



# Florida Department of Environmental Protection

## Memorandum

TO: Michael G. Cooke, Division of Air Resource Management

THRU: Trina Vielhauer, Bureau of Air Regulation   
Al Linero, Air Permitting South Program

FROM: Jeff Koerner, Air Permitting South Program 

DATE: April 25, 2005

SUBJECT: Air Permit No. 0410004-010-AC  
Florida Gas Transmission Company  
Compressor Station 24 – Gilchrist County  
Heat Input Increase and NSPS Revisions

The Final Permit for this project is attached for your approval and signature. It is a modification of original Permit No. 0410004-007-AC that: increases the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revises the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and makes minor changes to the component replacement provisions for consistency. Compressor Station 24 is an existing facility located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review. In an agreement with the District and Local air programs, the Bureau of Air Regulation is processing air construction permits for the natural gas pipeline.

The Department distributed an "Intent to Issue Permit" package on February 16, 2005. The applicant published the "Public Notice of Intent to Issue" in the Gilchrist County Journal on March 3, 2005. We received proof of publication on April 19, 2005. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

Day #90 is June 11, 2005. I recommend your approval of the attached Final Permit for this project.

Attachments

## FINAL DETERMINATION

### **PERMITTEE**

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

### **PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation, Air Permitting South Program  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida, 32399-2400

### **PROJECT**

Air Permit No. 0410004-010-AC  
Compressor Station 24 - Heat Input Increase for Engine 2402

This permit is a modification of original Permit No. 0410004-007-AC that: increases the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revises the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and makes minor changes to the component replacement provisions for consistency. Compressor Station 24 is an existing facility located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida.

### **NOTICE AND PUBLICATION**

The Department distributed an "Intent to Issue Permit" package on February 16, 2005. The applicant published the "Public Notice of Intent to Issue" in the Gilchrist County Journal on March 3, 2005. The Department received proof of publication on April 19, 2005. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

### **COMMENTS**

No comments on the Draft Permit were received from the public, the Department's Northeast District Office, or the applicant.

### **CONCLUSION**

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

Compressor Station 24 – Gilchrist County  
Air Permit No. 0410004-010-AC  
Engine 2402, Heat Input Increase

*Authorized Representative:*

Mr. Rick Craig, V.P. of Southeastern Operations

Enclosed is Final Air Permit No. 0410004-010-AC, which increases the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revises the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and makes minor changes to the component replacement provisions for consistency. Compressor Station 24 is an existing facility located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it 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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

CERTIFICATE OF SERVICE

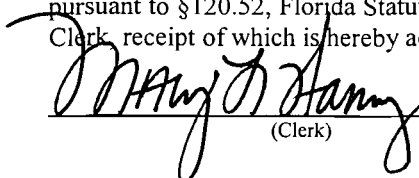
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 5/6/05 to the persons listed:

Mr. Rick Craig, FGTC\*  
Mr. James Fleak, FGTC  
Mr. David Holmes Parham, FGTC

Mr. V. Duane Pierce, AQMcs  
Mr. Chris Kirts, NED

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
(Clerk)

5/6/05  
(Date)



# Department of Environmental Protection

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Colleen M. Castille  
Secretary

## PERMITTEE:

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

### Authorized Representative:

Mr. Rick Craig, V.P. of Southeastern Operations

Air Permit No. 0410004-010-AC  
Facility ID No. 0410004  
Compressor Station 24  
Engine 2402, Heat Input Increase  
Gilchrist County, Florida  
Permit Expires: December 1, 2005

## PROJECT AND LOCATION

This permit is a modification of original Permit No. 0410004-007-AC that: increases the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revises the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and makes minor changes to the component replacement provisions for consistency. Compressor Station 24 is an existing facility located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. The UTM coordinates are Zone 17, 321.3 km East, and 3282.8 km North.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the Code of Federal Regulations. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This air construction permit supersedes all previous air construction permits for the emissions units at this facility.

## CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

*Michael G. Cooke*

Michael G. Cooke, Director  
Division of Air Resource Management

*5/5/05*

(Date)

"More Protection, Less Process"

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## SECTION I. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

Florida Gas Transmission Company (FGTC) operates existing Compressor Station 24 in Gilchrist County for their natural gas pipeline. The station consists of the following emissions units.

ID No.	Emission Unit Description
001	Engine 2401: Solar Model Mars 90-T13000S gas turbine rated at 13,000 bhp (ISO)
002	Miscellaneous support activities
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7200 bhp (ISO)

The station is part of FGTC's overall Phase VI project intended to increase the natural gas supply capacity and reliability to service domestic, commercial, and industrial customers in Florida. The permit consolidates the regulatory requirements for the emissions units at this facility.

### REGULATORY CLASSIFICATION

Title III: The facility is not a major source of hazardous air pollutants (HAP).

Title IV: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is not a Title V major source of air pollution pursuant to Chapter 62-213, F.A.C.

PSD: The facility is not a PSD major source of air pollution pursuant to Rule 62-212.400, F.A.C.

NSPS: New gas turbines are subject to the New Source Performance Standards of Subpart GG in 40 CFR 60.

### RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action and are on file with the Department.

- Permit No. 0410004-001-AC: Initial authorization to construct the new station (Engine 2401).
- Permit No. 0410004-003-AC: Modification to increase heat input rate for Engine 2401.
- Permit No. 0410004-004-AC: Modification to upgrade Engine 2401 to a 15,000 bhp gas turbine.
- Permit No. 0410004-006-AC: Authorization to construct Engine 2402.
- Permit No. 0410004-007-AC: Replacement of Engine 2401 (13,000 bhp gas turbine) and consolidation of all units.
- Project No. 0410004-010-AC: Application to increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency.

*{Permitting Note: This permit consolidates all of the emissions units under a single air construction permit. It is being "re-issued" to: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency. The units covered are existing units and the initial requirements have been met including: initial compliance tests; initial test reports; submittal of performance curves; and replacement of Engine 2401.}*

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: All documents related to applications for permits to operate an emissions unit shall be submitted to the Department's Air Resource Section of the Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/807-3300.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Air Resource Section of the Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/807-3300.
3. Appendices: The following Appendices are attached as part of this permit.
  - Appendix A. Citation Format
  - Appendix B. Common State Regulatory Requirements
  - Appendix C. NSPS Subpart GG Requirements for Gas Turbines
  - Appendix D. Summary of Potential Emissions
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the 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.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; and Title 40, Part 60 of the Code of Federal Regulations, adopted by reference in Rule 62-204.800, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
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 emissions unit or facility subject to this permit shall be constructed or 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. Air Operation Permit: This permit authorizes the proposed work and initial operation of the units to determine compliance with Department rules. An air operation permit is required for regular operation of the permitted emissions unit. At least sixty (60) days prior to the expiration of this air construction permit, the permittee shall submit an application for an air operation permit with the required compliance test report. [Rules 62-210.300, F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**Compressor Station 24**

This section of the permit addresses the following emissions units.

EU ID	Emissions Unit Description
001	<p><u>Compressor Engine 2401</u> consists of a Solar Model No. Mars 90-T13000S gas turbine.</p> <p><i>Fuel:</i> The gas turbine fires pipeline natural gas (SCC No. 2-02-002-01) at a maximum firing rate of approximately 108,100 cubic feet per hour based on a heating value (HHV) for natural gas of 1040 Btu/scf.</p> <p><i>Capacity:</i> At a maximum heat input rate of 113 MMBtu per hour, the gas turbine produces approximately 13,000 bhp (ISO). The gas turbine is intended to operate at or near capacity.</p> <p><i>Controls:</i> The efficient lean premix combustor design minimizes emissions of CO, NOx, and VOC. The exclusive combustion of natural gas minimizes emissions of PM and SO2.</p> <p><i>Stack Parameters:</i> When operating at capacity, exhaust gases exit a rectangular stack (7.5 feet by 8 feet) that is 58 feet tall with a flow rate of approximately 179,100 acfm and a temperature of approximately 873° F.</p>
002	<p><u>Miscellaneous support equipment</u> at this station includes a 443 bhp gas-fired emergency generator (“GEN03”), an oily water tank, a diesel oil tank, a pipeline condensate storage tank, and miscellaneous fugitive emissions from pipeline equipment such as pumps, valves, flanges, connectors, etc. <i>{Permitting Note: The emergency generator is expected to operate much less than 500 hours per year.}</i></p>
003	<p><u>Compressor Engine 2402</u> consists of a Cooper-Rolls Royce Model No. 501-KC7-DLE gas turbine.</p> <p><i>Fuel:</i> The gas turbine fires pipeline natural gas (SCC No. 2-02-002-01) at a maximum firing rate of approximately 65,400 cubic feet per hour based on a heating value (HHV) of 1040 Btu per scf of gas.</p> <p><i>Capacity:</i> At a maximum of 68 MMBtu per hour of heat input, the gas turbine produces approximately 7200 bhp (ISO). The gas turbine is intended to operate at or near capacity.</p> <p><i>Controls:</i> The efficient lean premix combustor design minimizes emissions of CO, NOx, and VOC. The exclusive combustion of natural gas minimizes emissions of PM and SO2.</p> <p><i>Stack Parameters:</i> When operating at capacity, exhaust gases exit a rectangular stack (7.33 feet by 5.50 feet) that is 61 feet tall with a flow rate of approximately 98,000 acfm and a temperature of approximately 960° F.</p>

**APPLICABLE STANDARDS AND REGULATIONS**

1. NSPS Requirements: Each gas turbine shall comply with the New Source Performance Standards (NSPS) of Subpart GG in 40 CFR 60. The applicable NSPS requirements are provided in Appendix C of this permit. [Rule 62-210.800, F.A.C.; 40 CFR 60, Subpart GG]
2. Other Permits: This permit supersedes all previous air construction permits for the emissions units identified at this facility. [Rule 62-4.070(3), F.A.C.]

**EQUIPMENT**

3. Compressor Engine 2401: The permittee is authorized to replace existing Engine 2401 with a 13,000 bhp (ISO) Solar Model No. Mars 90-T13000S gas turbine with lean premix combustor design. Ancillary equipment includes the automated gas turbine control system, an inlet air filtration system, and a rectangular stack. The permittee shall tune, operate and maintain the gas turbine’s lean premix combustion system to reduce emissions of nitrogen oxides to achieve the permitted standards. The existing 15,000 bhp Solar Mars 100-T15000S gas turbine shall be permanently removed from this site. [Applicant Request; Design]
4. Compressor Engine 2402: The permittee is authorized to install one 7200 bhp (ISO) gas turbine compressor engine consisting of a Cooper-Rolls Royce Model No. 501-KC7-DLE. Ancillary equipment includes the automated gas turbine control system, an inlet air filtration system, and a rectangular stack. The permittee shall tune, operate and maintain the gas turbine’s lean premix combustion system to reduce emissions of nitrogen oxides to achieve the permitted standards. [Applicant Request; Design]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**Compressor Station 24**

**PERFORMANCE RESTRICTIONS**

**5. Permitted Capacities**

- a. *Engine 2401*: The maximum heat input rate to the gas turbine is 113 MMBtu per hour while producing approximately 13,000 bhp (ISO) based on a turbine inlet air temperature of 59° F, 100% load, and a heating value (HHV) of 1040 Btu/scf of natural gas.
- b. *Engine 2402*: The maximum heat input rate to the gas turbine is 68 MMBtu per hour while producing approximately 7200 bhp (ISO) based on a turbine inlet air temperature of 59° F, 100% load, and a heating value (HHV) of 1040 Btu per scf of natural gas.

Heat input rates will vary depending upon gas 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. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.] *{Permitting Note: The maximum heat input rates are based on the manufacturer’s equipment specifications for each gas turbine. They are included to identify the capacity of each emissions unit for purposes of confirming that tests are conducted within 90% to 100% of the emission unit’s rated capacity (or to limit future operation to 105% of the test load, if applicable), to establish appropriate emissions limits, and to aid in determining future rule applicability.}*

- 6. **Authorized Fuel**: Each gas turbine shall fire only natural gas with a maximum of 10 grains of sulfur 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 NOx 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. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.334, as amended] [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
- 7. **Restricted Operation**: The hours of operation for each gas turbine are not restricted (8760 hours per year). Except for startup and shutdown, operation below 50% base load is prohibited. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

**EMISSIONS STANDARDS**

- 8. **Emissions Standards**: Each gas turbine shall not exceed the following standards for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO2), and volatile organic compounds (VOC).

Pollutant	Standards Engines 2401 and 2402	Equivalent Maximum Emissions <sup>f</sup>				Rule Basis <sup>g</sup>
		Engine 2401		Engine 2402		
		lb/hour	TPY	lb/hour	TPY	
CO <sup>a</sup>	50.0 ppmvd @ 15% O2	12.3	53.9	7.0	30.5	Rule 62-4.070(3), F.A.C.
NOx <sup>b</sup>	25.0 ppmvd @ 15% O2	10.1	44.2	5.7	25.0	Rule 62-4.070(3), F.A.C. 40 CFR 60.332
SO2 <sup>c</sup>	10 grains of sulfur/100 scf	3.1	13.5	1.9	8.2	Rule 62-4.070(3), F.A.C. 40 CFR 60.333
Opacity <sup>d</sup>	10% opacity, 6-minute average	Not Applicable				Rule 62-4.070(3), F.A.C.
PM <sup>e</sup>	Lean premix combustion design	0.7	3.3	0.45	2.0	Rule 62-4.070(3), F.A.C.
VOC <sup>e</sup>	Lean premix combustion design	0.4	1.5	1.5	6.5	Rule 62-4.070(3), F.A.C.

- a. The CO standards are based on the average of three test runs as determined by EPA Method 10.
- b. The NOx standards are based on the average of three test runs as determined EPA Method 20.
- c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission



SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Compressor Station 24

(FERC) and effectively limits the potential SO2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 scf of natural gas from the pipeline.

- d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.
e. PM and VOC emissions are minimized by the equipment specification of "lean premix combustion design" for each gas turbine.
f. Equivalent maximum emissions for each 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, NOx, and SO2) or the maximum expected emissions (PM and VOC).
g. The emissions standards of this permit ensure that the facility remains a minor source of air pollution with respect to both the PSD preconstruction review permit program and the Title V operating permit program.

Appendix E of this permit summarizes the potential emissions estimates for Station 24.

EMISSIONS PERFORMANCE TESTING

9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Table with 2 columns: Method, Description of Method and Comments. Rows include methods 1-4, 9, 10, 19, and 20 with detailed descriptions and permitting notes.

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 for compliance testing without prior written approval from the Department.

10. Initial Tests: Each gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial startup of the gas turbine.

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### Compressor Station 24

11. Annual Tests: During each federal fiscal year (October 1 - September 30), each gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NO<sub>x</sub>, and visible emissions. CO and NO<sub>x</sub> emissions shall be tested concurrently at permitted capacity. SO<sub>2</sub> emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a), F.A.C.]
12. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and, 60.8]

#### RECORDS AND REPORTS

13. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix B of this permit. For each required NO<sub>x</sub> test, emissions shall be corrected to equivalent terms and compared to the NSPS Subpart GG standard identified in Appendix C of this permit. For each test run, the report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (MMBtu per hour), the power output (bhp), percent of base load, and the turbine inlet temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.334]
14. Operational Data: Using the automated gas turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp), and hours of operation for each gas turbine. Operational information shall be summarized and reported with the required Annual Operating Report. [Rule 62-4.070(3), F.A.C.]
15. Component Replacements: For the replacement of gas 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 gas 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 gas 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. 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(7)(b), F.A.C.

