

## STATEMENT OF BASIS

Title V Air Operation Permit Renewal  
Permit No. 0090106-009-AV

### APPLICANT

The applicant for this project is Florida Gas Transmission Company, LLC, Compressor Station No. 19. The applicant's responsible official and mailing address are: Mr. David Shellhouse, Vice President – Southeast Operations, Florida Gas Transmission Company, LLC, 2301 Lucien Way Suite 200, Maitland, Florida 32751.

### FACILITY DESCRIPTION

The applicant operates the existing Compressor Station No. 19, which is located in Brevard County at 3400 Ranch Road, West Melbourne, Florida 32904.

The Florida Gas Transmission Company, LLC (FGT), Compressor Station (CS) No. 19, is part of a natural gas pipeline system operated by FGT that includes gathering systems in Texas and Louisiana, transmission and delivery throughout Florida. The existing CS that is located along the pipeline is used for maintaining line pressure to ensure natural gas continues to move at sufficient volumes for reliable service at delivery points. CS No. 19 is one of the compressor stations located on the FGT pipeline. The facility consists of two 2,600 and one 5,000 brake horsepower (bhp) non-emergency natural gas fired spark ignition (SI) reciprocating internal combustion engines (RICE) emissions units (EU) (EU 001 – EU 003) driving reciprocating compressors and one 385 bhp emergency generator driven by a SI ICE.

### REGULATED EU IDENTIFICATION NUMBERS AND DESCRIPTIONS

EU No.	Brief Description
001	Non-Emergency Natural Gas Engine No. 1901 (2,600 bhp)
002	Non-Emergency Natural Gas Engine No. 1902 (2,600 bhp)
003	Non-Emergency Natural Gas Engine No. 1903 (5,000 bhp)
004	Emergency Natural Gas Engine (385 bhp)

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

### APPLICABLE REGULATIONS

Based on the Title V air operation permit renewal application received on September 13, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (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 Nos.
<i>Federal Rule Citations</i>	
40 CFR 63, Subpart A, NESHAP General Provisions	001, 002, 003, 004
40 CFR 63, Subpart ZZZZ, Stationary RICE	001, 002, 003, 004
<i>State Rule Citations</i>	
Chapter 62-213, F.A.C., Operation Permits for Major Source of Air Pollution	001, 002, 003, 004
Rule 62-204.800, F.A.C., Federal Regulations Adopted by Reference	001, 002, 003, 004

### PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility. This permit is being processed concurrently with air construction Permit No. 0090106-008-AC. This permitting action responds to a request from FGT to revise a condition in an underlying air construction permit primarily

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related to adjusting the fuel sulfur content limit of Non-Emergency Natural Gas Engine No. 1903 (5,000 bhp) (EU 003) to 0.078 grains of sulfur per standard cubic feet (gr S/scf). The Department made some administrative changes to Engine Nos. 1901 – 1903 primarily related to: removing the sulfur dioxide (SO<sub>2</sub>) emission limits; removing emission factors established as emission limits for all regulated pollutants; and establishing new recordkeeping requirements for monitoring the operational hours, hourly natural gas consumption from each engine, and monthly average heat input rate.

### PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received **September 12, 2024**.

Draft Title V Air Operation Permit Renewal issued on **November 8, 2024**.

Revised Draft Title V Air Operation Permit Renewal issued on **January 3, 2025**

Proposed permit package issued: **February 20, 2025**

### PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 4922 – Natural Gas Transmission Establishments.

North American Industry Classification System (NAICS): 486210 – Pipeline Transportation of Natural Gas

HAP: The facility is identified as a major source of HAP.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

GHG: The facility is not identified as a major source of greenhouse gas (GHG) pollutants.

### PROJECT REVIEW

Changes to the permit made as part of this revision are shown in ~~strike through~~ format for deletions and in double underline format for additions. For ease of identification, all changes have also been **highlighted in yellow** within the permit document. The revisions shown below are the only portions of the permit that are open for public comment or challenge. Comments received related to the remainder of the permit will not be addressed during this permitting action.

The renewal permit includes the following changes.

1. Changes throughout the Title V air operation permit are based on the Department's updated formats for a Title V air operation permit.

#### Section I Facility Information

2. The names of the EU at the facility were revised to be more descriptive and consistent.
3. The table of applicable regulations was revised to only include relevant regulations.

#### Section II: Facility-Wide Conditions

4. General volatile organic compounds (VOC) sub-conditions from the previous air operation permit were not included in the renewal as they were not established in an air construction permit.

