



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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SECRETARY

## PERMITTEE

Sabal Trail Transmission, LLC  
5400 Westheimer Court  
Houston, TX 77056

Authorized Representative:

Thomas Wooden, Vice President, Field Operations

Air Permit No. 0970092-001-AC  
Permit Expires: January 31, 2018  
Reunion Compressor Station  
Facility ID No. 0970092

## PROJECT AND LOCATION

Sabal Trail Transmission, LLC is proposing to build the Reunion Compressor Station. The station is part of the proposed Sabal Trail natural gas pipeline. The proposed facility will be located in Osceola County on Osceola Polk Line Road in Intercession City, Florida. The UTM coordinates are Zone 17, 445.49 kilometers (km) East, and 3126.3 km North. The Reunion Compressor Station will consist of one 20,500 break horsepower (bhp) combustion turbine-driven compressor unit, one 15,900 bhp combustion turbine-driven compressor unit and one 880 bhp emergency generator. In addition, the station will consist of other emission units and support equipment to include: two gas fired natural gas heaters; one 2,000 gallon condensate storage tank; one 1,200 gallon oil storage tank; one 557 gallon separator vessel; one 177 gallon separator vessel; one 313 gallon separator vessel; two 43 gallon separator vessels; a parts washer; and miscellaneous support equipment.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. As a new minor source the project is not subject to the preconstruction review requirements for major stationary sources in Rules 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality or Rule 62-212.500, F.A.C. for the Preconstruction Review for Nonattainment Areas.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Administrative Requirements), Section 3 (Emission Unit Specific Requirements), and Section 4 (Appendices). As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of the permit under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

*For:*

Jeffery F. Koerner, Deputy Director  
Division of Air Resource Management

## FINAL PERMIT

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### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Reagan Mayces, Director, Spectra Energy Corporation: [RMMayces@spectraenergy.com](mailto:RMMayces@spectraenergy.com)

Mr. Bobby Van Borssum, Spectra Energy Corporation: [RHVanBorssum@spectraenergy.com](mailto:RHVanBorssum@spectraenergy.com)

Mr. Thomas Wooden, Spectra Energy Corporation: [TVWooden@spectraenergy.com](mailto:TVWooden@spectraenergy.com)

Mr. Michael Ballenger, P.E., Trinity Consultants: [mballenger@trinityconsultants.com](mailto:mballenger@trinityconsultants.com)

Ms. Heather Ceron, US EPA Region 4: [ceron.heather@epa.gov](mailto:ceron.heather@epa.gov)

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Mr. Tom Lubozynski, Administrator, DEP CD: [tom.lubozynski@dep.state.fl.us](mailto:tom.lubozynski@dep.state.fl.us)

Ms. Lynn Searce, DEP OPC: [lynn.searce@dep.state.fl.us](mailto:lynn.searce@dep.state.fl.us)

Clerk Stamp

### **FILING AND ACKNOWLEDGMENT**

**FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

## SECTION 1. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

Sabal Trail Transmission, LLC is proposing to construct the Reunion Compressor Station as part of the proposed Sabal Trail natural gas pipeline. The Sabal Trail Pipeline will consist of a 36 inch diameter pipeline which in Florida will run from the running from the running from the Florida/Georgia state line to the Reunion Compressor Station. Sabal Trail is proposing two compressor stations in Florida, in addition to the Reunion Station, as part of the overall pipeline construction. The Reunion Compressor Station is located in Intercession City on Osceola Polk Line Road in Osceola County, Florida. The proposed compressor station will consist of the following emissions units.

EU ID No.	Emissions Unit Description
001	One new Solar® Mars 100-16002 15,900 break horsepower (bhp) natural gas fired combustion turbine-driven compressor unit
002	One new Solar® Titan 130 20,500 bhp natural gas fired combustion turbine-driven compressor unit
003	One new 880 bhp Waukesha VGF36GL natural gas fired emergency generator or equivalent
004	Fugitive Piping Components
005	Gas Release Events

The compressor station will also consist of miscellaneous support equipment such as tanks vessels and natural gas heaters that are exempt from permitting.

### FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility operates units subject to the provision in 40 Code of Federal regulations (CFR) Part 60 Standards of Performance for New Stationary Sources or New Source Performance Standards (NSPS).
- The facility operates units subject to the provision in 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP).