## SECTION 4. APPENDICES

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Appendix A. Citation Format

Appendix B. Common State Regulatory Requirements

Appendix C. NSPS Subpart GG Requirements for Gas Turbines

Appendix D. Summary of Potential Emissions

## SECTION 4. APPENDIX A

### Citation Format

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The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

#### REFERENCES TO PREVIOUS PERMITTING ACTIONS

##### Old Permit Numbers

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* “AC” identifies the permit as an Air Construction Permit

“AO” identifies the permit as an Air Operation Permit

“123456” identifies the specific permit project number

##### New Permit Numbers

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

*Where:* “099” represents the specific county ID number in which the project is located

“2222” represents the specific facility ID number

“001” identifies the specific permit project

“AC” identifies the permit as an air construction permit

“AF” identifies the permit as a minor federally enforceable state operation permit

“AO” identifies the permit as a minor source air operation permit

“AV” identifies the permit as a Title V Major Source Air Operation Permit

##### PSD Permit Numbers

*Example:* Permit No. PSD-FL-317

*Where:* “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality

“FL” means that the permit was issued by the State of Florida

“317” identifies the specific permit project

#### RULE CITATION FORMATS

##### Florida Administrative Code (F.A.C.)

*Example:* [Rule 62-213.205, F.A.C.]

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

##### Code of Federal Regulations (CFR)

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

SECTION 4. APPENDIX B

Common State Regulatory Requirements

*{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at this facility.}*

**GENERAL CONDITIONS**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit. [Rule 62-4.160(3), F.A.C.]
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), F.A.C.]
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated. [Rule 62-4.160(7), F.A.C.]

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit. [Rule 62-4.160(8), F.A.C.]

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may

**SECTION 4. APPENDIX B**  
**Common State Regulatory Requirements**

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be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules. [Rule 62-4.160(9), F.A.C.]

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. [Rule 62-4.160(10), F.A.C.]
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. [Rule 62-4.160(11), F.A.C.]
12. This permit or a copy thereof shall be kept at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (not applicable);
  - b. Determination of Prevention of Significant Deterioration (not applicable); and
  - c. Compliance with New Source Performance Standards (Subpart GG is applicable to the gas turbines).

[Rule 62-4.160(13), F.A.C.]

14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.

[Rule 62-4.160(14), F.A.C.]

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]

**EMISSIONS AND CONTROLS**

16. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

**SECTION 4. APPENDIX B**  
**Common State Regulatory Requirements**

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17. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
18. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]
19. 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. [Rule 62-210.700(4), F.A.C.]
20. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
21. VOC or OS Emissions: 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. [Rule 62-296.320(1), F.A.C.]
22. Objectionable Odor 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.]
23. 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 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
24. Unconfined Particulate 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.]

**TESTING REQUIREMENTS**

25. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
26. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
27. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
28. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

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### Common State Regulatory Requirements

- a. *Required Sampling Time.* Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

[Rule 62-297.310(4), F.A.C.]

#### 29. Determination of Process Variables

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

30. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
31. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
32. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
33. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - a. The type, location, and designation of the emissions unit tested.
  - b. The facility at which the emissions unit is located.
  - c. The owner or operator of the emissions unit.
  - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - f. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating



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**Common State Regulatory Requirements**

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parameters during each test run.

- g. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- h. The date, starting time and duration of each sampling run.
- i. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- j. The number of points sampled and configuration and location of the sampling plane.
- k. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- l. The type, manufacturer and configuration of the sampling equipment used.
- m. Data related to the required calibration of the test equipment.
- n. Data on the identification, processing and weights of all filters used.
- o. Data on the types and amounts of any chemical solutions used.
- p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- q. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- r. All measured and calculated data required to be determined by each applicable test procedure for each run.
- s. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- t. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- u. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

**RECORDS AND REPORTS**

- 34. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 35. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SECTION 4. APPENDIX C**

**NSPS Subpart GG Requirements for Gas Turbines**

The following emissions unit is subject to the applicable requirements of Subpart A (General Provisions) and Subpart GG (Stationary Gas Turbines) established as New Source Performance Standards in 40 CFR 60 and adopted by reference in Rule 62-204.800(7)(b), F.A.C.

EU ID	Emission Unit Description
001	Engine 2401: Solar Model Mars 90-T13000S gas turbine rated at 13,000 bhp (ISO)
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7222 bhp (ISO)

**NSPS General Provisions**

The emissions units are subject to the applicable General Provisions of the New Source Performance Standards including 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). The General Provisions are not included in this permit, but can be obtained from the Department upon request.

**40 CFR 60, Subpart GG**

**Standards of Performance for Stationary Gas Turbines**

*{Permitting Note: Each gas turbine shall comply with all applicable requirements of 40 CFR 60, Subpart GG adopted by reference in Rule 62-204.800(7)(b), F.A.C. Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in italics immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.}*

40 CFR 60.330 - Applicability and Designation of Affected Facility

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour), based on the lower heating value of the fuel fired.

40 CFR 60.331 - Definitions

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.

40 CFR 60.332 - Standard for Nitrogen Oxides

- (a) On and after the date of the performance test required by Section 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (c) of this section shall comply with:
  - (2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

**SECTION 4. APPENDIX C**

**NSPS Subpart GG Requirements for Gas Turbines**

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	$0.04(N)$
$0.1 < N \leq 0.25$	$0.004 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

where: N=the nitrogen content of the fuel (percent by weight).

*Department Requirement: When firing natural gas, the "F" value shall be assumed to be 0.*

*{Permitting Note: The "Y" value for this gas turbine is approximately 12.2 for natural gas. The equivalent emission standard is 177 ppmvd corrected to 15% oxygen. The emissions standards specified in this permit are much more stringent than this requirement.}*

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

40 CFR 60.333 - Standard for Sulfur Dioxide

On and after the date on which the performance test required to be conducted by Section 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

*{Permitting Note: The gas turbines will exclusively fire natural gas, which contains less than 0.03% sulfur by weight assuming a density of 0.0455 lb/scf of natural gas.}*

40 CFR 60.334 - Monitoring of Operations

(c) For the purpose of reports required under Section 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Section 60.332 by the performance test required in Section 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in Section 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Section 60.335(a).

*{Permitting Note: Excess NOx emissions reporting requirements do not apply. The gas turbine uses "dry" lean premix combustors and not wet injection to control NOx emissions. As indicated above, the Subpart GG NOx standard is 177 ppmvd @ 15% oxygen. This is nearly eight times the NOx standard specified in the permit and would be nearly impossible for this lean premix combustion turbine to exceed. As stated in the preamble to the July 2004 amendments, the rule changes do not impose any additional monitoring requirements for existing units.}*

(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332).

*{Permitting Note: Because the nitrogen content of pipeline natural is negligible, the permittee does not claim an allowance for fuel bound nitrogen and will use "0" for the F-value when calculating the NOx standard in §60.332. The permit prohibits the permittee from claiming the allowance for fuel nitrogen. Therefore, no fuel nitrogen*

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NSPS Subpart GG Requirements for Gas Turbines

*monitoring is required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.*

- (3) May elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(v), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring.

§60.331(v) states, “Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth’s surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: Landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.”

The permittee elects not to monitor the sulfur content of natural gas based on §60.334(h)(3)(i), which states that, “The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.” The current tariff sheet specifies that natural gas delivered by the pipeline system shall contain not more than 10 grains of total sulfur per 100 cubic feet of gas. Therefore, the pipeline natural gas meets the above definition.

*{Permitting Note: The permit requires the gas turbine to fire only pipeline natural gas with a maximum sulfur content of 10 grains of sulfur per 100 cubic feet of gas. Therefore, no fuel sulfur monitoring is required and no periodic reports of excess SO<sub>2</sub> emissions are required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}*

40 CFR 60.335 - Test Methods and Procedures

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in Section 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in Section 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Sections 60.332 and 60.333(a) as follows:
  - (1) The nitrogen oxides emission rate (NO<sub>x</sub>) shall be computed for each run using the following equation:

$$NO_x = (NO_{x0}) (Pr/Po)^{0.5} e^{19(Ho - 0.00633)} (288^\circ K/Ta)^{1.53}$$

where:

- NO<sub>x</sub> = emission rate of NO<sub>x</sub> at 15 percent O<sub>2</sub> and ISO standard ambient conditions, volume percent.
- NO<sub>x0</sub> = observed NO<sub>x</sub> concentration, ppm by volume.
- Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.
- Po = observed combustor inlet absolute pressure at test, mm Hg.
- Ho = observed humidity of ambient air, g H<sub>2</sub>O/g air.
- e = transcendental constant, 2.718.
- Ta = ambient temperature, °K.

*Department Requirement: The permittee is required to correct NO<sub>x</sub> emissions to ISO ambient atmospheric conditions for each required emissions performance test and compare to the NO<sub>x</sub> standard specified in 40 CFR 60.332.*

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NSPS Subpart GG Requirements for Gas Turbines

- (2) The monitoring device of Section 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Section 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

*Department Requirement: The initial NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load.*

*{Permitting Note: Although the dry low-NOx combustion controls are only effective above a minimum load of approximately 50%, the proposed gas turbines are able to quickly ramp up above this level. Gas turbines used as compressor engines typically operate at permitted capacity. Excluding startup and shutdown, the permit requires operation above 50% load. The minimum normal operating load will be identified during initial testing.}*

- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

*Department Requirement: The span value shall be no greater than 75 ppm of nitrogen oxides due to the low NOx emission levels of the specified gas turbine.*

- (d) The owner or operator shall determine compliance with the sulfur content standard in Section 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see Section 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

- (e) To meet the requirements of Section 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

*{Permitting Note: The permit prohibits the permittee from claiming the allowance for fuel nitrogen. The permit also requires the gas turbine to fire only pipeline natural gas with a maximum sulfur content of 10 grains of sulfur per 100 cubic feet of gas. Therefore, no fuel nitrogen or fuel sulfur monitoring is required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}*

**SECTION 4. APPENDIX D**

**Summary of Potential Emissions**

For informational purposes only, the following table summarizes the potential emissions from Station 24.

EU No.	Description	Hourly Emissions, lb/hour						Annual Emissions, ton/year					
		CO	NOx	PM	SO2	VOC	HAPs	CO	NOx	PM	SO2	VOC	HAPs
001	Engine 2401, 13,000 bhp Gas Turbine	12.3	10.1	0.7	3.1	0.4	0.12	53.9	44.2	3.3	13.5	1.5	0.5
002	Miscellaneous Support Activities	---	---	---	---	---	---	0.6	2.2	0.2	0.2	0.6	0.6
	GEN03, 443 bhp Emergency Generator	2.4	8.8	0.7	0.8	0.02	Neg.	0.6	2.2	0.2	0.2	Neg.	Neg.
	Fugitive VOC Leaks	---	---	---	---	---	---	---	---	---	---	0.6	0.6
	Oily Water Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
	Diesel Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
	Condensate Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
003	Engine 2402, 7222 bhp gas turbine	7.0	5.7	0.4	1.7	1.5	0.3	30.5	25.0	2.0	8.2	6.5	0.3
Total for Station 24								85.0	71.4	5.5	21.9	8.6	1.4

Notes:

1. All VOC emissions from fugitive leaks were assumed to be HAPs.
2. Hourly emissions are based on manufacturer's equipment specifications.
3. Annual emissions are based on information in the application and permit conditions.

**SENDER: COMPLETE THIS SECTION**

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Mr. Richard Craig, V.P. of Southeastern  
Operations  
Florida Gas Transmission Company  
Post Office Box 4657  
Houston, TX 77101-4657

**2. Article Number**

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**A. Signature**

X *[Signature]*

- Agent  
 Addressee

**B. Received by (Printed Name)**

SALAZAR MAY 10 2005

**C. Date of Delivery**

**D. Is delivery address different from item 1?**

- Yes  
 No  
If YES, enter delivery address below:

**3. Service Type**

- Certified Mail     Express Mail  
 Registered         Return Receipt for Merchandise  
 Insured Mail        C.O.D.

**4. Restricted Delivery? (Extra Fee)**

- Yes

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**U.S. Postal Service  
CERTIFIED MAIL RECEIPT**

(Domestic Mail Only; No Insurance Coverage Provided)

7001 0320 0001 3692 2022

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	

Postmark  
Here

Mr. Richard Craig, V.P. of Southeastern  
Operations  
Florida Gas Transmission Company  
Post Office Box 4657  
Houston, TX 77101-4657

PS Form 3800, January 2001

See Reverse for Instructions



## Florida Gas Transmission Company

601 South Lake Destiny Road, Suite 450, Maitland, FL 32751  
Post Office Box 945100, Maitland, FL 32794-5100  
407.838.7000 Fax 407.838.7001

April 18, 2005

Mr. Jeff Koerner  
Bureau of Air Regulation  
Florida Dept. of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RECEIVED

APR 19 2005

BUREAU OF AIR REGULATION

RE: Proof of Publication Notice Affidavit  
Unit 2402 Heat Rate Revision, Trenton Compressor Station No. 24  
Air Construction Permit No. 0410004-010-AC

Dear Mr. Koerner:

Florida Gas Transmission Company (FGT) submits the required proof of publication affidavit for the draft construction permit 0410004-010-AC related to Unit 2402 located at FGT's Trenton Compressor Station No. 24.

The required notice was published March 3, 2005 in the Gilchrist County Journal. The original affidavit and legal notice column is enclosed. This document was received by FGT on April 15, 2005.

If you have any questions or need further information, please call me at (407)838-7057.

Sincerely,

James Fleak, P.E.  
Sr. Environmental Specialist

Cc: Trenton Team, Envision 203.1.20, Jake Krautsch, David Ayers  
Ms. Leslie Maybin, FDEP NE District, 7825 Baymeadows Way, Suite B-200, Jacksonville, FL  
32256-7590



# GILCHRIST COUNTY JOURNAL

PUBLISHED WEEKLY

TRENTON, GILCHRIST COUNTY, FLORIDA

STATE OF FLORIDA,  
COUNTY OF GILCHRIST:

Before the undersigned authority personally appeared JOHN M. AYERS II, who on oath says he is Editor and Publisher of the GILCHRIST COUNTY JOURNAL, a newspaper published at Trenton, in Gilchrist County, Florida; that the attached copy of advertisement, being a

Public Notice of Intent to Issue Air Permit

Florida Department of Environmental Protection

Draft Air Permit No. 0410004-010-AC

Florida Gas Transmission Company

was published in said newspaper in the issues of \_\_\_\_\_  
March 3, 2005

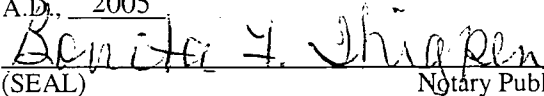
Affiant further says that the said GILCHRIST COUNTY JOURNAL is a newspaper published at Trenton, in said Gilchrist County, Florida, and that the said newspaper has heretofore been continuously published in said Gilchrist County, Florida, each week and has been entered as second class mail matter at the post office in Trenton, in said Gilchrist County, Florida, for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm, or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

  
\_\_\_\_\_  
Editor and Publisher.

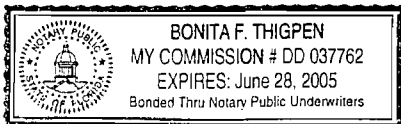
Sworn to and subscribed before me, and is personally known to me, appeared John M. Ayers II, who did take an oath;

this 8 day of April

A.D., 2005

  
\_\_\_\_\_  
(SEAL) Notary Public

(Print Name)



## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DRAFT AIR PERMIT NO. 0410004-010-AC FLORIDA GAS TRANSMISSION COMPANY - STATION 24 GILCHRIST COUNTY, FLORIDA

**Applicant:** The applicant for this project is the Florida Gas Transmission Company. The applicant's authorized representative and mailing address is Mr. Rick Craig, V.P. of Southeastern Operations, P.O. Box 4657, Houston, TX 77210-4657.

**Facility Location:** The Florida Gas Transmission Company operates existing natural gas compressor Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida.

**Project:** The applicant proposes the following air construction permit revisions: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency among the stations. The Department agrees that the requested revisions are minor in nature and do not trigger any new requirements. Permit No. 0410004-010-AC will be issued as a revised air construction permit that supersedes all previous air construction permits for these units.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical

Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. A copy of the complete project file is also available at the Air Resources Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The telephone number is 904/807-3300.