#### Section III: EUs and Specific Conditions

*Subsection A, Non-Emergency Natural Gas Engines Nos. 1901 – 1903 (EU 001 – EU 003)*

5. Previous Condition A.3 (Permitted Capacity). This condition was revised as follows.

**A.3. Permitted Capacity.** The average natural gas consumption for Emissions Units EU-001 and EU-002 shall not exceed 0.0227 million standard cubic feet per hour (MMSCF/hr) per engine (based on a fuel

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heating value of 1040 BTU/SCF) and the maximum heat input shall not exceed 23.6 MMBTU/hr. for each engine. The average natural gas consumption for EU 003 shall not exceed 0.0442 MMSCF/hr. (based on a fuel heating value of 1040 BTU/SCF) and the maximum heat input shall not exceed 46.0 MMBTU/hr. The maximum allowable heat input rate and fuel consumption rate are as follows:

<u>Unit No.</u>	<u>Heat Input Rate</u> <u>MMBtu/hour</u>	<u>Fuel Consumption</u> <u>MMscf/hour</u>	<u>Fuel Type</u>
<u>1901</u>	<u>23.6</u>	<u>0.0227</u>	<u>Natural Gas</u>
<u>1902</u>	<u>23.6</u>	<u>0.0227</u>	<u>Natural Gas</u>
<u>1903</u>	<u>46.0</u>	<u>0.0442</u>	<u>Natural Gas</u>

[Rule 62-210.200(201PTE), *Definitions—Potential to Emit (PTE)*, F.A.C.; and Permit Nos. AC05-189665 dated May 9, 1991; (modified—amended on September 17, 1993) and AC05-229322 dated September 23, 1993]

7. **Previous Condition A.4 (Emissions Limits).** Air construction Permit No. 0090106-008-AC revised this condition to remove the SO<sub>2</sub> emission limits and all the emission factors, since the engines only fire natural gas and to provide the facility the flexibility to use new methodology as allowed pursuant to Rule 62-210.370, F.A.C. In addition, the HAP limit was inserted into the previous Title V permit and was not established in an air construction permit. Consequently, there is no underlying basis for this limit; therefore, the HAP limit is considered invalid and obsolete, and the HAP limit is being removed from the current Title V permit without an underlying construction permit. The emissions limits table was revised and replaced with new Condition Nos. A.6 through A.9.

**A.4. Emissions Limits.** For each engine, exhaust emissions shall not exceed the levels for each pollutant shown in the table below:

a. Emissions Units EU 001 and EU 002

<b>Pollutant</b>	<b>Lbs/hr.</b>	<b>Tons/yr.</b>	<b>Emission factor</b>
Nitrogen Oxides	11.0	48.3	1.92 g/bhp-hr
Carbon Monoxide	15.4	67.6	2.69 g/bhp-hr
VOC (non-methane)	9.4	41.0	1.64 g/bhp-hr
Particulates (TSP)	0.24	1.0	0.00999 lbs./MMBtu
Particulates (PM 10/2.5)	0.24	1.0	0.00999 lbs./MMBtu
Sulfur Dioxide	0.51	2.2	7.80 gr S/100 scf
HAPs	1.7	7.5	0.0722 lbs./MMBtu

b. Emissions Unit EU 003:

<b>Pollutant</b>	<b>Lbs/hr.</b>	<b>Tons/yr.</b>	<b>Emission factor</b>
Nitrogen Oxides	22.05	96.58	2.0 g/bhp-hr
Carbon Monoxide	30.87	135.21	2.8 g/bhp-hr
VOC (non-methane)	8.82	38.63	0.8 g/bhp-hr
Particulates (TSP)	2.22	9.7	0.04831 lbs./MMBtu
Particulates (PM 10/2.5)	2.22	9.7	0.04831 lbs./MMBtu
Sulfur Dioxide	1.13	4.94	10 gr S/100 scf
HAPs	3.66	16.0	0.0795 lbs./MMBtu

[Rule 62-210.200(201), *Definitions—Potential to Emit (PTE)*, F.A.C.; and Permit Nos. AC05-189665 dated May 9, 1991; (modified—September 17, 1993) and AC05-229322 dated September 23, 1993]

**A.6. NO<sub>x</sub> Emissions.** As determined by stack test, nitrogen oxide (NO<sub>x</sub>) emissions from each engine shall not exceed the following:

- Engine Nos. 1901 and 1902 (EU 001 & EU 002).* 48.3 tons/year. [Rule 62-4.070, F.A.C.; and Permit No. AC05-189665, amended on September 17, 1993]
- Engine No. 1903 (EU 003).* 96.58 tons/year. [Rule 62-4.070, F.A.C.; and Permit No. AC05-229322]