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Division of Air Resource Management of the Department of Environmental Protection (Department). Copies shall be sent to each agency identified under Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Central District Office. The mailing address and phone number of the Central District Office is: 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767 and (407) 897-4100.
3. Appendices: The following Appendices are attached as part of this permit:
  - a. Appendix A: (Citation Formats and Glossary of Common Terms);
  - b. Appendix B: (General Conditions);
  - c. Appendix C: (Common Conditions);
  - d. Appendix D: (Common Testing Requirements);
  - e. Appendix E: (NSPS Subpart A – General Provisions);
  - f. Appendix F: (NSPS Subpart KKKK - Standards of Performance for Stationary Combustion Turbines);
  - g. Appendix G: (NSPS Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines);
  - h. Appendix H: (NESHAP Subpart A – General Provisions); and
  - i. Appendix I: (NESHAP Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation:
  - (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]
  - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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8. Application for Air Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. An air operating permit is required for regular operation of the permitted emissions unit. The permittee shall apply for an air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for an air operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]
9. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]  
*{Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as 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.}*
10. Unconfined Emissions of 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. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
11. Volatile Organic Compounds: No person shall 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. No such devices or systems are deemed necessary or ordered by the Department. [Rule 62-296.320(1), F.A.C.]
12. Opacity: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
13. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating hours and emissions from this facility (including the emission units in subsequent sections of this permit). Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**A. Compressor Turbines 1 and 2 (EU ID Nos. 001 and 002)**

This section of the permit addresses the following emissions unit.

EU ID No.	Emissions Unit Description
001	<p>Turbine 01 is a Solar® Mars 100-16002 15,900 bhp natural gas fired combustion turbine-driven compressor unit.</p> <ul style="list-style-type: none"><li>• <i>Fuel:</i> The combustion turbine will fire only natural gas.</li><li>• <i>Capacity:</i> At a heat input rate of approximately 118 million British thermal units per hour (MMBtu/hr), lower heating value (LHV), the combustion turbine produces approximately 15,900 bhp (nominal rating per ISO).</li><li>• <i>Controls:</i> Natural gas contains little or no ash, sulfur, or other contaminants, which minimizes emissions of particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>). The efficient combustion of natural gas at high temperatures results in lower emissions of carbon monoxide (CO) and volatile organic compounds (VOC). Lean premix combustion technology (SoLoNO<sub>x</sub> Dry Emission Technology) will minimize the formation of nitrogen oxides (NO<sub>x</sub>). An oxidation catalyst (OxCat) will be used to further reduce emissions of CO and VOC.</li><li>• <i>Stack Parameters:</i> When operating at 100% power output and at the annual average ambient conditions, exhaust gases will exit a 9.0 foot equivalent diameter, 59 foot tall stack at a velocity of approximately 50 feet per second (fps) at a temperature of approximately 917 degrees Fahrenheit (°F).</li></ul>
002	<p>Turbine 2 is a Solar® Titan 130 20,500 bhp natural gas fired combustion turbine-driven compressor unit.</p> <ul style="list-style-type: none"><li>• <i>Fuel:</i> The combustion turbine will fire only natural gas.</li><li>• <i>Capacity:</i> At a heat input rate of approximately 144 MMBtu/hr, LHV, the combustion turbine produces approximately 20,500 bhp.</li><li>• <i>Controls:</i> See Turbine 1.</li><li>• <i>Stack Parameters:</i> When operating at capacity, exhaust gases will exit a 9.0 foot diameter, 59foot tall stack at a velocity of approximately 60 fps at a temperature of approximately 955.1 °F.</li></ul>

**EQUIPMENT**

1. Compressor Turbines 1 and 2: The permittee is authorized to install a new Solar® Mars 100-16002 15,900 bhp natural gas fired combustion turbine-driven compressor unit (Turbine 1, EU ID No. 001) and a new Solar® Titan 130 20,500 bhp natural gas fired combustion turbine-driven compressor unit (Turbine 2, EU ID No. 002). Both turbines shall incorporate SoLoNO<sub>x</sub> Dry Emission Technology to minimize the formation of NO<sub>x</sub> and OxCat to minimize emissions of CO and VOC. [Application No. 0970092-001-AC and Rule 62-210.200(PTE), F.A.C.]