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3),

asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

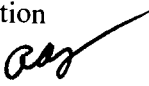
Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.


# Florida Department of Environmental Protection

## Memorandum

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TO: Trina Vielhauer, Chief  
Bureau of Air Regulation

THROUGH: Al Linero, Manager   
Air Permitting South Program

FROM: Jeff Koerner, Air Permitting South Program 

DATE: February 7, 2005

SUBJECT: Draft Air Permit No. 0410004-010-AC  
Florida Gas Transmission Company – Station 24, Gilchrist County  
Minor Permit Revisions

Attached for your review are the following items:

- Intent to Issue Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- PE Certification

The revised air construction permit is for existing Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project, rule applicability, and emissions standards. The P.E. certification briefly summarizes the proposed project. Day #74 is March 12, 2005. I recommend your approval of the attached Draft Permit for this project.

Attachments

**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**PROJECT**

Draft Air Construction Permit No. 0410004-010-AC  
Existing Compressor Station 24  
ARMS Facility ID No. 0410004  
Increase in Heat Input for Engine 2402 and Minor Permit Revisions  
(Emissions Units 001 - 003)

**COUNTY**

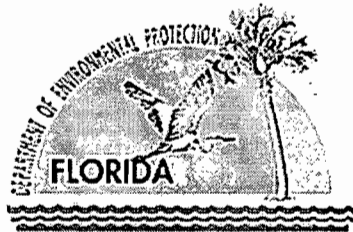
Gilchrist County, Florida

**APPLICANT**

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

**PERMITTING  
AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
New Source Review Section



February 7, 2005

*{Filename: TEPD - 0410004-010-AC}*

## 1. GENERAL PROJECT INFORMATION

### Facility Description and Location

Florida Gas Transmission Company operates existing Compressor Station 24 (SIC No. 4922), which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. The station consists of a 13,000 bhp gas turbine (Engine 2401), a 7222 bhp gas turbine (Engine 2402), and miscellaneous support activities. The existing site is in an area that is in attainment with the ambient air quality standards for carbon monoxide, nitrogen oxides, sulfur dioxide, and ozone. It is unclassifiable with regard to particulate matter and lead.

### Regulatory Categories

Title III: The facility is not a major source of hazardous air pollutants (HAP).

Title IV: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is not a Title V major source of air pollution pursuant to Chapter 62-213, F.A.C.

PSD: The facility is not a PSD major source of air pollution pursuant to Rule 62-212.400, F.A.C.

NSPS: New gas turbines are subject to the New Source Performance Standards of Subpart GG in 40 CFR 60.

### Processing Schedule

The Department received a complete application on December 29, 2004.

### Project Description

The applicant requested the following revisions to original permit No. 0410004-007-AC:

- Increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour;
- Revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and
- Make minor changes to the component replacement provisions for consistency.

## 2. APPLICABLE REGULATIONS

### State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures

### Federal Regulations

This project is also subject to the applicable federal provisions regarding air quality as established by the EPA in the following sections of the Code of Federal Regulations (CFR).

<u>Title 40, CFR</u>	<u>Description</u>
Part 60	Subpart A - General Provisions for NSPS Sources NSPS Subpart GG - Stationary Gas Turbines Applicable Appendices

### 3. DEPARTMENT REVIEW

Increased Heat Input Rate: The increase in heat input is necessary because the installed Cooper-Rolls Royce Model 501-KC7-DLE gas turbine is actually operating at a heat rate of approximately 8603 Btu/BHP-hour instead of 7942 Btu/Bhp-hour as indicated in the original vendor data. In short, the gas turbine must fire additional fuel to produce desired bhp output. Actual tested emissions have shown to be much lower than initially predicted. As a result, there will be no increase in the potential emissions of CO and NOx as specified in the original permit. Only minor corrections to the equivalent emission rates are necessary for PM/PM<sub>10</sub>, SO<sub>2</sub>, and VOC.

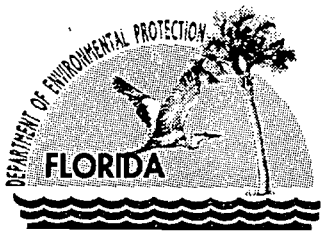
NSPS Subpart GG Monitoring Requirements: Several changes were recently made to the monitoring requirements of NSPS Subpart GG. These changes incorporated many of EPA's previous guidance memorandums used in determining "custom fuel monitoring plans". Based on the revised rule, it is no longer necessary to monitor the nitrogen content of natural gas if the permittee agrees that no fuel bound nitrogen allowance will be used to determine the Subpart GG NOx standard. FGTC agrees that no allowance is appropriate for pipeline natural gas, which contains negligible concentrations of nitrogen. In addition, it is no longer necessary to monitor the sulfur content of natural gas if it is from a pipeline source with a tariff of less than 20 grains of sulfur per 100 scf. The FGTC pipeline has a tariff of 10 grains of sulfur per 100 scf for this pipeline. This is also specified in the permit as the maximum fuel sulfur limit. These monitoring issues will be revised throughout the permit as well as Appendix C (NSPS Subpart GG Requirements for Gas Turbines). In addition, the Custom Fuel Monitoring Schedule (originally identified as Appendix D) is no longer necessary and will be deleted.

Component Replacement Provisions: Previous Permit No. 0410004-0007-AC already included a "functionally equivalent component replacement" provision as Condition 15. Minor revisions to this condition will be made to be consistent with a similar provision in the recent permit for Station 18 in Orlando.

The Department agrees that the requested revisions are minor in nature and do not trigger any new requirements. Permit No. 0410004-010-AC will be issued as a revised air construction permit that supersedes all previous air construction permits for these units.

### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and 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 specific conditions of the draft permit. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Colleen M. Castille  
Secretary

February 15, 2005

Mr. Rick Craig, V.P. of Southeastern Operations  
Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

Re: Air Construction Permit No. 0410004-010-AC  
Florida Gas Transmission Company, Station 24  
Increased Heat Input for Engine 2402

Dear Mr. Craig:

On December 29, 2004, you submitted an application requesting several minor permit revisions including an increase of the heat input rate for Engine 2402. The equipment is installed at existing Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit".

The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a Draft Permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of Intent to Issue Air Permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jeff Koerner, at 850/921-9536.

Sincerely,

Trina Vielhauer, Chief  
Bureau of Air Regulation

Enclosures

*"More Protection, Less Process"*

*Printed on recycled paper.*

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## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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*In the Matter of an  
Application for Air Permit by:*

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

*Authorized Representative:*

Mr. Rick Craig, V.P. of Southeastern Operations

Air Permit No. 0410004-010-AC  
Facility ID No. 0410004  
Compressor Station 24  
Increase in Heat Input for Engine 2402  
Gilchrist County, Florida

**Facility Location:** Florida Gas Transmission Company operates existing natural gas compressor Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida.

**Project:** The applicant proposes the following air construction permit revisions: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency among the stations. Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination".

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. A copy of the complete project file is also available at the Air Resources Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The telephone number is 904/807-3300.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public



## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.


**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



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Trina Vielhauer, Chief  
Bureau of Air Regulation

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

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**CERTIFICATE OF SERVICE**

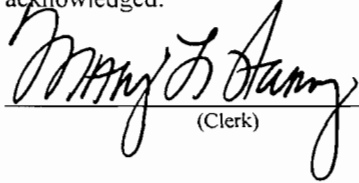
The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 2/16/05 to the persons listed below.

Mr. Rick Craig, FGTC\*  
Mr. James Fleak, FGTC  
Mr. David Holmes Parham, FGTC

Mr. V. Duane Pierce, AQMcS  
Mr. Chris Kirts, NED

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.

  
\_\_\_\_\_  
(Clerk)

2/16/05  
(Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection  
Draft Air Permit No. 0410004-010-AC  
Florida Gas Transmission Company – Station 24  
Gilchrist County, Florida

**Applicant:** The applicant for this project is the Florida Gas Transmission Company. The applicant's authorized representative and mailing address is Mr. Rick Craig, V.P. of Southeastern Operations, P.O. Box 4657, Houston, TX 77210-4657.

**Facility Location:** The Florida Gas Transmission Company operates existing natural gas compressor Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida.

**Project:** The applicant proposes the following air construction permit revisions: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency among the stations. The Department agrees that the requested revisions are minor in nature and do not trigger any new requirements. Permit No. 0410004-010-AC will be issued as a revised air construction permit that supersedes all previous air construction permits for these units.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. A copy of the complete project file is also available at the Air Resources Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The telephone number is 904/807-3300.

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available for this proceeding.

# DRAFT PERMIT

## PERMITTEE:

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

*Authorized Representative:*

Mr. Rick Craig, V.P. of Southeastern Operations

Air Permit No. 0410004-010-AC Facility ID No. 0410004 Compressor Station 24 Engine 2402, Heat Input Increase Gilchrist County, Florida Permit Expires: <u>September 1, 2005</u>
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## PROJECT AND LOCATION

This permit is a modification of original Permit No. 0410004-007-AC that: increases the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revises the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and makes minor changes to the component replacement provisions for consistency. Compressor Station 24 is an existing facility located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida. The UTM coordinates are Zone 17, 321.3 km East, and 3282.8 km North.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the Code of Federal Regulations. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This air construction permit supersedes all previous air construction permits for the emissions units at this facility.

## CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

(DRAFT)

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Michael G. Cooke, Director  
Division of Air Resource Management

(Date)

## SECTION 1. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

Florida Gas Transmission Company (FGTC) operates existing Compressor Station 24 in Gilchrist County for their natural gas pipeline. The station consists of the following emissions units.

ID No.	Emission Unit Description
001	Engine 2401: Solar Model Mars 90-T13000S gas turbine rated at 13,000 bhp (ISO)
002	Miscellaneous support activities
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7200 bhp (ISO)

The station is part of FGTC's overall Phase VI project intended to increase the natural gas supply capacity and reliability to service domestic, commercial, and industrial customers in Florida. The permit consolidates the regulatory requirements for the emissions units at this facility.

### REGULATORY CLASSIFICATION

Title III: The facility is not a major source of hazardous air pollutants (HAP).

Title IV: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is not a Title V major source of air pollution pursuant to Chapter 62-213, F.A.C.

PSD: The facility is not a PSD major source of air pollution pursuant to Rule 62-212.400, F.A.C.

NSPS: New gas turbines are subject to the New Source Performance Standards of Subpart GG in 40 CFR 60.

### RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action and are on file with the Department.

- Permit No. 0410004-001-AC: Initial authorization to construct the new station (Engine 2401).
- Permit No. 0410004-003-AC: Modification to increase heat input rate for Engine 2401.
- Permit No. 0410004-004-AC: Modification to upgrade Engine 2401 to a 15,000 bhp gas turbine.
- Permit No. 0410004-006-AC: Authorization to construct Engine 2402.
- Permit No. 0410004-007-AC: Replacement of Engine 2401 (13,000 bhp gas turbine) and consolidation of all units.
- Project No. 0410004-010-AC: Application to increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency.

{Permitting Note: This permit consolidates all of the emissions units under a single air construction permit. It is being "re-issued" to: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency. The units covered are existing units and the initial requirements have been met including: initial compliance tests; initial test reports; submittal of performance curves; and replacement of Engine 2401.}

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to operate an emissions unit shall be submitted to the Department's Air Resource Section of the Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/807-3300.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Air Resource Section of the Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/807-3300.
3. Appendices: The following Appendices are attached as part of this permit.
  - Appendix A. Citation Format
  - Appendix B. Common State Regulatory Requirements
  - Appendix C. NSPS Subpart GG Requirements for Gas Turbines
  - ~~Appendix D. Custom Fuel Monitoring Schedule~~
  - Appendix D. Summary of Potential Emissions
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the 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.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; and Title 40, Part 60 of the Code of Federal Regulations, adopted by reference in Rule 62-204.800, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
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 emissions unit or facility subject to this permit shall be constructed or 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. Air Operation Permit: This permit authorizes the proposed work and initial operation of the units to determine compliance with Department rules. An air operation permit is required for regular operation of the permitted emissions unit. At least sixty (60) days prior to the expiration of this air construction permit, the permittee shall submit an application for an air operation permit with the required compliance test report. [Rules 62-210.300, F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**Compressor Station 24**

This section of the permit addresses the following emissions units.

EU ID	Emissions Unit Description
001	<p><u>Compressor Engine 2401</u> consists of a Solar Model No. Mars 90-T13000S gas turbine.</p> <p><i>Fuel:</i> The gas turbine fires pipeline natural gas (SCC No. 2-02-002-01) at a maximum firing rate of approximately 108,100 cubic feet per hour based on a heating value (HHV) for natural gas of 1040 Btu/scf.</p> <p><i>Capacity:</i> At a maximum heat input rate of 113 MMBtu per hour, the gas turbine produces approximately 13,000 bhp (ISO). The gas turbine is intended to operate at or near capacity.</p> <p><i>Controls:</i> The efficient lean premix combustor design minimizes emissions of CO, NOx, and VOC. The exclusive combustion of natural gas minimizes emissions of PM and SO2.</p> <p><i>Stack Parameters:</i> When operating at capacity, exhaust gases exit a rectangular stack (7.5 feet by 8 feet) that is 58 feet tall with a flow rate of approximately 179,100 acfm and a temperature of approximately 873° F.</p>
002	<p><u>Miscellaneous support equipment</u> at this station includes a 443 bhp gas-fired emergency generator ("GEN03"), an oily water tank, a diesel oil tank, a pipeline condensate storage tank, and miscellaneous fugitive emissions from pipeline equipment such as pumps, valves, flanges, connectors, etc. <i>{Permitting Note: The emergency generator is expected to operate much less than 500 hours per year.}</i></p>
003	<p><u>Compressor Engine 2402</u> consists of a Cooper-Rolls Royce Model No. 501-KC7-DLE gas turbine.</p> <p><i>Fuel:</i> The gas turbine fires pipeline natural gas (SCC No. 2-02-002-01) at a maximum firing rate of approximately <del>60,700</del> <u>65,400</u> cubic feet per hour based on a heating value (HHV) of 1040 Btu per scf of gas.</p> <p><i>Capacity:</i> At a maximum of <del>63</del> <u>68</u> MMBtu per hour of heat input, the gas turbine produces approximately 7200 bhp (ISO). The gas turbine is intended to operate at or near capacity.</p> <p><i>Controls:</i> The efficient lean premix combustor design minimizes emissions of CO, NOx, and VOC. The exclusive combustion of natural gas minimizes emissions of PM and SO2.</p> <p><i>Stack Parameters:</i> When operating at capacity, exhaust gases exit a rectangular stack (7.33 feet by 5.50 feet) that is 61 feet tall with a flow rate of approximately 98,000 acfm and a temperature of approximately 960° F.</p>

**APPLICABLE STANDARDS AND REGULATIONS**

- NSPS Requirements:** Each gas turbine shall comply with the New Source Performance Standards (NSPS) of Subpart GG in 40 CFR 60. The applicable NSPS requirements are provided in Appendix C of this permit. ~~An approved Custom Fuel Monitoring Schedule is specified in Appendix D of this permit. The Department believes that the conditions in this section are at least as stringent as, or more stringent than, the NSPS requirements of Subpart GG. [Rule 62-210.800, F.A.C.; 40 CFR 60, Subpart GG]~~
- Other Permits:** This permit supersedes all previous air construction permits for the emissions units identified at this facility. [Rule 62-4.070(3), F.A.C.]

