# TECHNICAL EVALUATION
# &
# PRELIMINARY DETERMINATION

## APPLICANT

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

Compressor Station No. 19

Facility ID No. 0090106

## PROJECT

Project No. 0090106-006-AV
Application for Title V Air Operation Permit Renewal
Project Name: FGT Compressor Station No. 19 Title V Renewal

## COUNTY

Brevard County, Florida

## PERMITTING AUTHORITY

Florida Department of Environmental Protection
Waste and Air Resource Programs
Central District Office
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us

February 24, 2015

Prepared by Jeff Rustin, P.E.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## GENERAL PROJECT INFORMATION

### Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210, and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

### Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Project Description:

A. Applicant:

Mr. David W. Shellhouse, Vice President, Southeast Operations
Vectorworks Merritt Island, LLC
2405 Lucien Way, Suite 200
Maitland, FL 32751-7047
**Dave.Shellhouse@energytransfer.com**

B. Professional Engineer:

Mr. William Karl, P.E.
Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, FL 32606-5004
**bkarl@ectinc.com**

C. Application Contact:

Ms. Janice Taylor, Environmental Engineer
Florida Gas Transmission Company
P.O. Box 945100
Maitland, FL 32794-5100
**Janice.Taylor@energytransfer.com**

D. Project Location:

3400 Ranch Road
West Melbourne, FL

E. Project Summary:

This is a Title V Air Operation Permit Renewal for the facility. This facility is Compressor Station No. 19, which consists of four natural gas fired internal combustion engines. Two are rated at 2,600 bhp and are manufactured by Dresser-Rand, Model 412-KVSRA; one is rated at 5,000 bhp and is manufactured by Dresser-Rand, Model TCVD-10. The fourth internal combustion engine is a 385-hp natural gas-fired emergency electrical generator manufactured by Waukesha. This facility is part of a natural gas pipeline system serving the State of Florida.

The emergency generator unit was deleted from the insignificant emissions units and activities list and was reclassified as an emission unit, because it is subject to unit specific conditions of 40 CFR 63, Subpart ZZZZ. It has been designated as Emission Unit 004.

F. Application Information:

Application Received on: 02/13/2015
Application considered to be complete on: 02/18/2015

## II. PSD Applicability for Project

There were no equipment changes since the last Title V Air Permit Renewal was issued and no emission limit increases in the permit. The emergency generator was reclassified as an emission unit (previously classified as an insignificant emission unit). The potential to emit (based on 100 hours) for $NO_X$ emissions for the Emergency Generator is 0.42 tons/year, the pollutant with the highest emissions from the generator. No additional PSD Applicability Evaluation is necessary.

III. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, and Chapters 62-204 through 62-297, F.A.C., as indicated below.

| Subject to: | Y/N | Comments |
|---|---|---|
| **Rule 62-212.400, F.A.C.** - Prevention of Significant Deterioration | N | • No equipment changes; reclassified emergency generator as an emission unit.<br>• When next air construction permit is received, a PSD determination should be accomplished. |
| **Rule 62-296.320(4), F.A.C.** - General Particulate Emission Limiting Standards | Y | The facility is a potential source of unconfined particulate matter emissions. Visible emissions for each source that emits particulates are limited to less than 20 percent opacity. |
| **Rules 62-296.320(1) and (2), F.A.C.** - General Pollutant Emission Limiting Standards (VOCs and Odor) | Y | The facility is a source of VOCs and odors. |
| **Rule 62-296.400, F.A.C.** – Stationary Source Emission Standards | N | There is no applicable source category. |
| **Rule 62-296.500, F.A.C.** - Reasonably Available Control Technology (VOC) | N | Brevard County is an attainment area for ozone |
| **Rule 62-204.800(8), F.A.C.** - Standards of Performance for New Stationary Sources (NSPS – 40 CFR 60) | N | There is no applicable source category. |
| **Rule 62-204.800(11), F.A.C.** National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63) | Y | • Emission Units 001, 002, and 003 are considered to be existing affected sources by 40 CFR 63, Subpart ZZZZ; but are not are subject to meet any of the requirements.<br>• Emission Unit 004 is considered to be an existing affected source, but is subject to the applicable requirements listed in Table 2C of the subpart. |
| **Chapter 62-213, F.A.C.** - Operation Permits for Major Sources of Air Pollution | Y | Facility is a Title V facility. |
| **Rule 62-297.310, F.A.C.** – General | Y | Conduct stack tests and visible |

| Subject to: | Y/N | Comments |
|---|---|---|
| Compliance Test Requirements | | emission tests annually. |

IV. Summary of Emissions

| Pollutant | EU No. | Potential Emissions (tons/year) | Major Source Thresholds (tons/year) |
|---|---|---|---|
| $NO_X$ | 001 | 48.3 | 100 |
| CO | 001 | 67.6 | 100 |
| VOC | 001 | 41.0 | 100 |
| $SO_2$ | 001 | 2.2 | 100 |
| $PM/PM_{10}/PM_{2.5}$ | 001 | 1.0 | 100 |
| HAPs | 001 | 7.5 | 25 (total) |
| $NO_X$ | 002 | 48.3 | 100 |
| CO | 002 | 67.6 | 100 |
| VOC | 002 | 41.0 | 100 |
| $SO_2$ | 002 | 2.2 | 100 |
| $PM/PM_{10}/PM_{2.5}$ | 002 | 1.0 | 100 |
| HAPs | 002 | 7.5 | 25 (total) |
| $NO_X$ | 003 | 96.58 | 100 |
| CO | 003 | 135.21 | 100 |
| VOC | 003 | 38.63 | 100 |
| $SO_2$ | 003 | 4.94 | 100 |
| $PM/PM_{10}/PM_{2.5}$ | 003 | 9.73 | 100 |
| HAPs | 003 | 16.0 | 25 (total) |
| $NO_X$ | 004 | 0.42 | 100 |
| CO | 004 | 0.03 | 100 |
| VOC | 004 | 0.01 | 100 |
| $SO_2$ | 004 | 0.003 | 100 |
| $PM/PM_{10}/PM_{2.5}$ | 004 | 0.002 | 100 |
| HAPs | 004 | 0.008 | 25 (total) |
| $NO_X$ | Facility | 193.6 | 100 |
| CO | Facility | 270.44 | 100 |
| VOC | Facility | 120.64 | 100 |
| $SO_2$ | Facility | 9.434 | 100 |
| $PM/PM_{10}/PM_{2.5}$ | Facility | 11.732 | 100 |
| HAPs | Facility | 31.008 | 25 (total) |

V. Discussion

There were no equipment changes since the last Title V Air Permit Renewal was issued. The emergency generator was reclassified as an emission unit (previously classified as an

insignificant emission unit). I reviewed the 2014 Annual Performance Test Audit Report for testing conducted on July 16-17, 2014. The results were satisfactory.

## VI. Federal NSPS and/or NESHAP Provisions

A. NESHAP Subpart ZZZZ–Stationary Reciprocating Internal Combustion Engines

## VII. Conclusions

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

## VIII. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and adopted federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Waste & Air Resource Programs, Central District Office, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767, by e-mail at jeff.rustin@dep.state.fl.us or by phone at 407-897-4100.