**APPLICABLE FEDERAL REGULATIONS**

2. NSPS Subparts A and KKKK: Turbines 1 and 2 are subject to applicable requirements in NSPS Subparts A (General Provisions) and KKKK (Stationary Combustion Turbines) of 40 CFR 60. See Appendices E and F, respectively. [NSPS 40 CFR 60, Subpart A and NSPS 40 CFR 60, Subpart KKKK]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**A. Compressor Turbines 1 and 2 (EU ID Nos. 001 and 002)**

**PERFORMANCE RESTRICTIONS**

3. Permitted Capacity:

- a. *Turbine 1:* The nominal maximum heat input rate to compressor Turbine 1 is approximately 118 MMBtu per hour, LHV, while producing approximately 15,900 bhp at International Organization for Standardization (ISO) conditions based on: a compressor inlet air temperature of 59 °F; a compressor inlet pressure of 1 atmosphere and 60% humidity; 100% load; and a lower heating value of 940 British thermal unit per standard cubic foot (Btu/scf) for natural gas.
- b. *Turbine 2:* The nominal maximum heat input rate to compressor Turbine 2 is approximately 144 MMBtu/hr, LHV, while producing approximately 20,500 bhp at ISO conditions based on: a compressor inlet air temperature of 59 °F; a compressor inlet pressure of 1 atmosphere and 60% humidity; 100% load; and a lower heating value (LHV) of 940 Btu/scf for natural gas.
- c. *Performance Curves:* Heat input rates will vary depending upon combustion turbine characteristics, load, and ambient conditions. The permittee shall provide manufacturer’s performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial testing, i.e., stack testing required for demonstration of compliance with the emissions standards in **Specific Condition 3.A.6**. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

[Application No. 0970092-001-AC and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

- 4. Authorized Fuel: The turbines shall fire only natural gas with a maximum sulfur content of 20 grains per 100 standard cubic feet (20 g S/100 SCF). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and 40 CFR 60 Subpart KKKK]
- 5. Restricted Operation: The hours of operation of the turbines are not restricted (8,760 hours per year). Normal operation is defined as > 0 °F and between 50% and 100% load. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

**EMISSIONS STANDARDS**

- 6. Emissions Standards: The turbines shall not exceed the following emission limits:

Emission Unit	Pollutant	Limit	Basis	Compliance
Compressor Turbines	NO <sub>x</sub>	9 ppmvd @15% O <sub>2</sub>	Applicant Request <sup>1</sup>	Stack Tests <sup>2</sup>
		25 ppmvd @15% O <sub>2</sub>	Subpart KKKK	
		150 ppmvd @15% O <sub>2</sub> <75 percent of peak load	Subpart KKKK	
	SO <sub>2</sub>	20 g S/100 SCF <0.060 lb/MMBtu	Subpart KKKK	Fuel Certification <sup>3</sup>
	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	20 g S/100 SCF	Reasonable Assurance	Fuel Certification <sup>3</sup>
		10% Opacity		Annual Test <sup>4</sup>
	CO	25 ppmvd @15% O <sub>2</sub>	Verify Emission Rate	Initial Test <sup>5</sup>
VOC	25 ppmvd TOC @15% O <sub>2</sub>	Verify Emission Rate	Initial Test <sup>6</sup>	

1. By meeting this limit between 50% and 100% load at temperature > 0 F, the applicant shows compliance with the NSPS Subpart KKKK NO<sub>x</sub> emission limit of 25 ppmvd @15% O<sub>2</sub>.
2. Performance tests in accordance with 40 CFR 60.4400 to demonstrate continuous compliance.
3. Pursuant to 40 CFR 60.4365(a) obtain a vendor certification or current tariff sheet for the fuel specifying that the maximum total sulfur content for natural gas use is 20 g S/100 scf.
4. Opacity from the unit during normal operation shall not exceed 10% opacity based on a 30-minute test conducted annually in accordance with EPA Method 9 - Visual Determination of Opacity. This opacity standard does not apply for the first 30 minutes after a turbine has started up.
5. EPA Method 10 – Determination of Carbon Monoxide Emissions from Stationary Sources (Instrumental Analyzer Procedure). Not an emissions limit. Test conducted to verify the emission rate.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Compressor Turbines 1 and 2 (EU ID Nos. 001 and 002)

6. EPA Method 25A – Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer. Not an emissions limit. Test conducted to verify the emission rate.