**EQUIPMENT**

- Compressor Engine 2401:** The permittee is authorized to replace existing Engine 2401 with a 13,000 bhp (ISO) Solar Model No. Mars 90-T13000S gas turbine with lean premix combustor design. Ancillary equipment includes the automated gas turbine control system, an inlet air filtration system, and a rectangular stack. The permittee shall tune, operate and maintain the gas turbine's lean premix combustion system to reduce emissions of nitrogen oxides to achieve the permitted standards. The existing 15,000 bhp Solar Mars 100-T15000S gas turbine shall be permanently removed from this site. [Applicant Request; Design]
- Compressor Engine 2402:** The permittee is authorized to install one 7200 bhp (ISO) gas turbine compressor engine consisting of a Cooper-Rolls Royce Model No. 501-KC7-DLE. Ancillary equipment includes the automated gas turbine control system, an inlet air filtration system, and a rectangular stack. The permittee shall tune, operate and maintain the gas turbine's lean premix combustion system to reduce emissions of nitrogen oxides to achieve the permitted standards. [Applicant Request; Design]



**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**Compressor Station 24**

**PERFORMANCE RESTRICTIONS**

5. Permitted Capacities

- a. *Engine 2401*: The maximum heat input rate to the gas turbine is 113 MMBtu per hour while producing approximately 13,000 bhp (ISO) based on a turbine inlet air temperature of 59° F, 100% load, and a heating value (HHV) of 1040 Btu/scf of natural gas.
- b. *Engine 2402*: The maximum heat input rate to the gas turbine is ~~63~~ 68 MMBtu per hour while producing approximately 7200 bhp (ISO) based on a turbine inlet air temperature of 59° F, 100% load, and a heating value (HHV) of 1040 Btu per scf of natural gas.

Heat input rates will vary depending upon gas 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. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.] *{Permitting Note: The maximum heat input rates are based on the manufacturer's equipment specifications for each gas turbine. They are included to identify the capacity of each emissions unit for purposes of confirming that tests are conducted within 90% to 100% of the emission unit's rated capacity (or to limit future operation to 105% of the test load, if applicable), to establish appropriate emissions limits, and to aid in determining future rule applicability.}*

- 6. Authorized Fuel: Each gas turbine shall fire only natural gas with a maximum of 10 grains of sulfur 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 NOx 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. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.334, as amended] [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
- 7. Restricted Operation: The hours of operation for each gas turbine are not restricted (8760 hours per year). Except for startup and shutdown, operation below 50% base load is prohibited. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

**EMISSIONS STANDARDS**

- 8. Emissions Standards: Each gas turbine shall not exceed the following standards for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO2), and volatile organic compounds (VOC).

Pollutant	Standards Engines 2401 and 2402	Equivalent Maximum Emissions <sup>f</sup>				Rule Basis <sup>g</sup>
		Engine 2401		Engine 2402		
		lb/hour	TPY	lb/hour	TPY	
CO <sup>a</sup>	50.0 ppmvd @ 15% O2	12.3	53.9	7.0	30.5	Rule 62-4.070(3), F.A.C.
NOx <sup>b</sup>	25.0 ppmvd @ 15% O2	10.1	44.2	5.7	25.0	Rule 62-4.070(3), F.A.C. 40 CFR 60.332
SO2 <sup>c</sup>	10 grains of sulfur/100 scf	3.1	13.5	1.9	8.2	Rule 62-4.070(3), F.A.C. 40 CFR 60.333
Opacity <sup>d</sup>	10% opacity, 6-minute average	Not Applicable				Rule 62-4.070(3), F.A.C.
PM <sup>e</sup>	Lean premix combustion design	0.7	3.3	0.45	2.0	Rule 62-4.070(3), F.A.C.
VOC <sup>e</sup>	Lean premix combustion design	0.4	1.5	1.5	6.5	Rule 62-4.070(3), F.A.C.

- a. The CO standards are based on the average of three test runs as determined by EPA Method 10.
- b. The NOx standards are based on the average of three test runs as determined EPA Method 20.
- c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission (FERC) and effectively limits the potential SO2 emissions. Expected fuel sulfur levels are less than 1 grain per 100

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Compressor Station 24

scf of natural gas from the pipeline.

- d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.
- e. PM and VOC emissions are minimized by the equipment specification of "lean premix combustion design" for each gas turbine. The equivalent maximum emissions are provided for informational purposes only. PM emissions are based on an AP-42 emission factor of 0.0066 lb/MMBtu (Table 3.1-2a). VOC emissions are based on available vendor data of 10 ppmvd and exclude emissions of methane and ethane, which are assumed to be 90% of the factor for total unburned hydrocarbons. No testing or other compliance demonstration is required for emissions of PM or VOC.
- f. Equivalent maximum emissions for each 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, NOx, and SO2) 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, NOx and SO2. Mass emission rates for SO2 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.
- g. The emissions standards of this permit ensure that the facility remains a minor source of air pollution with respect to both the PSD preconstruction review permit program and the Title V operating permit program.

Appendix E of this permit summarizes the potential emissions estimates for Station 24.

EMISSIONS PERFORMANCE TESTING

- 9. Test Methods: 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
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources <i>{Permitting Note: The method shall be based on a continuous sampling train.}</i>
19	Determination of SO2 Removal Efficiency and Emission Rates for PM, SO2, and NOx <i>{Permitting Note: Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.}</i>
20	Determination of NOx, SO2, and Diluent Emissions from 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 for compliance testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Appendix B of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

- 10. Initial Tests: Each gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial startup of the gas turbine. The initial NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load. Each of the three low-load NOx performance tests shall consist of three, 20-minute test runs. The peak load NOx performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NOx performance tests at peak load. SO2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. *{Permitting Note: The permittee has previously satisfied the requirement for initial testing of these units.}* [Rule 62-297.310(7)(a)1, F.A.C.; 40 CFR 60.8 and 60.335]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### Compressor Station 24

11. Annual Tests: During each federal fiscal year (October 1 - September 30), each gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NO<sub>x</sub>, and visible emissions. CO and NO<sub>x</sub> emissions shall be tested concurrently at permitted capacity. SO<sub>2</sub> emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a), F.A.C.]
12. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and, 60.8]

#### RECORDS AND REPORTS

13. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix B of this permit. For each required NO<sub>x</sub> test, emissions shall be corrected to equivalent terms and compared to the NSPS Subpart GG standard identified in Appendix C of this permit. For each test run, the report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (MMBtu per hour), the power output (bhp), percent of base load, and the turbine inlet temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.334]
14. Operational Data: Using the automated gas turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp), and hours of operation for each gas turbine. Operational information shall be summarized and reported with the required Annual Operating Report. [Rule 62-4.070(3), F.A.C.]
15. Component Replacements: For the replacement of gas 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 gas 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 gas 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. 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(7)(b), F.A.C.

## SECTION 4. APPENDICES

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### Contents

Appendix A. Citation Format

Appendix B. Common State Regulatory Requirements

Appendix C. NSPS Subpart GG Requirements for Gas Turbines

~~Appendix D. Custom Fuel Monitoring Schedule~~

Appendix D. Summary of Potential Emissions

## SECTION 4. APPENDIX A

### Citation Format

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The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

#### REFERENCES TO PREVIOUS PERMITTING ACTIONS

##### Old Permit Numbers

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* “AC” identifies the permit as an Air Construction Permit  
“AO” identifies the permit as an Air Operation Permit  
“123456” identifies the specific permit project number

##### New Permit Numbers

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

*Where:* “099” represents the specific county ID number in which the project is located  
“2222” represents the specific facility ID number  
“001” identifies the specific permit project  
“AC” identifies the permit as an air construction permit  
“AF” identifies the permit as a minor federally enforceable state operation permit  
“AO” identifies the permit as a minor source air operation permit  
“AV” identifies the permit as a Title V Major Source Air Operation Permit

##### PSD Permit Numbers

*Example:* Permit No. PSD-FL-317

*Where:* “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality  
“FL” means that the permit was issued by the State of Florida  
“317” identifies the specific permit project

#### RULE CITATION FORMATS

##### Florida Administrative Code (F.A.C.)

*Example:* [Rule 62-213.205, F.A.C.]

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

##### Code of Federal Regulations (CFR)

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**SECTION 4. APPENDIX B**  
**Common State Regulatory Requirements**

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*{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at this facility.}*

**GENERAL CONDITIONS**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit. [Rule 62-4.160(3), F.A.C.]
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), F.A.C.]
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated. [Rule 62-4.160(7), F.A.C.]

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit. [Rule 62-4.160(8), F.A.C.]

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may

**SECTION 4. APPENDIX B**  
**Common State Regulatory Requirements**

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be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules. [Rule 62-4.160(9), F.A.C.]

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. [Rule 62-4.160(10), F.A.C.]
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. [Rule 62-4.160(11), F.A.C.]
12. This permit or a copy thereof shall be kept at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (not applicable);
  - b. Determination of Prevention of Significant Deterioration (not applicable); and
  - c. Compliance with New Source Performance Standards (Subpart GG is applicable to the gas turbines).[Rule 62-4.160(13), F.A.C.]
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.

[Rule 62-4.160(14), F.A.C.]

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]

**EMISSIONS AND CONTROLS**

16. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

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### Common State Regulatory Requirements

17. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
18. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) 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.]
19. 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. [Rule 62-210.700(4), F.A.C.]
20. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
21. VOC or OS Emissions: 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. [Rule 62-296.320(1), F.A.C.]
22. Objectionable Odor 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.]
23. 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 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
24. Unconfined Particulate 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.]

#### TESTING REQUIREMENTS

25. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
26. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
27. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
28. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.



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**Common State Regulatory Requirements**

- a. *Required Sampling Time.* Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

[Rule 62-297.310(4), F.A.C.]

**29. Determination of Process Variables**

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

30. **Sampling Facilities:** The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
31. **Test Notification:** The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
32. **Special Compliance Tests:** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
33. **Test Reports:** The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - a. The type, location, and designation of the emissions unit tested.
  - b. The facility at which the emissions unit is located.
  - c. The owner or operator of the emissions unit.
  - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - f. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating

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**Common State Regulatory Requirements**

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parameters during each test run.

- g. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- h. The date, starting time and duration of each sampling run.
- i. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- j. The number of points sampled and configuration and location of the sampling plane.
- k. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- l. The type, manufacturer and configuration of the sampling equipment used.
- m. Data related to the required calibration of the test equipment.
- n. Data on the identification, processing and weights of all filters used.
- o. Data on the types and amounts of any chemical solutions used.
- p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- q. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- r. All measured and calculated data required to be determined by each applicable test procedure for each run.
- s. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- t. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- u. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

**RECORDS AND REPORTS**

- 34. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 35. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SECTION 4. APPENDIX C**  
**NSPS Subpart GG Requirements for Gas Turbines**

The following emissions unit is subject to the applicable requirements of Subpart A (General Provisions) and Subpart GG (Stationary Gas Turbines) established as New Source Performance Standards in 40 CFR 60 and adopted by reference in Rule 62-204.800(7)(b), F.A.C.

EU ID	Emission Unit Description
001	Engine 2401: Solar Model Mars 90-T13000S gas turbine rated at 13,000 bhp (ISO)
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7222 bhp (ISO)

**NSPS General Provisions**

The emissions units are subject to the applicable General Provisions of the New Source Performance Standards including 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). The General Provisions are not included in this permit, but can be obtained from the Department upon request.

**40 CFR 60, Subpart GG**

**Standards of Performance for Stationary Gas Turbines**

*{Permitting Note: Each gas turbine shall comply with all applicable requirements of 40 CFR 60, Subpart GG adopted by reference in Rule 62-204.800(7)(b), F.A.C. Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in italics immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.}*

40 CFR 60.330 - Applicability and Designation of Affected Facility

(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour), based on the lower heating value of the fuel fired.

40 CFR 60.331 - Definitions

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.

40 CFR 60.332 - Standard for Nitrogen Oxides

(a) On and after the date of the performance test required by Section 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (c) of this section shall comply with:

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

**SECTION 4. APPENDIX C**

**NSPS Subpart GG Requirements for Gas Turbines**

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	$0.04(N)$
$0.1 < N \leq 0.25$	$0.004 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

where: N=the nitrogen content of the fuel (percent by weight).

*Department Requirement: When firing natural gas, the "F" value shall be assumed to be 0.*

*{Permitting Note: The "Y" value for this gas turbine is approximately 12.2 for natural gas. The equivalent emission standard is 177 ppmvd corrected to 15% oxygen. The emissions standards specified in this permit are much more stringent than this requirement.}*

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

40 CFR 60.333 - Standard for Sulfur Dioxide

On and after the date on which the performance test required to be conducted by Section 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

*{Permitting Note: The gas turbines will exclusively fire natural gas, which contains less than 0.03% sulfur by weight assuming a density of 0.0455 lb/scf of natural gas.}*

40 CFR 60.334 - Monitoring of Operations

(c) For the purpose of reports required under Section 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Section 60.332 by the performance test required in Section 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in Section 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Section 60.335(a).

*{Permitting Note: Excess NOx emissions reporting requirements do not apply. The gas turbine uses "dry" lean premix combustors and not wet injection to control NOx emissions. As indicated above, the Subpart GG NOx standard is 177 ppmvd @ 15% oxygen. This is nearly eight times the NOx standard specified in the permit and would be nearly impossible for this lean premix combustion turbine to exceed. As stated in the preamble to the July 2004 amendments, the rule changes do not impose any additional monitoring requirements for existing units.}*

(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332).

*{Permitting Note: Because the nitrogen content of pipeline natural is negligible, the permittee does not claim an allowance for fuel bound nitrogen and will use "0" for the F-value when calculating the NOx standard in §60.332. The permit prohibits the permittee from claiming the allowance for fuel nitrogen. Therefore, no fuel nitrogen*

**SECTION 4. APPENDIX C**  
**NSPS Subpart GG Requirements for Gas Turbines**

*monitoring is required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}*

- (3) May elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(v), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring.

§60.331(v) states, “Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth’s surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: Landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.”

The permittee elects not to monitor the sulfur content of natural gas based on §60.334(h)(3)(i), which states that, “The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.” The current tariff sheet specifies that natural gas delivered by the pipeline system shall contain not more than 10 grains of total sulfur per 100 cubic feet of gas. Therefore, the pipeline natural gas meets the above definition.

*{Permitting Note: The permit requires the gas turbine to fire only pipeline natural gas with a maximum sulfur content of 10 grains of sulfur per 100 cubic feet of gas. Therefore, no fuel sulfur monitoring is required and no periodic reports of excess SO<sub>2</sub> emissions are required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}*

40 CFR 60.335 - Test Methods and Procedures

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in Section 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in Section 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Sections 60.332 and 60.333(a) as follows:

- (1) The nitrogen oxides emission rate (NO<sub>x</sub>) shall be computed for each run using the following equation:

$$\text{NO}_x = (\text{NO}_{x0}) (\text{Pr}/\text{Po})^{0.5} e^{19(\text{Ho} - 0.00633)} (288^\circ\text{K}/\text{Ta})^{1.53}$$

where:

NO<sub>x</sub> = emission rate of NO<sub>x</sub> at 15 percent O<sub>2</sub> and ISO standard ambient conditions, volume percent.

NO<sub>x0</sub> = observed NO<sub>x</sub> concentration, ppm by volume.

