4234; Table 1 of 40 CFR 60 Subpart JJJJ, Rule 62-204.800, F.A.C.]

Monitoring Requirements

D.8. Hour Meter- Each Engine. Starting on January 1, 2011, if the emergency stationary spark ignition internal combustion engine was built on or after January 1, 2011 does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

[40 CFR 60.4237(b), Rule 62-204.800, F.A.C.]

Compliance Requirements

D.9. Engine Certification. The owner or operator of a stationary SI internal combustion engine must demonstrate compliance by purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in paragraphs(1) and (2) below**.**

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance as follows:

(i) You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

[40 CFR 60.4243(b)(1), 40 CFR 60.4243(a), (a)(1), (a)(2)(ii), Rule 62-204.800, FAC]

D.10. If the owner or operator does not operate and maintain the certified stationary SI ICE and control device according to the manufacturer’s written emission-related written instructions, the owner or operator shall perform initial performance testing, but is not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(f), Rule 62-204.800(8), F.A.C.]

Performance Testing Requirements

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.11. Performance Testing Requirements. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this Condition:

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 to 40 CFR 60 Subpart JJJJ *(Refer to Appendix).*

(b) Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If the stationary SI internal combustion engine is non-operational, the engine does not need to started up solely to conduct a performance test; however, the performance test must be conducted immediately upon startup of the engine.

(c) Three separate test runs must be conducted for each performance test required, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 1)$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 2)$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

Note: Performance testing pursuant to 40 CFR 60 Subpart JJJJ is required if either the requirements of **Condition D.9.(2)(i)** are applicable or the conditions of 40 CFR 60.4243(f) are met [**Condition D.10.].**

[40 CFR 60.4244, Rule 62-204.800(8), F.A.C.]

D.12. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

Notification, Recordkeeping and Reporting Requirements

D.13. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (1) through (4) of this Condition.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to **Condition D.9.(2)**, documentation that the engine meets the emission standards.

[40 CFR 60.4245(a), Rule 62-204.800, F.A.C.]

D.14. Performance Testing Report Submittal. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in **Condition D.11.** to the Compliance Authority within 45 days after the test has been completed.

[Rule 62-297.310(10), F.A.C., 40 CFR 60.4245(d), Rule 62-204.800, F.A.C.]

D.15. If the emergency stationary SI ICE operates for the purposes specified in **Condition D.2.(3)(i)**, an annual report shall be submitted according to the requirements in paragraphs (1) through (3) of this Condition.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) *N/A – Vacatur Mandate of 40 CFR 60.4243(d)(2)(ii) and (iii).*

(vi) *N/A – Vacatur Mandate of 40 CFR 60.4243(d)(2)(ii) and (iii).*

(vii) Hours spent for operation for the purposes specified in **Condition D.2.(3)(i),** including the date, start time, and end time for engine operation for the purposes specified in **Condition D.2.(3)(i).** The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data

Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.4245(e), Rule 62-204.800(8), F.A.C.]

D.16. Compliance Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

[Rule 62-297.310(9), F.A.C.]

D.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

[Rule 62-213.440(1)(b), F.A.C.]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Abbreviations, Acronyms, Citations and Identification Numbers
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, ZZZZ.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart GG
Appendix NSPS, Subpart JJJJ
Appendix NSPS, Subpart KKKK.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.

Referenced Attachments. ..... At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.