[Application No. 00970092-001-AC; Rules 62-4.070(3) and 62-212.400(12), F.A.C.; NSPS 40 CFR 60, Subpart KKKK]

#### TESTING REQUIREMENTS

7. **Initial Compliance Tests:** The turbines shall be tested to demonstrate initial compliance with the emission standards for NO<sub>x</sub> and opacity and to verify the CO and VOC emissions rates. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial startup of the turbine. Pursuant to Rule 62-297.310(2), F.A.C., permitted capacity is defined as 90% to 100% of the maximum operation rate (heat input rate) allowed by the permit. Pursuant to 40 CFR 60.4400, the performance tests must be done at any load condition within plus or minus 25% of peak load. The NO<sub>x</sub> performance test shall consist of three, 1-hour test runs. The CO and VOC performance tests shall be conducted concurrently with the NO<sub>x</sub> performance tests at peak load. No further CO or VOC testing is required. Actual SO<sub>2</sub> emissions shall be reported based on the fuel sulfur content and actual natural gas firing rate for each test run. [Rules 62-4.070(3) and 62-297.310(8)(b)3., F.A.C.; and 40 CFR 60.8 and 40 CFR 60.4400]
8. **VE and NO<sub>x</sub> Annual Compliance Tests:** During each calendar year, the turbines shall be tested to demonstrate compliance with the emission standards for NO<sub>x</sub> and opacity. If the NO<sub>x</sub> emissions from the performance test for a turbine is less than or equal to 75 percent of the NO<sub>x</sub> NSPS Subpart KKKK emissions limit ( $\leq 18.75$  ppm at 15% O<sub>2</sub> or  $\leq 0.9$  lb/MW-hr), then the testing frequency of subsequent performance tests on each turbine that is equal to or less than 75% of the NO<sub>x</sub> emission limit can be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test on a turbine exceed 75% of the NSPS Subpart KKKK NO<sub>x</sub> emissions limit, testing on an annual basis must be resumed for that turbine. [Rules 62-4.070(3) and 62-297.310(8)(a), F.A.C.; and 40 CFR 60.4400]
9. **SO<sub>2</sub> Emissions:** Annual SO<sub>2</sub> emissions shall be reported based on the fuel sulfur content and the actual natural gas volume firing during the reporting year. [Rules 62-4.070(3); and 40 CFR 60.4415]
10. **Test Requirements:** The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance test and at least 15 days prior to any other required test. If the proposed test schedule must be changed, the Compliance Authority may accept a shorter notice. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit and NSPS Subpart KKKK as applicable. [Rule 62-297.310(9), F.A.C.; and 40 CFR 60.7, 60.8 and 60.4400]
11. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments <sup>a</sup>
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content (These methods shall be conducted as necessary to support the other test methods.)
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 (This method shall be based on a continuous sampling train.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Combustion Turbines
18 <sup>b</sup>	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Compressor Turbines 1 and 2 (EU ID Nos. 001 and 002)

Method	Description of Method and Comments <sup>a</sup>
a.	The 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 for compliance testing unless prior written approval is received from the Department's Office of Permitting and Compliance in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C.
b.	EPA Method 25A is used to determine VOC. EPA Method 18 may be used to determine and deduct emissions of methane and ethane from the emissions measured using Method 25A when determining VOC emissions.

The above methods are described in Appendix A of 40 CFR 60 and are 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. [Rules 62-204.800, F.A.C. and Appendix A of 40 CFR 60]

#### EXCESS EMISSIONS

12. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. *Malfunction* is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. [Rules 62-210.700(4) and 62-210.200(Definitions), F.A.C.]
13. Best Operational Practices (BOPs) Required: The permittee shall train and require all operators and supervisors to operate and maintain the turbines and monitoring equipment in a manner consistent with best operational practices (BOPs) for minimizing emissions at all times including during startup, shutdown and malfunction. [Rules 62-4.070(3) and 62-210.700(1), F.A.C.]
14. Malfunction Notification: If emissions in excess of a standard occur due to malfunction, the permittee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rule 62-4.130, F.A.C.; Rule 62-204.800, F.A.C.; Rule 62-210.700(6), F.A.C.; 40 CFR 60.7; 40 CFR 60.4420]