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H<sub>2</sub>O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

Department Requirement: *The permittee is required to correct NO<sub>x</sub> emissions to ISO ambient atmospheric conditions for each required emissions performance test and compare to the NO<sub>x</sub> standard specified in 40 CFR 60.332.*

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NSPS Subpart GG Requirements for Gas Turbines

- (2) The monitoring device of Section 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Section 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

*Department Requirement: The initial NO<sub>x</sub> performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load.*

*{Permitting Note: Although the dry low-NO<sub>x</sub> combustion controls are only effective above a minimum load of approximately 50%, the proposed gas turbines are able to quickly ramp up above this level. Gas turbines used as compressor engines typically operate at permitted capacity. Excluding startup and shutdown, the permit requires operation above 50% load. The minimum normal operating load will be identified during initial testing.}*

- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO<sub>x</sub> emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

*Department Requirement: The span value shall be no greater than 75 ppm of nitrogen oxides due to the low NO<sub>x</sub> emission levels of the specified gas turbine.*

- (d) The owner or operator shall determine compliance with the sulfur content standard in Section 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see Section 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

- (e) To meet the requirements of Section 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

*{Permitting Note: The permit prohibits the permittee from claiming the allowance for fuel nitrogen. The permit also requires the gas turbine to fire only pipeline natural gas with a maximum sulfur content of 10 grains of sulfur per 100 cubic feet of gas. Therefore, no fuel nitrogen or fuel sulfur monitoring is required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}*

**SECTION 4. APPENDIX D**  
**Custom Fuel Monitoring Schedule**

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~~Custom Fuel Monitoring Schedule: The Department approves the following Custom Fuel Monitoring Schedule in lieu of the NSPS fuel monitoring requirements in 40 CFR 60.334 of Subpart GG for the gas turbine affected by this project.~~

- ~~1. Because natural gas is the exclusive fuel for the gas turbine and contains negligible amounts of nitrogen, no monitoring of the fuel nitrogen content is required.~~
- ~~2. Fuel sulfur monitoring shall be performed in accordance with the following requirements:
  - ~~a. The natural gas shall be sampled and analyzed for the sulfur content as determined by ASTM methods D4084-82, D3246-81 or more recent versions.~~
  - ~~b. After first fire in the gas turbine, fuel sulfur monitoring shall be conducted at least twice each month. If this monitoring indicates little variability and compliance with the fuel sulfur limit of this permit for a period of six months, monitoring shall be reduced to once each calendar quarter. If this monitoring indicates little variability and compliance with the fuel sulfur limit of this permit for six calendar quarters, monitoring shall be reduced to twice each year (once each during the first and third calendar quarters).~~
  - ~~c. The permittee shall provide written notification to the Compliance Authority prior to reducing the frequency of monitoring in accordance with the above custom schedule. The notification shall include the results of the previous fuel-sulfur analyses, the current frequency of monitoring, and the future frequency of monitoring.~~~~
- ~~3. This custom fuel monitoring plan shall be reevaluated if there is a change in the fuel supply, a substantial change in the fuel quality, or any required monitoring indicates failure to comply with the fuel sulfur limit of this permit. For such cases, fuel sulfur monitoring shall resume on a weekly basis while the Department reevaluates the monitoring schedule.~~

[Rule 62-4.070(3); 40 CFR 60.334]

**SECTION 4. APPENDIX D**  
**Summary of Potential Emissions**

For informational purposes only, the following table summarizes the potential emissions from Station 24.

EU No.	Description	Hourly Emissions, lb/hour						Annual Emissions, ton/year					
		CO	NOx	PM	SO2	VOC	HAPs	CO	NOx	PM	SO2	VOC	HAPs
001	Engine 2401, 13,000 bhp Gas Turbine	12.3	10.1	0.7	3.1	0.4	0.12	53.9	44.2	3.3	13.5	1.5	0.5
002	Miscellaneous Support Activities	---	---	---	---	---	---	0.6	2.2	0.2	0.2	0.6	0.6
	GEN03, 443 bhp Emergency Generator	2.4	8.8	0.7	0.8	0.02	Neg.	0.6	2.2	0.2	0.2	Neg.	Neg.
	Fugitive VOC Leaks	---	---	---	---	---	---	---	---	---	---	0.6	0.6
	Oily Water Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
	Diesel Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
	Condensate Tank	---	---	---	---	---	Neg.	---	---	---	---	Neg.	Neg.
003	Engine 2402, 7222 bhp gas turbine	7.0	5.7	0.4	1.7	1.5	0.3	30.5	25.0	2.0	8.2	6.5	0.3
Total for Station 24								85.0	71.4	5.5	21.9	8.6	1.4

Notes:

1. All VOC emissions from fugitive leaks were assumed to be HAPs.
2. Hourly emissions are based on manufacturer's equipment specifications.
3. Annual emissions are based on information in the application and permit conditions.



**P.E. CERTIFICATION STATEMENT**

**PERMITTEE**

Florida Gas Transmission Company  
P.O. Box 4657  
Houston, TX 77210-4657

Air Permit No. 0410004-010-AC  
Compressor Station 24  
Minor Revisions  
Gilchrist County, Florida

**PROJECT DESCRIPTION**

Florida Gas Transmission Company (FGTC) operates existing Compressor Station 24 in Gilchrist County, which consists of a 13,000 bhp gas turbine compressor engine, a 7222 bhp gas turbine compressor engine and miscellaneous support activities. The station is part of FGTC's overall Phase VI project intended to increase the natural gas supply capacity and reliability to service domestic, commercial, and industrial customers in Florida. The existing facility is a minor source of air pollution. The permit will include the following revisions:

- **Increased Heat Input Rate:** The increase in heat input is necessary because the installed Cooper-Rolls Royce Model 501-KC7-DLE gas turbine is actually operating at a heat rate of approximately 8603 Btu/BHP-hour instead of 7942 Btu/Bhp-hour as indicated in the original vendor data. In short, the gas turbine must fire additional fuel to produce desired bhp output. Actual tested emissions have shown to be much lower than initially predicted. As a result, there will be no increase in the potential emissions of CO and NOx as specified in the original permit. Only minor corrections to the equivalent emission rates are necessary for PM/PM10, SO2, and VOC.
- **NSPS Subpart GG Monitoring Requirements:** Several changes were recently made to the monitoring requirements of NSPS Subpart GG. These changes incorporated many of EPA's previous guidance memorandums used in determining "custom fuel monitoring plans". Based on the revised rule, it is no longer necessary to monitor the nitrogen content of natural gas if the permittee agrees that no fuel bound nitrogen allowance will be used to determine the Subpart GG NOx standard. FGTC agrees that no allowance is appropriate for pipeline natural gas, which contains negligible concentrations of nitrogen. In addition, it is no longer necessary to monitor the sulfur content of natural gas if it is from a pipeline source with a tariff of less than 20 grains of sulfur per 100 scf. The FGTC pipeline has a tariff of 10 grains of sulfur per 100 scf for this pipeline. This is also specified in the permit as the maximum fuel sulfur limit. These monitoring issues will be revised throughout the permit as well as Appendix C (NSPS Subpart GG Requirements for Gas Turbines). In addition, the Custom Fuel Monitoring Schedule (originally identified as Appendix D) is no longer necessary and will be deleted.
- **Component Replacement Provisions:** Previous Permit No. 0410004-0007-AC already included a "functionally equivalent component replacement" provision as Condition 15. Minor revisions to this condition will be made to be consistent with a similar provision in the recent permit for Station 18 in Orlando.

The Department agrees that the requested revisions are minor in nature and do not trigger any new requirements. Permit No. 0410004-010-AC will be issued as a revised air construction permit that supersedes all previous air construction permits for these units.

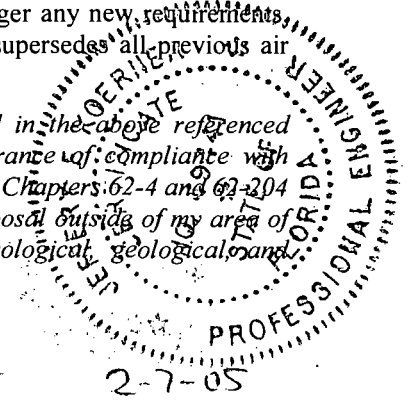
*I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*

*Jeffery F. Koerner*

Jeffery F. Koerner, P.E.  
Registration Number: 49441

2-7-05

(Date)



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input checked="" type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <u>J. Salazar</u> C. Date of Delivery <u>FEB 23 2005</u></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No  If YES, enter delivery address below:</p>
<p>1. Article Addressed to:</p> <p>Mr. Richard Craig, V.P. of Southeastern Operations  Florida Gas Transmission Company  Post Office Box 4657  Houston, TX 77101-4657</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) <u>7000 1670 0013 3109 9144</u></p>	
<p>PS Form 3811, August 2004 Domestic Return Receipt 102595-02-M-1540</p>	

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Mr. Richard Craig, V.P. of Southeastern Operations  
Florida Gas Transmission Company  
Post Office Box 4657  
Houston, TX 77101-4657

PS Form 3811, August 2004 See Reverse for Instructions



**Florida Gas Transmission Company**

601 South Lake Destiny Road, Suite 450, Maitland, FL 32751  
Post Office Box 945100, Maitland, FL 32794-5100  
407.838.7000 Fax 407.838.7001

December 28, 2004  
VIA UPS

**RECEIVED**

DEC 29 2004

**BUREAU OF AIR REGULATION**

Ms. Trina Vielhauer  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
Twin Towers Office Bldg.  
2600 Blairstone  
Tallahassee, FL 32399-2400

Reference: AIRS ID No. 0410004  
Air Permit No. 0410004-006-AC  
Emission Unit No. 003 (Engine No. 2402)  
Compressor Station No. 24, Trenton, Gilchrist County

Dear Ms. Vielhauer:

**Subject: Application to Modify Air Construction Permit for Increased Heat Rate**

Florida Gas Transmission Company (FGT) has previously submitted an Application for an Air Construction Permit for a new Cooper-Rolls 501-KC7 compressor turbine at the above referenced facility. This was authorized by the above referenced construction permit. With this document, FGT is requesting three revisions to this construction permit.

(1) A review of data from the initial compliance test for the new engine indicates that the heat rate for the engine is higher than was predicted by the manufacturer. FGT, therefore, is requesting that the heat rate listed in the permit be changed from 63 MM Btu/hr to 68 MM Btu/hr. An application requesting these modifications is attached. The changes reflect a change in the heat rate and the resulting changes in particulate matter, hazardous air pollutants and SO<sub>2</sub> emissions that are based on fuel use. The 40 CFR 60 Subpart GG Nitrogen oxides standard has also been recalculated using the vendor's lower heating value. This has resulted in a slightly lower standard.

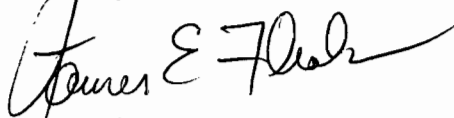
(2) On July 8, 2004, the U.S. EPA promulgated a revised 40 CFR 60 Subpart GG. Under these revisions, the fuel sulfur monitoring requirements are no longer applicable to the turbine at Compressor Station No. 24 since the gas quality characteristics are in a current, valid purchase contract, tariff sheet or transportation contract specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less (40 CFR 60.331(u)). FGT is requesting that this fuel monitoring requirement be removed from the permit.

(3) FGT is requesting that the FDEP consider inclusion of the Routine Component Replacement permit language into this construction permit for Units 2401 and 2402 (EU Nos. 001 and 003) as was done for Unit 1806 (EU No. 006) located at FGT's Orlando Compressor Station No. 18 (Facility ID No. 0950190).

The Routine Component Replacement permit language that was included in the permit for Compressor Station No. 18 was previously drafted and mutually agreed upon. The inclusion of this language in Permit No. 0410004-006-AC would allow FGT to complete routine maintenance and repair work on existing turbine gas generator/power turbine components and replace the components with "like-kind" components associated with unit 2401 and 2402 without first obtaining a construction permit.

If you have any questions or need additional information, please call me at (850) 350-5042.

Sincerely,

A handwritten signature in black ink, appearing to read "James E. Fleak". The signature is fluid and cursive, with a long horizontal stroke at the end.

James Fleak, P.E.  
Senior Environmental Specialist

#### ATTACHMENTS

CC: Rick Craig, w/o attachments  
David Parham, P.E.  
Duane Pierce, AQMcS, LLC  
Compressor Station No. 24  
Mr. Christopher Kirts, P.E., District Air Program Administrator, Northeast District,  
Florida Department of Environmental Protection, 7825 Baymeadows Way, Suite  
B200, Jacksonville, FL 32256-7590

**Florida Gas Transmission Company**

**Phase VI Expansion Project**

**Compressor Station No. 24**

**APPLICATION  
For  
AIR CONSTRUCTION  
PERMIT MODIFICATIONS**

**December 2004**

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Prepared by AQMcs, LLC

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## 1.0 INTRODUCTION

Florida Gas Transmission Company (FGT) has expanded its existing natural gas pipeline facility near Trenton in Gilchrist County, Florida (Compressor Station No. 24). This modification is part of FGT's Phase VI Expansion Project, aimed at increasing the supply capacity of FGT's network servicing domestic, commercial, and industrial customers in Florida.

Compressor Station No. 24 is located in Gilchrist County, Florida, approximately 4 miles north of Trenton on U. S. Highway 129. Figure 1-1 shows the location of the existing compressor station.

The expansion at this location consisted of the addition of one 7,200 ISO brake horsepower (bhp), natural-gas-fired, turbine compressor engine. The new compressor engine is used solely for transporting natural gas by pipeline for distribution to markets in Florida. The new engine is a Cooper-Rolls 501-KC7 DLE equipped with dry low NO<sub>x</sub> (oxides of nitrogen) combustion. Engineering designs for the new turbine included selection of an engine incorporating dry low NO<sub>x</sub> combustion technology. Dry low NO<sub>x</sub> technology for control of NO<sub>x</sub> emissions would represent Best Available Control Technology (BACT) for the new turbine engine under PSD requirements.

This application requests a revision to the heat rate for the new turbine described above. Initial emissions testing indicated that the heat rate was higher than that anticipated by the manufacturer. Therefore, FGT is proposing to increase the descriptive heat rate for this engine and to also revise the emission rates for particulate matter (PM), sulfur dioxide (SO<sub>2</sub>) and hazardous air pollutants (HAPs) since they are dependent on fuel use.

This narrative contains the following additional sections. Descriptions of the existing operation at FGT's Compressor Station No. 24 and the new 7,200 bhp (ISO) engine addition are presented in Section 2.0. The air quality review requirements and applicability of state and federal regulations are discussed in Section 3.0 and references are included in Section 4.0

FDEP permit application forms are presented in Attachment A. Attachment B contains a plot plan of the facility. Attachment C contains vendor information and Attachment D contains emission calculations.



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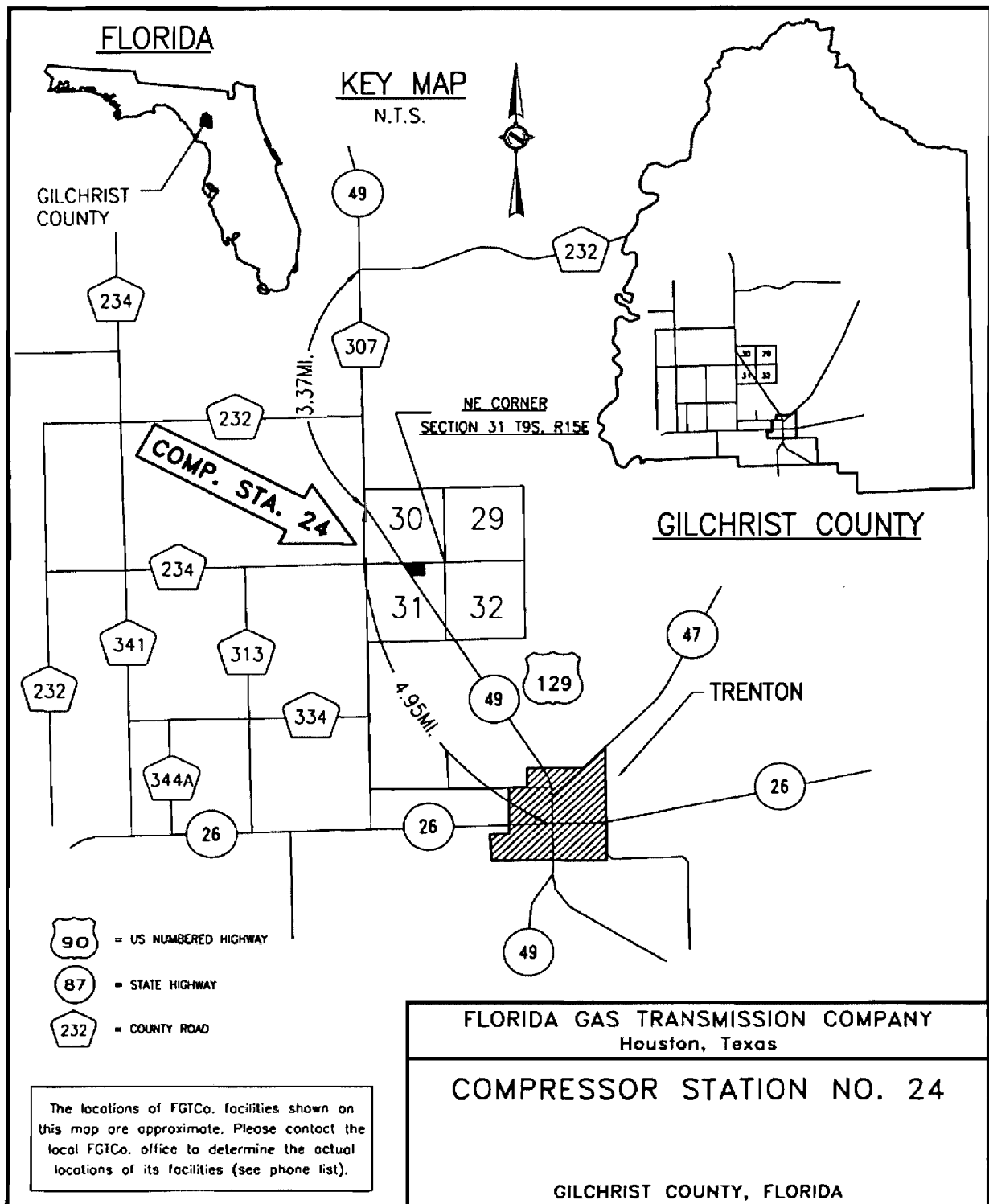


Figure 1-1

## 2.0 PROJECT DESCRIPTION

A plot plan of FGT's Compressor Station No. 24, showing the location of the plant boundaries, the existing emission sources, and the location of the new engine addition is presented in Attachment B. The following sections provide a description of the existing operations at this location, as well as a description of the new project.