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- A.7. CO Emissions.** As determined by stack test, Carbon monoxide (CO) emissions from each engine shall not exceed the following:
- Engine Nos. 1901 and 1902 (EU 001 & EU 002).* 67.6 tons/year. [Rule 62-4.070, F.A.C.; and Permit No. AC05-189665, amended on September 17, 1993]
  - Engine No. 1903 (EU 003).* 135.21 tons/year. [Rule 62-4.070, F.A.C.; and Permit No. AC05-229322]
- A.8. VOC Emissions.** As determined by stack test, VOC emissions from each engine shall not exceed the following:
- Engine Nos. 1901 and 1902 (EU 001 & EU 002).* 41.0 tons/year. *{Permitting Note: CO emissions is used as a surrogate for VOC emissions and by demonstrating compliance with the CO emissions limit will demonstrate compliance with the VOC emission limit.}* [Rule 62-4.070, F.A.C.; and Permit No. AC05-189665, amended on September 17, 1993]
  - Engine No. 1903 (EU 003).* 38.63 tons/year. *{Permitting Note: CO emissions is used as a surrogate for VOC emissions and by demonstrating compliance with the CO emissions limit will demonstrate compliance with the VOC emission limit.}* [Rule 62-4.070, F.A.C.; and Permit No. AC05-229322]
- A.9. PM Emissions.** As determined by stack test, PM emissions from each engine shall not exceed the following:
- Engine Nos. 1901 and 1902 (EU 001 & EU 002).* 0.4 tons/year. [Rule 62-4.070, F.A.C.; and Permit Nos. AC05-189665, amended on September 17, 1993, & 0090106-008-AC]
  - Engine No. 1903 (EU 003).* 0.89 tons/year. [Rule 62-4.070, F.A.C.; and Permit Nos. AC05-229322 & 0090106-008-AC]
8. **Previous Condition A.6 (Annual Compliance Tests Required).** Air construction Permit No. 0090106-008-AC revised this condition to clarify the annual compliance testing requirements for opacity, NOx, and CO, and particulate matter (PM). In addition, a statement was included that pursuant to Rule 62-297.310(8)(a)5.e, F.A.C., an annual emissions test is not required for any EU with emissions generated solely from the combustion of natural gas.
- A.6. Annual Compliance Tests Required.** During each calendar year (January 1<sup>st</sup> to December 31<sup>st</sup>), each EU shall be tested to demonstrate compliance with the emissions standards for opacity, NOx, and CO, and PM in Conditions ~~Error! Reference source not found.~~ - ~~Error! Reference source not found.~~ & **A.9A.7.** Except, an annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of natural gas; therefore, no stack testing required. However, the Department can request a special compliance test pursuant to Rule 62-297.310(8)(c), F.A.C., [Rules 62-4.070(1) and (3) *Reasonable Assurance* and Rule 62-297.310 (8)(a), 8(a)5.e & (8)(~~ec~~), *Annual Emissions Tests Required*, F.A.C. and Permit Nos. AC05-189665, dated May 9, 1991; (modified September 17, 1993) and AC05-229322 dated September 23, 1993 & 0090106-008-AC]
- {Permitting Note: In accordance with Rule 62.297.310 (8) (a)5.d. annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.}*
9. **New Condition A.14 (Visual Inspection – Engine No. 1903 (EU 003)).** This condition, authorized in Permit No. AC05-229322, was included in the renewed Title v air operation permit.
- A.14. Visual Inspection – Engine No. 1903 (EU 003).** The permittee shall annually perform a visual inspection of the compressor engine, filters, associated piping system for rust spots cracks, leaks and odors. Also, ensure that safety valves and the stack are in proper order and working properly. The permittee shall document the findings and corrective action taken. [Permit No. AC05-229322]
10. **New Condition A.15 (Monthly Recordkeeping Requirements) & Previous Conditions A.11 (Monthly Recordkeeping Requirement and A.12 (Additional Recordkeeping Requirements).** Previous Condition A.11 and A.12 were inserted into the previous Title V permit and was not established in an air construction permit.

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Consequently, there is no underlying basis for these recordkeeping requirements; therefore, the recordkeeping requirements are considered invalid and obsolete. Therefore, air construction Permit No. 0090106-008-AC established the following new recordkeeping requirement:

**A.15. Monthly Recordkeeping Requirement.**

a. Monthly Log. The permittee shall maintain a log containing the following information for each engine:

- (1) Facility Name, Facility ID No. (i.e., Compressor Station 19, Facility ID 0090106).
- (2) Designation of the month and year of record.
- (3) Most recent monthly total of operational hours.
- (4) Hourly logs of the natural gas burned (MMscf) in each compressor engine.
- (5) Monthly average heat input rate per each hour of operation.
- (6) Monthly logs shall be completed by the end of the following month.

b. Record Retention. The permittee shall maintain the log at the facility for a period of 5 years and made available to the Department upon request.

[Rule 62-4.070(1) & (3), F.A.C.; and Permit No. 0090106-008-AC]

*Subsection B, EU 004, Emergency Natural Gas Engine (385 bhp)*

11. Previous Condition B.11 (40 CFR 63 Subpart A – General Provisions). This condition was removed pursuant to 40 CFR 63.6665, an existing emergency stationary RICE is not required to comply with any of the requirements of the General Provisions specified in Table 8 of 40 CFR 63, Subpart ZZZZ.

## CONCLUSION

This project renews Title V air operation permit No. 0090106-007-AV, which was effective on November 25, 2019. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.