#### RECORDS AND REPORTS

15. Monitoring of Capacity: The permittee shall monitor and record the operating rate of each turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made by monitoring daily rates of consumption of natural gas. [Rule 62-4.070(3), F.A.C.]
16. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the unit for the previous month of operation: fuel consumption, hours of turbine operation and the updated 12-month rolling totals for each. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. [Rules 62-4.070(3), F.A.C.]
17. Fuel Sulfur Records: Compliance with the fuel sulfur limit for natural gas given in **Specific Conditions 4 and 6** shall be demonstrated by keeping reports obtained from the vendor or a current tariff sheet indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D4468-85, D5504-01, D6228-98 and D6667-01, D3246-81 or more recent versions. [Rule 62-4.070(3), F.A.C; Rule 62-4.160(15), F.A.C.]
18. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Compressor Turbines 1 and 2 (EU ID Nos. 001 and 002)

297.310(10)(c), F.A.C. and in Appendix D of this permit. [Rule 62-297.310(10), F.A.C., and 40 CFR 60.4375(b)]

19. 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 of NO<sub>x</sub> and opacity 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(7)(b), 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.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### B. Emergency Generator (EU ID No. 003)

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

EU ID No.	Emission Unit Description
003	Waukesha VGF36GL 880 bhp natural gas fired spark ignition (SI) internal combustion engine (ICE) emergency generator or equivalent

#### APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Subparts A and JJJJ: The emergency generator is subject to NSPS Subparts A-General Provisions and JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. See Appendices E and G, respectively. [Rule 62-204.800(8)(b)81, F.A.C.; NSPS Subpart JJJJ]
2. NESHAP Subparts A and ZZZZ: The emergency generator is subject only to the initial notification requirements of NESHAP Subparts A and ZZZZ - Stationary Reciprocating Internal Combustion Engines (RICE). Per 40 CFR 63.6590(c), a new SI RICE at an area source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for SI ICE. No further requirements apply for such engines under the NESHAP Subpart ZZZZ. Thus, by complying with 40 CFR 60 Subpart JJJJ, the emergency generator meets the requirements of NESHAP Subpart ZZZZ. NESHAP Subparts A and ZZZZ are contained in Appendices H and I, respectively. [Rule 62-204.800(11)(b)82 and (d)1; NESHAP Subpart A and Subpart ZZZZ]

#### EQUIPMENT SPECIFICATIONS

3. Equipment: The permittee is authorized to install, operate, and maintain one natural gas fueled emergency generator rated at approximately 880 bhp (647 kilowatts). If the permittee chooses to install a certified engine, the electrical generator must be operated and maintained according to the manufacturer's emission-related written instruction. However, if the permittee does not choose to install a certified engine, the electrical generator must be operated in a consistent manner with good air pollution practice for minimizing emissions. Additionally for engines not certified, the permittee must keep a maintenance plan and record conducted maintenance.  
[Application No. 0970092-001-AC; NSPS Subpart JJJJ]

#### EMISSIONS AND PERFORMANCE REQUIREMENTS

4. Timer: The emergency generator must have a non-resettable hour meter. [40 CFR 60.4237(a)]
5. Hours of Operation: Operation of the emergency generator is limited as follows:
  - a. There is no time limit on the use of the emergency generator in emergency situations;
  - b. Each emergency generator may be operated for a maximum of 100 hours/calendar year for the purposes of:
    - i. 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.
    - ii. Emergency demand response for periods specified in 40 CFR 60.4243(d)(2)(ii).
    - iii. Periods where there is a deviation of voltage or frequency of 4 percent or greater below standard voltage or frequency.
  - c. Each emergency generators can be operated for up to 50 hours/calendar year in non-emergency situations but shall be counted towards the 100 hours/calendar year allowed in **Specific Condition 5.b.** above.