### 2.1 Existing Operations

FGT's Compressor Station No. 24 was built as a part of the Phase IV Expansion Project and was constructed in 2000-2001. Compressor Station No. 24 originally consisted of one flat rated 10,350 bhp gas-fired turbine engine (Engine 2401). Compressor Engine 2401 was up-rated in 2002 to 15,000 bhp as part of the Phase V Expansion Project. This unit was replaced with a turbine compressor unit rated at 13,000 bhp (ISO) as part of the Phase VI Expansion Project.

The existing facility also has supporting equipment including lube and used oil storage tanks, air compressors and emergency generators.

### 2.2 New Compressor Engine

As part of the Phase VI Expansion, Project FGT added one new gas-fired turbine (Compressor Engine 2402). The new engine is used to increase the volumetric delivery capacity by driving a gas compressor that is a part of a gas transmission line that transports natural gas from source wells in Texas and Louisiana for delivery throughout Florida.

The heat and fuel rate values provided in Table 2-1 represent revised values based on initial emission testing and observation of operating parameters since installation.

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**Table 2-1 Revised Compressor Engine 2402 Specifications and Stack Parameters**

<b>Parameter</b>	<b>Design</b>
Compressor Engine	2402
Type	Gas Turbine
Manufacturer	Cooper-Rolls
Model	501-KC7 DLE
Unit Size (shaft)	7,200 bhp (ISO)
Specific Heat Input <sup>a</sup>	9,444 Btu/hp-hr*
Heat Rate <sup>b</sup>	68 MM Btu/hr*
Maximum Fuel Consumption <sup>a</sup>	0.0654 MMscf/hr*
Speed (shaft)	13,600 rpm
Stack Parameters	
Stack Height	61.17 ft
Stack Diameter	88" x 66"
Exhaust Gas Flow	106,087 acfm*
Exhaust Temperature	958 °F
Exhaust Gas Velocity	43.84 ft/sec*
<p>NOTE:</p> <p>acfm = actual cubic feet per minute.</p> <p>bhp = brake horsepower.</p> <p>Btu/bhp-hr = British thermal units per brake horsepower per hour.</p> <p>°F = degrees Fahrenheit.</p> <p>ft = feet.</p> <p>ft/sec = feet per second.</p> <p>MMscf/hr = million standard cubic feet per hour</p> <p>rpm = revolutions per minute.</p> <p><sup>a</sup> Based on observed higher heat value (HHV) heat rate; lower heating value estimated at 9,579 Btu/hp-hr</p> <p><sup>b</sup> Fuel flow for natural gas of 1040 British thermal units per standard cubic foot (Btu/scf).</p> <p>* REVISED</p>	

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Hourly and annual emissions of regulated pollutants from the engine under normal operating conditions are presented in Table 2-2. Emissions of oxides of nitrogen (NO<sub>x</sub>, carbon monoxide (CO) and non-methane hydrocarbons (NMHC) are based on the engine manufacturer's supplied data (See Attachment C).

Typically, turbine vendors do not provide information on particulate matter (PM), sulfur dioxide (SO<sub>2</sub>) or hazardous air pollutant (HAP) emissions; therefore, particulate matter and HAP emissions are based upon USEPA publication AP-42 Table 3.1-2a and Table 3.1-3 respectively (USEPA, 2000) and emissions of SO<sub>2</sub> are based on FGT's Federal Energy Regulatory Commission (FERC) certificate limit of 10 grains sulfur per 100 cubic feet of natural gas.

**Table 2-2 Emissions from FGT's New Turbine Engine No. 2402**

<b>Pollutant</b>	<b>Emission Factor</b>	<b>Reference</b>	<b>lb/hr</b>	<b>TPY</b>
Nitrogen Oxides	5.7 lb/hr	Manufacturer Data	5.7	25.0
Carbon Monoxide	6.96 lb/hr	Manufacturer Data	6.96	30.5
Volatile Organic Compounds (non methane)	1.49 lb/hr	Manufacturer Data	1.49	6.5
Particulate Matter*	0.0066 lb/MMBtu	AP-42, Table 3.1-2a	0.45	2.0
Sulfur Dioxide*	10 grains/100 scf	FERC Limit	1.87	8.2
HAPs*	Various see Attachment D	AP-42, Table 3.1-3	0.07	0.3

\* Values revised due to heat rate increase

## 2.2.1 Emissions Summary

The new total emissions resulting from this revision are listed on Table 2-3. The calculations used to estimate these emissions are presented in Attachment D.

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**Table 2-3 Potential Annual Emissions (tpy) Summary**

SOURCE ID	DESCRIPTION	NO <sub>x</sub>	CO	VOC <sup>a</sup>	SO <sub>2</sub>	PM
<b>EXISTING EMISSIONS</b>						
2401	15,000 bhp Turbine Engine	49.5	60.0	1.8	14.9	3.5
GEN03	443 bhp Recip. Engine	2.2	0.6	0.01	0.2	0.2
FUGITIVE	Fugitive			0.59		
TANK 01	Oily Water Tank			<0.001		
TANK 02	Diesel Tank			<0.001		
TANK 03	Condensate Tank			<0.001		
2402	7,200 bhp (ISO) Turbine Engine – new	25.0	30.5	6.5	7.6	1.8
<b>CURRENT TOTALS:</b>		<b>76.7</b>	<b>91.1</b>	<b>8.903</b>	<b>22.7</b>	<b>5.5</b>
<b>ADDITIONAL NEW EMISSIONS</b>						
2402 - Added	7,200 bhp (ISO) Turbine Engine – new	0.0	0.0	0.0	0.6	0.2
<b>PROPOSED NEW TOTALS:</b>		<b>76.7</b>	<b>91.1</b>	<b>8.903</b>	<b>23.3</b>	<b>5.7</b>
(a) VOC = NM/NE HC						

## 3.0 REGULATORY ANALYSIS

This section presents a review of federal and Florida State air quality regulations, which are applicable to the operations and new emission unit at Compressor Station No. 24.

### 3.1 Federal Regulations Review

The federal regulatory programs administered by the USEPA have been developed under the authority of the Clean Air Act. The following subsections review the essential elements of the federal regulatory program and the impact they have on the operations and new modifications at Compressor Station No. 24.

#### 3.1.1 Applicability of New Source Performance Standards (NSPS)

The regulation of new sources through the development of standards applicable to a specific category of sources was a significant step taken by the 1970 CAA Amendments. The Administrator was directed to publish a new regulation establishing a Standard of Performance for any category of new sources that cause or contribute significantly to air pollution and which may reasonably be anticipated to endanger public health. All Standards apply to all sources within a given category, regardless of geographic location or ambient air quality at the location.

Performance standards are published in 40 CFR 60. The new turbine installed at Compressor Station No. 24 is subject to Subpart GG, Standards of Performance for Stationary Gas Turbines, because it has a maximum heat input at peak load of >10.7 gigajoules/hour (10 MMBtu/hr) based on the lower heating value of the natural gas fuel. This regulation establishes emission limits for NO<sub>x</sub> and SO<sub>2</sub>. The applicable emission standards are provided in Table 3-1.

The NO<sub>x</sub> emission limit for Subpart GG is calculated as follows:

$$STD = 0.0150 (14.4/Y) + F$$

$$STD = \text{Allowable NO}_x \text{ emissions}$$

$$Y = \text{Heat rate at peak load not to exceed 14.4 KJwatt-hour}$$

$$F = \text{NO}_x \text{ emission allowance}$$

The use of the F factor in this equation is optional under the revised Subpart GG. Since the fuel bound nitrogen in natural gas is less than 0.015% by weight, the value of F as defined in 40

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CFR 60.332 would be equal to zero.

$$\begin{aligned} Y &= \text{Btu/bhp-hr} \times 1.055 \text{ Kj/Btu} \times \text{hp-hr}/745.7 \text{ watt-hour} \\ &= 8,603 \text{ Btu/bhp-hr} \times 1.055 \text{ Kj/Btu} \times \text{hp-hr}/745.7 \text{ watt-hour} \\ &= 12.2 \text{ Kj/watt-hr} \end{aligned}$$

$$\text{STD} = 0.0150 (14.4/12.2) + 0$$

$$= 0.0177 \%$$

$$= 177 \text{ ppm}_v$$

Table 3-1 summarizes the NSPS applicability for this gas turbine.

The turbine at this facility will meet the NSPS for NO<sub>x</sub> of 177 ppmv (i.e., manufacturer's estimation of 25 ppmv), and for SO<sub>2</sub> of 150 ppmv (estimated for this turbine to be ~4 ppmv).

FGT was granted a custom fuel monitoring schedule for this engine; however, the daily monitoring of fuel nitrogen and sulfur is no longer required under the recent revisions effective July 8, 2004. FGT is requesting that this requirement be removed from the construction and operating permits. Specifically, FGT is requesting that Section III, Provision B.13 of the construction permit be deleted. A valid tariff sheet demonstrating the natural gas characteristics is attached as Attachment E.

### 3.1.2 Applicability of National Emission Standards for Hazardous Air Pollutants (NESHAPS)

Several NESHAPS are potentially applicable to this facility and these emission sources. This facility is not a major source of HAPs.

#### 3.1.2.1 40 CFR 63 Subpart HHH

One NESHAPS potentially applicable to this compressor station is 40 CFR 63 Subpart HHH. Compressor Station No. 24 has no affected sources as defined by 40 CFR 63 Subpart HHH and is, therefore, not subject to this subpart.

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**Table 3-1 Applicability of New Source Performance Standards**

<b>NSPS Subpart</b>	<b>NSPS Regulations</b>	<b>Equipment</b>	<b>Fuel</b>	<b>Pollutant</b>	<b>Heat Input Applicability</b>	<b>Equipment Design Maximum*</b>	<b>NSPS Emission Limits</b>	<b>Equipment Emissions</b>
GG	60.332	Engine No. 2402 Gas Turbine	Gas	NO <sub>2</sub>	>10 MM Btu/hr	61.94MMBtu/hr	177 ppm <sub>v</sub>	25 ppm <sub>v</sub>
GG	60.333	Engine No. 2402 Gas Turbine	Gas	SO <sub>2</sub>	>10 MM Btu/hr	61.94 MMBtu/hr	150 ppm <sub>v</sub>	~4 ppm <sub>v</sub>

\* Based on vendor design maximum of 57.3545 MM Btu/hr LHV plus 8%.



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## 3.1.2.2 40 CFR 63 Subpart YYYY

This facility is a not a Major Source for Hazardous Air Pollutants and this turbine is not subject to the new turbine MACT regulations (40 CFR 63 Subpart YYYY) promulgated on March 5, 2004 and stayed for two subcategories on August 18, 2004.

## 3.1.2.3 40 CFR 63 Subpart ZZZZ

The U.S.EPA has recently finalized 40 CFR 63 Subpart ZZZZ for reciprocating internal combustion engines; however, FGT does not have any engines subject to this regulation at this facility.

## **3.2 Florida State Air Quality Regulations**

Compressor Station No. 24 is currently operating under Permit No. 0410004-002-AO (Modified) and is subject to the provisions of that permit. Rule 62, F.A.C., contains the air quality rules and regulations for the State of Florida. The primary federal regulations that affect Compressor Station No. 24 have been incorporated into or are referenced by these rules. The significant state regulations that are applicable to the new emission units are briefly listed below.

### 3.2.1 Rule 62-210.300 Permits Required

FGT is required to obtain a construction permit prior to construction of new emission units. This requirement was met by the submittal of an application for a construction permit and the subsequent issuance of Construction Permits Nos. 0410004-006-AC and 0410004-007-AC.

### 3.2.2 Rule 62-204.240 Ambient Air Quality Standards

FGT must not violate any of the ambient air quality standards listed under this rule.

### 3.2.3 Rule 62-296.320(2) Objectionable Odors

This rule prohibits the discharge of pollutants that will cause or contribute to an objectionable odor.

### 3.2.4 Rule 62-296.320(4)(b)1 General Particulate Emission Limiting Standards.

FGT is prohibited from allowing the new compressor engine to discharge into the atmosphere the emissions of air pollutants, the density of which is equal to or greater than that designated

# AQMs

---

as Number 1 on the Ringelmann Chart (20 percent opacity).

## 3.2.5 Rule 62-210.300(3)(a) Exempt Emissions Units and/or Activities.

The emissions from the emergency generator and the fugitive leak emissions are insignificant sources and are exempt from the permitting requirements of Chapter 62-210 Stationary Sources - General Requirements, 62-213 Operation Permits For Major Sources Of Air Pollution and 62-4 Permits.

# AQMs

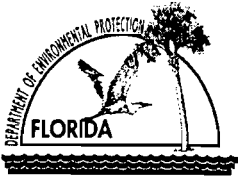
---

## 4.0 REFERENCES

U.S. Environmental Protection Agency (USEPA). 2000. Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources (5<sup>th</sup> Ed.) AP-42, Research Triangle Park, NC.

## **Attachment A**

### **DEP Forms**



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revise/renewal Title V air operation permit.

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)**  
– Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: Florida Gas Transmission Company	
2. Site Name: Compressor Station No. 24	
3. Facility Identification Number: 0410004	
4. Facility Location... Street Address or Other Locator: Intersection of U.S. Highway 129 and SW 50 <sup>th</sup> Street City: Trenton                                  County: Gilchrist                                  Zip Code: 32693	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### Application Contact

1. Application Contact Name: James Fleak, P.E., Senior Environmental Specialist	
2. Application Contact Mailing Address: Organization/Firm: Florida Gas Transmission Company Street Address: P.O. Box 945100 City: Maitland                  State: FL                  Zip Code: 32794-5100	
3. Application Contact Telephone Numbers: Telephone: (407) 838-7057                                  Fax: (407) 838-7101	
4. Application Contact Email Address: james.fleak@crosscountryenergy.com	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	12-29-04
2. Project Number(s):	0410004-010-AE
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

## APPLICATION INFORMATION

### Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

Air construction permit.

#### **Air Operation Permit**

Initial Title V air operation permit.

Title V air operation permit revision.

Title V air operation permit renewal.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

Air construction permit and Title V permit revision, incorporating the proposed project.

Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

Application is for an increase in the heat rate for a new turbine that was installed under Construction Permit 0410004-006-AC. Corresponding increases in particulate matter and sulfur dioxide emissions are also being made.

This application is for approximately 7.8% increase in the heat rate for Emission Unit No. 003 (Turbine No. 2402). Initial emissions testing indicated that the actual heat rate is higher than as described in the original permit application and the original construction permit.

**APPLICATION INFORMATION**

**Scope of Application**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Proc. Fee</b>
003	Cooper-Rolls 501-KC7 DLE Turbine rated at 7,200 bhp ISO, Engine 2402	AC1D	\$2,000.00

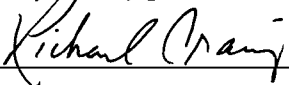
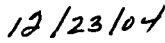
**Application Processing Fee**

Check one:  Attached - Amount: \$ 2,000.00       Not Applicable

**APPLICATION INFORMATION**

**Owner/Authorized Representative Statement**

**Complete if applying for an air construction permit or an initial FESOP.**

1. Owner/Authorized Representative Name : Richard Craig, Vice President, Southeast Operations
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Florida Gas Transmission Company Street Address: P.O. Box 4657 City: Houston State: TX Zip Code: 77210-4657
3. Owner/Authorized Representative Telephone Numbers... Telephone: (713) 646 - 7227 ext. Fax: ( ) -
4. Owner/Authorized Representative Email Address: rick.craig@CrossCountryEnergy.com
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility of any permitted emissions unit.</i>   Signature   Date



# APPLICATION INFORMATION

## Application Responsible Official Certification

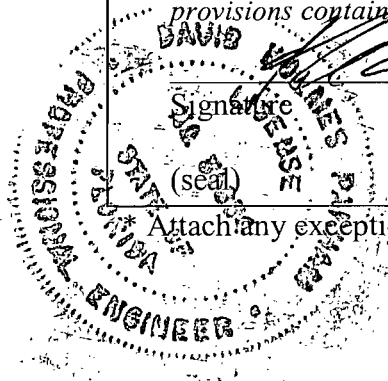
Complete if applying for an initial/revise/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: NA
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Owner/Authorized Representative Mailing Address... Organization/Firm: NA Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers...NA Telephone: ( ) - ext. Fax: ( ) -
5. Application Responsible Official Email Address: NA
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  _____ Signature  _____ Date

C/S-24

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: David Holmes Parham Registration Number: 50834
2. Professional Engineer Mailing Address... Organization/Firm: Florida Gas Transmission Company Street Address: 601 S. Lake Destiny Dr. Suite 450 City: Maitland State: FL Zip Code: 32751
3. Professional Engineer Telephone Numbers... Telephone: (407) 838-7119 ext. Fax: (407) 838-7101
4. Professional Engineer Email Address: david.parham@CrossCountryEnergy.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i>  (1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i>  (2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i>  (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i>  (4) <i>If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i>  (5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>   Signature: _____ Date: <u>12/16/04</u> (seal) _____ Attach any exception to certification statement.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### **Facility Location and Type**

1. Facility UTM Coordinates... Zone 17      East (km)    321.323 North (km)    3282.787		2. Facility Latitude/Longitude... Latitude (DD/MM/SS)    29/39/51 Longitude (DD/MM/SS)    82/50/46	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4922
7. Facility Comment : Compressor Station No. 24 is an existing natural gas pipeline compressor station with two existing compressor engines. It is not classified as a major source under New Source Review and Title V definitions.			

#### **Facility Contact**

1. Facility Contact Name: Abe Kattawar, Team Environmental Leader
2. Facility Contact Mailing Address... Organization/Firm: Florida Gas Transmission Company Street Address: P.O. Box 2176 City: Trenton                              State: FL                              Zip Code: 32693
3. Facility Contact Telephone Numbers: Telephone: (850) 544 - 6961      ext.      Fax:      (352) 463 - 0097
4. Facility Contact Email Address:

#### **Facility Primary Responsible Official**

**Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."**

1. Facility Primary Responsible Official Name: See Section 1
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City:                              State:                              Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) -      ext.      Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

## FACILITY INFORMATION

### Facility Regulatory Classifications

**Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”**

1.	<input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2.	<input type="checkbox"/> Synthetic Non-Title V Source	
3.	<input type="checkbox"/> Title V Source	
4.	<input type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5.	<input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6.	<input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7.	<input type="checkbox"/> Synthetic Minor Source of HAPs	
8.	<input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9.	<input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10.	<input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11.	<input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12.	<p>Facility Regulatory Classifications Comment:</p> <p>Facility is a minor source for PSD and Title V purposes. The turbines are subject to NSPS Subpart GG.</p>	

# FACILITY INFORMATION

## List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NO <sub>x</sub>	B	N
CO	B	N
VOC	B	N
SO <sub>2</sub>	B	N
PM	B	N

**FACILITY INFORMATION**

**B. EMISSIONS CAPS**

**Facility-Wide or Multi-Unit Emissions Caps**

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NA					

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

There are no emission caps.

## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach. B</u> <input type="checkbox"/> Previously Submitted, Date: _____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>08/2000</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>NA</u> <input type="checkbox"/> Previously Submitted, Date: _____

#### Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>Narrative Fig. 1-1</u> <input type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: <input checked="" type="checkbox"/> Attached, Document ID: <u>Narrative Section 2.0</u>
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <u>Narrative Section 3.0</u>
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

# FACILITY INFORMATION

## Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):  
 Attached, Document ID: \_\_\_\_\_  Not Applicable (no exempt units at facility)

## Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):  
 Attached, Document ID: \_\_\_\_\_  Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):  
 Attached, Document ID: \_\_\_\_\_  
 Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan (Required for all initial/revision/renewal applications):  
 Attached, Document ID: NA  
 Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):  
 Attached, Document ID: \_\_\_\_\_  
 Equipment/Activities On site but Not Required to be Individually Listed  
 Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :  
 Attached, Document ID: \_\_\_\_\_  Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:  
 Attached, Document ID: \_\_\_\_\_  Not Applicable

## Additional Requirements Comment



## EMISSIONS UNIT INFORMATION

Section [ 1 ] of [ 1 ]

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

# EMISSIONS UNIT INFORMATION

Section [ 1 ] of [ 1 ]

## A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

### Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

7,200 bhp ISO natural gas fired turbine compressor unit

3. Emissions Unit Identification Number: 003

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 09/30/03	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
-------------------------------------	--------------------------------	--------------------------------------	---	--

9. Package Unit:

Manufacturer: Cooper-Rolls Royce

Model Number: 501-KC7 DLE

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

The new turbine engine is a Cooper-Rolls 501-KC7 DLE engine compressor unit ISO rated at 7,200 bhp (ISO). Fuel is exclusively natural gas from the FGT's gas pipeline. The new engine will incorporate dry, low NO<sub>x</sub> combustion technology.

**EMISSIONS UNIT INFORMATION**

**Section [ 1] of [ 1]**

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

The engine incorporates dry, low NOX combustion technology.

2. Control Device or Method Code(s): 99

**EMISSIONS UNIT INFORMATION**

Section [ 1] of [ 1]

**B. EMISSIONS UNIT CAPACITY INFORMATION**  
**(Optional for unregulated emissions units.)**

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 68 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year
6. Operating Capacity/Schedule Comment:  Heat input is 63.09 MM Btu/hr at ISO conditions based on a vendor specified 7,200 bhp (ISO) and a LHV heat rate of 7,942 Btu/bhp-hr plus 10% to adjust to HHV.  This value is being increased by approximately 8% to 68 mmBtu/hr due to higher values observed during emissions testing

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**C. EMISSION POINT (STACK/VENT) INFORMATION  
(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: 2402		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:  NA			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:  NA			
5. Discharge Type Code: V	6. Stack Height: 61.17 feet	7. Exit Diameter: 88" x 66"	
8. Exit Temperature: 958 °F	9. Actual Volumetric Flow Rate: 106,087 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 321.323 North (km): 3282.787		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type):  Natural gas fired turbine engine driving a natural gas compressor, operating full time.		
2. Source Classification Code (SCC): 2-02-002-01		3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 0.0654	5. Maximum Annual Rate: 572.9	6. Estimated Annual Activity Factor: NA
7. Maximum % Sulfur: 0.03	8. Maximum % Ash: NA	9. Million Btu per SCC Unit: 1040
10. Segment Comment: Based on heat rate of 68 MMBtu/hr HHV.  Percent sulfur is based on maximum Federal Energy Regulatory Commission (FERC) limit of 10 gr S/100 scf and gas density of 0.0455 lb/scf.		

**Segment Description and Rate:** Segment NA of       

1. Segment Description (Process/Fuel Type):  		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:  		

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)**

**Segment Description and Rate:** Segment NA of \_\_\_\_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

**Segment Description and Rate:** Segment NA of \_\_\_\_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

**EMISSIONS UNIT INFORMATION**

**Section [ 1 ] of [ 1 ]**

**E. EMISSIONS UNIT POLLUTANTS**

**List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX	099		EL
CO			NS
VOC			NS
SO2			EL
PM			NS
HAPS			NS



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 5.7 lb/hour                      25.0 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year NA			
6. Emission Factor: 5.7 lb/hr  Reference: Vendor's data		7. Emissions Method Code: 5	
8. Calculation of Emissions:  (5.70 lb/hr)(1 ton/2000 lb)(8760 hr/1 yr) = 24.97 tons/year			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Based on vendor's data. See Attachment C.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units: 25 ppmv	4. Equivalent Allowable Emissions: 5.7 lb/hour      25 tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):  40 CFR 60.332(a)(2) limits NOX emissions to 177 ppmv.	

**Allowable Emissions** Allowable Emissions NA of    

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of    

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1.82 lb/hour                      8.0 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year NA	
6. Emission Factor: 10 gr/100scf  Reference: FERC limit	7. Emissions Method Code: 2
8. Calculation of Emissions:  (10 gr S/100 scf)(65,385 scf/hr)(1 lb/7000 gr) = 0.93 lb S/hr (0.93 lb S/hr)(2 lb SO2/lb S) = 1.87 lb SO2/hr (1.87 lb SO2/hr)(8760 hr/yr)(1 ton/2000 lb) = 8.18 ton/yr	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Based on vendor's heat rate value plus 10% and 1040 Btu/scf. Fuel has been increased approximately 8% based on observed values.	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units: 10 grains/100 scf	4. Equivalent Allowable Emissions: 1.87 lb/hour      8.2 tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):  40 CFR 60.333(a) limits SO2 emissions to 150 ppmv.	

**Allowable Emissions** Allowable Emissions NA of    

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of    

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.45 lb/hour                      2.00 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year NA	
6. Emission Factor: 0.0066 lb/MM Btu  Reference: Table 3.1-2a, AP-42 4/00, Supplement E	7. Emissions Method Code: 3
8. Calculation of Emissions:  (0.0066 lb/MM Btu)(68 MM Btu/hr) = 0.45 lb/hr (0.45 lb/hr)(8760 hr/yr)(1 ton/2000 lb) = 1.97 ton/yr	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Originally based on vendor's heat rate value plus 10% and 1040 Btu/scf. Fuel has been increased approximately 8% based on observed values.	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**  
(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6.96 lb/hour                      30.5 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year NA	
6. Emission Factor: 6.91 lb/hr  Reference: Vendor's data	7. Emissions Method Code: 5
8. Calculation of Emissions:  (6.96 lb/hr)(1 ton/2000 lb)(8760 hr/1 yr) = 30.48 tons/year	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Based on vendor's data. See Attachment C.	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1.49 lb/hour                      6.5 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year NA			
6. Emission Factor: 1.49 lb/hr  Reference: Vendor's data		7. Emissions Method Code: 5	
8. Calculation of Emissions:  (1.49 lb/hr)(1 ton/2000 lb)(8760 hr/1 yr) = 6.53 tons/year			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Based on vendor's data. See Attachment C.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: HAPS	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.068 lb/hour                      0.30 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year NA	
6. Emission Factor: 0.001027 lb/MM Btu  Reference: Table 3.1-3a, AP-42 04/00, Supplement E	7. Emissions Method Code: 3
8. Calculation of Emissions:  (0.001027 lb/MM Btu)(68 MM Btu/hr) = 0.070 lb/hr (0.070/lb/hr)(8760 hr/yr)(1 ton/2000 lb) = 0.31 ton/yr	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:  Detailed calculations provided in Attachment C. Included in VOC emissions.	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: NA
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:  Initial performance test, custom fuel monitoring	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions NA of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**G. VISIBLE EMISSIONS INFORMATION**

**Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.**

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: 40 CFR 60 Appendix A Method 9	
5. Visible Emissions Comment:  Subject to 62-296-320(4)(b)1 General Visible Emissions Standards.	

**Visible Emissions Limitation:** Visible Emissions Limitation NA of     

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**H. CONTINUOUS MONITOR INFORMATION**

**Complete if this emissions unit is or would be subject to continuous monitoring.**

**Continuous Monitoring System:** Continuous Monitor NA of   

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor    of   

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 1 ]

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>08/2000</u>
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>08/2000</u>
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>NA</u> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>NA</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: <u>Submitted separately and concurrently</u> Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable  Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

**Section [ 1 ] of [ 1 ]**

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: <u>NA</u> <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for Title V Air Operation Permit Applications**

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: <u>_</u> <input checked="" type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable



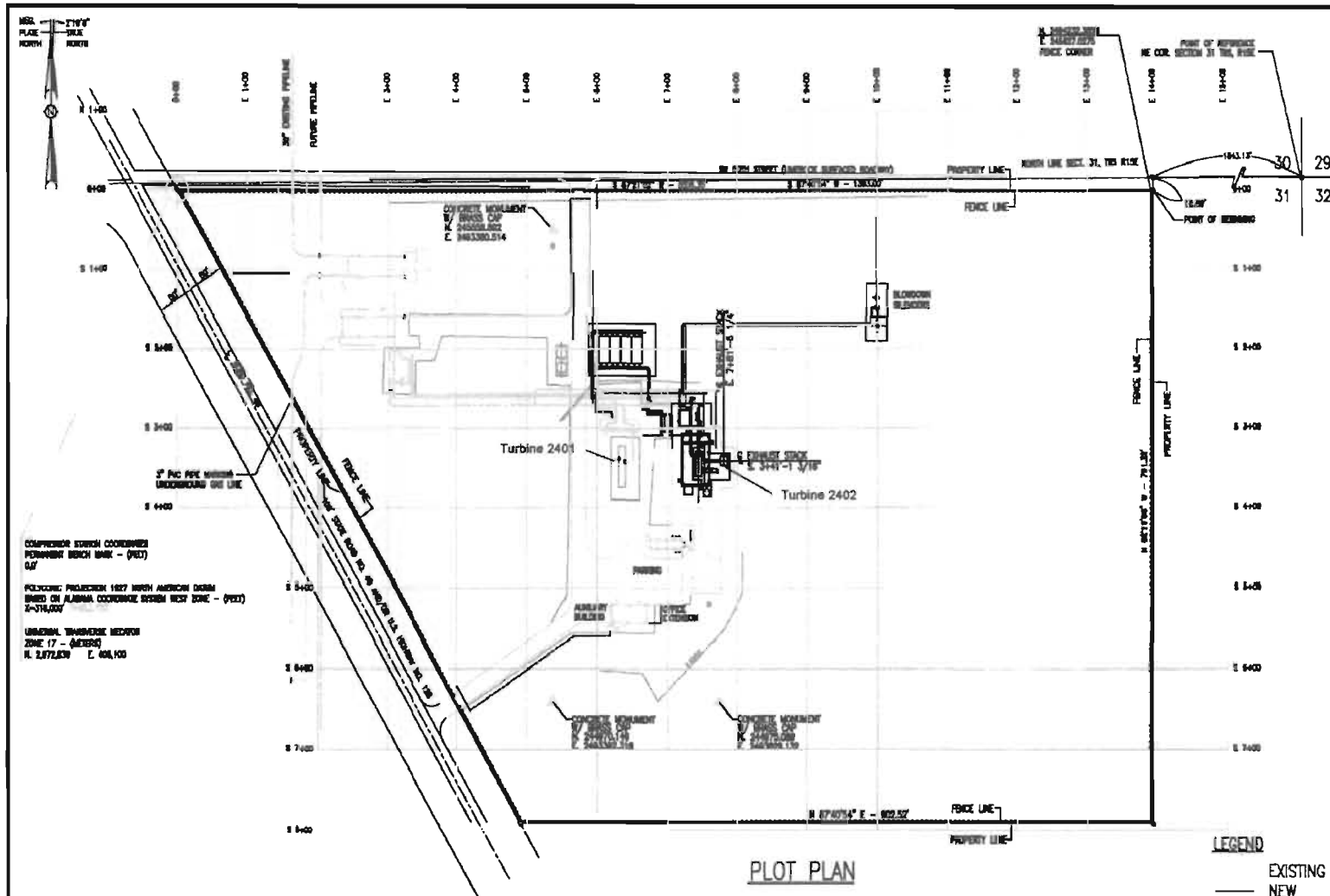
**EMISSIONS UNIT INFORMATION**

**Section [ 1 ] of [ 1 ]**

**Additional Requirements Comment**

## **Attachment B**

### **Plot Plan**



COMPRESSOR STATION COORDINATES  
 PERMANENT BENCH MARK - (9527)  
 0.07'