[NSPS Subpart JJJJ, 40 CFR 60.4243(d)]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**B. Emergency Generator (EU ID No. 003)**

- 6. **Other Requirements:** The applicant must track the engine's run time and the reason for use in order to demonstrate compliance with the run time requirements. If a non-certified engine is chosen, initial notification is required for non-certified RICE greater than 500 hp. In addition, since performance testing would be required per 40 CFR 60.4243(a)(2)(iii), advanced notification and results reporting are required. [40 CFR 60.4245(b), 40 CFR 60.4245(c), 40 CFR 60.8(d) and 40 CFR 60.4245(d)]
- 7. **Fuel Specification:** The generator shall burn natural gas with a sulfur content no greater than 20 g S/100 SCF. [Application No. 0970092-001-AC]
- 8. **Emergency Generator Emission Limits:** The permittee may purchase/install an emergency generator that is certified by the manufacturer to the certification emission standards given below for the power range.

Emergency Generator hp≥130	NO <sub>x</sub>	CO	VOC
	2.0 g/hp-hr <sup>1</sup>	4.0 g/hp-hr	1.0 g/hp-hr
	160 ppmvd @15% O <sub>2</sub> <sup>2</sup>	540 ppmvd @15% O <sub>2</sub>	86 ppmvd @15% O <sub>2</sub>

1. g/hp-hr means grams per horsepower-hour.  
2. ppmvd @15% O<sub>2</sub> means parts per million volume dry at 15% oxygen.  
3. The VOC noted in this table does not include formaldehyde (HCHO)

[Application No. 0970092-001-AC; NSPS Subpart JJJJ, Table 1]

- 9. **Emergency Generators Testing Requirements:** The certification requirement given in **Condition 3** and **Condition 8** can fulfill testing requirements. If a certified engine is used, the permittee shall maintain documentation from the manufacturer that the engine is certified to meet the emission standards. If a non-certified engine is installed, requirements include conducting an initial performance test within one year of startup and submitting a copy of the performance test within 60 days of its completion per 40 CFR 60.4245(d). Initial and subsequent testing must meet the requirements of 60.4244 and Table 2. [NSPS Subpart JJJJ]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**C. Piping Components (EU ID No. 004)**

This section of the permit addresses the following emissions unit.

EU ID No.	Emissions Unit Description
004	Emissions from piping components will occur, including occasional leaks from flanges, connectors, valves, open-ended lines, compressor seals, pump seals, etc.

**EQUIPMENT**

1. Piping Components: The permittee is authorized to construct, operate and maintain the piping components required to support the natural gas compressor station. [Application No. 0830177-001-AC]

**OPERATIONS**

2. Hours of Operation: The hours of operation are not limited (8,760 hours/year, each). [Application No. 0830177-001-AC]
3. Quarterly Visual Inspections: Within the second month of each calendar quarter, the permittee shall conduct a visual inspection of the piping components to identify component leaks. The permittee shall promptly conduct any necessary maintenance, repairs or replacements to minimize fugitive emissions from piping components. The permittee shall maintain a written or electronic log of each visual inspection, the findings, and any corrective actions taken. The log shall be available for review within 10 days of conducting the visual inspection. [Application No. 0830177-001-AC and Rule 62-296.320(1), F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**D. Emissions from Gas Releases (EU ID No. 005)**

This section of the permit addresses the following emissions unit.

<b>EU ID No.</b>	<b>Emissions Unit Description</b>
005	Gas release events at the compressor station will occur due to: periodic blowdown of the new compressors and other events. A gas release event refers to the intentional and unintentional venting of gas for routine operations (e.g., startup and shutdown), maintenance and emergency conditions. The majority of emissions from planned gas release events are associated with startup, shutdown, reduced-pressure demand events and maintenance activities.

**OPERATIONS**

1. Gas Releases: Gas release events are allowed for routine operations (e.g., startup and shutdown), maintenance, reduced-pressure demand events, other similar events and emergency conditions. When feasible, the permittee shall minimize the amount of gas released by proper planning. [Application No. 0830177-001-AC]
2. Gas Release Event Records: The permittee shall maintain a written or electronic log of the gas release events. For each gas release event, the permittee shall identify the date, time, reason for the release, approximate duration of the release and estimated quantity of gas released. This information shall be used when estimating emissions and for future planning. [Application No. 0830177-001- AC and Rule 62-296.320(1), F.A.C]