POLYCONIC PROJECTION 1987 NORTH AMERICAN DATUM  
 BASED ON ALABAMA COORDINATE SYSTEM WEST ZONE - (9527)  
 7-376,000'

UNIVERSAL TRANSVERSE MERCATOR  
 ZONE 17 - (AMERICA)  
 N. 2,877,830' E. 408,100'

**PLOT PLAN**

**LEGEND**  
 ——— EXISTING  
 ——— NEW

PIPELINE, STATION, OR ACCOUNT NUMBER		SCALE N.T.S.		CONST. YR. 2003		PROJECT NO. C.012612			
FILENUMBER		CADD FILENAME		DRAWN MM		DATE 10/16/02			
REV. NO. - DESCRIPTION	BY	DATE	APP.	<b>Florida Gas Transmission Company</b> An Enbridge Energy Partners Affiliate		COMPRESSOR STATION NO. 24 FGT PHASE VI EXPANSION PLOT PLAN			
						GILCHRIST COUNTY, FLORIDA		PREVIOUS DWG. NO.	
						SHT. OF		DWG. NO.	
						S3-1AP		SHT. 1 OF 1	
						A			

**Attachment C**

**Vendor Information**

**Cooper-Rolls 501 KC-7 Turbine**

**Allison Industrial Engine Performance & Emissions Estimate (EDR 18656)**

**Date:** June 4, 2001  
**Project:** Florida Gas Site Analyses  
**Engine Configuration:** 501-KC7, DLE W/Diffuser Bleed

Parameter\	Data Pt. No.	C/S 15 #1
Altitude (feet)		50
Ambient Press. (psia)		14.669
Relative Humidity		60
Specific Humidity		0.006366
Inlet Loss ("H2O)		0
Exhaust Loss ("H2O)		0
Inlet Pressure (CIP, psia)		14.669
Inlet Temperature (CIT, °F)		59
Inlet Flow (lb/sec)		45.24
MGT t/c (°F)		1375
Control Temp. (°F)		1935
Fuel Flow (MMBTU/hr)		57.3545
Fuel Flow (lb/hr)		2808.74
Output Shaft Speed (rpm)		13600
Gas Generator Speed (rpm)		14677
Shaft Power (hp)		7222.1
% of Full Load		100
SFC [lb/(hp*hr)]		0.3889
HeatRate[Shaft] BTU/(shp*hr)		7942
Exhaust Flow (lb/sec)		45.708
Exhaust Temp. (f/a, °F)		958
Exhaust P-static (psia)		14.67
Fuel	Ref Gas	
Fuel LHV (BTU/lb)		20420
H/C (wt ratio)		0.3261
Fuel Molecular Weight		16.6303
Fuel Specific Gravity		0.5902
Expected Emissions @ 15% O2		
NOx ppm		25
CO ppm		50
UHC ppm		20
VOC ppm		10
Expected Emissions (lb/eng-hr)		
NOx		5.7
CO		6.96
UHC		1.59
VOC		1.49
Exhaust Gas (vol %)		
CO2		2.94
H2O		6.63
O2		14.43
N2		75.1
Ar		0.9

NOTE: This data was originally prepared for Engine No. 1508 at FGT CS 15. Engine 2402 is an identical unit and the elevation is the same.

**Attachment D**  
**Emission Calculations**

**Engine No. 2402 EPN: 003**

**NOx Emissions: (Based on Vendor Data)**

$$\text{lb NOx/hr} = 5.70$$

$$\begin{aligned} \text{tons NOx/yr} &= (\text{lb NOx/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (5.7 \text{ lb NOx/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 24.97 \end{aligned}$$

**CO Emissions: (Based on Vendor Data)**

$$\text{lb CO/hr} = 6.96$$

$$\begin{aligned} \text{tons CO/yr} &= (\text{lb CO/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (7.0 \text{ lb CO/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 30.48 \end{aligned}$$

**VOC Emissions: (Based on Vendor Data)**

$$\text{lb VOC/hr} = 1.49$$

$$\begin{aligned} \text{tons VOC/yr} &= (\text{lb VOC/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (1.490 \text{ lb VOC/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 6.53 \end{aligned}$$

**SO2 Emissions: (Based on FERC Limits)**

$$\begin{aligned} \text{lb S/hr} &= (\text{gr S}/100 \text{ scf})(\text{MMscf/hr})(1 \text{ lb}/7000 \text{ gr}) \\ &= (10 \text{ gr S}/100 \text{ scf})(0.0654 \text{ MMscf/hr})(1 \text{ lb}/7000 \text{ gr}) \\ &= 0.93 \end{aligned}$$

$$\begin{aligned} \text{lb SO2/hr} &= (\text{lb S/hr})(2 \text{ lb SO2}/\text{lb S}) \\ &= (0.93 \text{ lb S/hr})(2 \text{ lb SO2}/\text{lb S}) \\ &= 1.87 \end{aligned}$$

$$\begin{aligned} \text{tons SO2/yr} &= (\text{lb SO2/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (1.87 \text{ lb SO2/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 8.18 \end{aligned}$$

**PM 10/2.5 Emissions: (Based on AP-42 Table 3.1-2a, 4/00)**

$$\begin{aligned} \text{lb PM/hr} &= (\text{lb PM}/\text{MMscf})(\text{MMBtu/hr}) \\ &= (0.0066 \text{ lb}/\text{MMBtu})(68.00 \text{ MMBtu/hr}) \\ &= 0.45 \end{aligned}$$

$$\begin{aligned} \text{tons PM/yr} &= (\text{lb PM/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (0.45 \text{ lb PM/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 1.97 \end{aligned}$$

**HAPs Emissions: (Based on AP-42 Table 3.1-3, 4/00)**

$$\begin{aligned} \text{lb HAP/hr} &= (\text{lb HAP}/\text{MMBtu})(\text{MMBtu/hr}) \\ &= (0.00102733 \text{ lb}/\text{MMBtu})(68.0000 \text{ MMBtu/hr}) \\ &= 0.0699 \end{aligned}$$

$$\begin{aligned} \text{tons HAP/yr} &= (\text{lb HAP/hr})(\text{hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (0.070 \text{ lb HAP/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 0.31 \end{aligned}$$

### Specific Engine HAP Emission Factors

HAP	Turbine	
	Factor lb/MMBtu	Ref.
1,3-Butadiene	4.30E-07	d
Acetaldehyde	4.00E-05	d
Acrolein	6.40E-06	d
Benzene	1.20E-05	d
Ethylbenzene	3.20E-05	d
Formaldehyde	7.10E-04	d
Naphthalene	1.30E-06	d
PAH	2.20E-06	d
Toluene	1.30E-04	d
Xylenes	6.40E-05	d
<b>Total Hazardous Cmpds</b>	<b>1.027E-03</b>	

Reference:

AP-42, 5th Edition, Supplement F, 04/00, Table3.1-3



**Attachment E**

**Pages from Tariff Sheet**

FLORIDA GAS TRANSMISSION COMPANY  
FERC Gas Tariff  
Third Revised Volume No. 1

Title Page

FERC GAS TARIFF  
Third Revised Volume No. 1  
(Supersedes Second Revised Volume No. 1)

of  
FLORIDA GAS TRANSMISSION COMPANY

filed with

Federal Energy Regulatory Commission

Communications concerning this Tariff should be addressed to:

Robert B. Kilmer  
Vice President - Rates and Certificates  
Florida Gas Transmission Company  
P.O. Box 1188  
1400 Smith Street 77002  
Houston, Texas 77251-1188

Telephone No. (713)853-6160  
Facsimile No. (713)646-3201

Issued by: Robert B. Kilmer, Vice President  
Issued on: April 10, 1997

Effective: May 10, 1997

GENERAL TERMS AND CONDITIONS  
(continued)

- am. NAESB Definitions - shall mean any such definitions issued by NAESB which have been adopted by the FERC. Transporter incorporates NAESB Definitions (Version 1.6, July 31, 2002) including the Wholesale Gas Quadrant Recommendations R02002 and R02002-2, 1.2.8 through 1.2.19, 2.2.2, 2.2.3, 4.2.1 through 4.2.20, 5.2.2 and 5.2.3 by reference herein.
- an. "Transporter's Web site" shall mean the Uniform Resource Locator (URL) of Transporter's Electronic Communication Mechanism on the Internet at [www.fgt.enron.com](http://www.fgt.enron.com).
- ao. "Execution" or "executed" or any other form of the root word "execute" when used with respect to any service agreement, amendment to service agreement, or any other contract shall include electronic execution pursuant to the procedures established by Transporter.
- ap. "Written" or "in writing" or any other combination of words indicating a requirement that a document be in a physically written form shall include any service agreement, amendment to service agreement, or any other contract or document which has been electronically executed pursuant to the procedures established by Transporter.
- aq. NAESB - North American Energy Standards Board [Successor to the Gas Industry Standards Board ("GISB")], or any subsequent successor organization.

2. QUALITY

- A. Gas delivered by Shipper or for its account into Transporter's pipeline system at receipt points shall conform to the following quality standards:
  - 1. shall be free from objectionable odors, solid matter, dust, gums, and gum forming constituents, or any other substance which might interfere with the merchantability of the gas stream, or cause interference with proper operation of the lines, meters, regulators, or other appliances through which it may flow;
  - 2. shall contain not more than seven (7) pounds of water vapor per one thousand (1,000) MCF;
  - 3. shall contain not more than one quarter (1/4) grain of hydrogen sulphide per one hundred (100) cubic feet of gas;
  - 4. shall contain not more than ten (10) grains of total sulphur per one hundred (100) cubic feet of gas;
  - 5. shall contain not more than a combined total three percent (3%) by volume of carbon dioxide and/or nitrogen;
  - 6. shall contain not more than one quarter percent (1/4%) by volume of oxygen;

Issued by: Robert B. Kilmer, Vice President  
Issued on: July 3, 2003  
Filed to comply with order of the Federal Energy Regulatory Commission,  
Docket No. RP03-361, issued June 25, 2003, 100 FERC ,

Effective: July 1, 2003

REMITTANCE STATEMENT

VENDOR NUMBER:

VOUCHER NUMBER	INVOICE DATE	INVOICE NO.	PURCHASE ORDER	AMOUNT		
				GROSS	DISCNT	NET
	12-16-04			2000.00		
				<b>CHECK TOTAL</b>		2000.00

SPECIAL INSTRUCTIONS:

DETACH AND RETAIN THIS STUB FOR YOUR RECORDS.

CHECK # 1500000217

ATTACHED BELOW

REMOVE DOCUMENT ALONG THIS PERFORATION

THE FACE OF THIS DOCUMENT IS PRINTED BLUE THE BACK CONTAINS A SIMULATED WATERMARK



Florida Gas Transmission Company  
P. O. Box 1188  
Houston, TX 77251-1188

DATE 12-16-04

CHECK NO. 1500000217

JPMorgan Chase Bank  
6040 Tarbell Road  
Syracuse, NY 13206

50-937  
213

PAY Two Thousand and 00/100 Dollars

2000.00

To  
The  
Order  
Of  
Florida Department of Environmental Protection

NOT VALID AFTER 1 YEAR

*Douglas McHorse*



# GILCHRIST COUNTY JOURNAL

PUBLISHED WEEKLY

TRENTON, GILCHRIST COUNTY, FLORIDA

STATE OF FLORIDA,  
COUNTY OF GILCHRIST:

Before the undersigned authority personally appeared JOHN M. AYERS II, who on oath says he is Editor and Publisher of the GILCHRIST COUNTY JOURNAL, a newspaper published at Trenton, in Gilchrist County, Florida; that the attached copy of advertisement, being a

Public Notice of Intent to Issue Air Permit

Florida Department of Environmental Protection

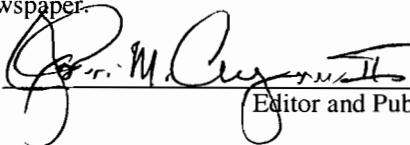
Draft Air Permit No. 0410004-010-AC

Florida Gas Transmission Company

was published in said newspaper in the issues of \_\_\_\_\_

March 3, 2005

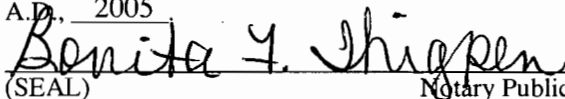
Affiant further says that the said GILCHRIST COUNTY JOURNAL is a newspaper published at Trenton, in said Gilchrist County, Florida, and that the said newspaper has heretofore been continuously published in said Gilchrist County, Florida, each week and has been entered as second class mail matter at the post office in Trenton, in said Gilchrist County, Florida, for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm, or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

  
\_\_\_\_\_  
Editor and Publisher.

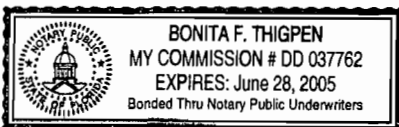
Sworn to and subscribed before me, and is personally known to me, appeared John M. Ayers II, who did take an oath,

this 8 day of April

A.D., 2005

  
(SEAL) \_\_\_\_\_  
Notary Public

(Print Name )



## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DRAFT AIR PERMIT NO. 0410004-010-AC FLORIDA GAS TRANSMISSION COMPANY - STATION 24 GILCHRIST COUNTY, FLORIDA

**Applicant:** The applicant for this project is the Florida Gas Transmission Company. The applicant's authorized representative and mailing address is Mr. Rick Craig, V.P. of Southeastern Operations, P.O. Box 4657, Houston, TX 77210-4657.

**Facility Location:** The Florida Gas Transmission Company operates existing natural gas compressor Station 24, which is located near Trenton at the intersection of U.S. Highway 129 and SW 50th Street in Gilchrist County, Florida.

**Project:** The applicant proposes the following air construction permit revisions: increase the maximum heat input rate for Engine 2402 from 63 to 68 MMBtu per hour; revise the fuel monitoring requirements to be consistent with the recent changes to NSPS Subpart GG; and make minor changes to the component replacement provisions for consistency among the stations. The Department agrees that the requested revisions are minor in nature and do not trigger any new requirements. Permit No. 0410004-010-AC will be issued as a revised air construction permit that supersedes all previous air construction permits for these units.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical

Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. A copy of the complete project file is also available at the Air Resources Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590. The telephone number is 904/807-3300.

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of fourteen (14) days from the date of publication of this Public Notice. Written comments must be provided to the Permitting Authority at the above address. Any written comments filed will be made available for public inspection. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3),

F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available for this proceeding.  
Pub. March 3, 2005b.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> Signature <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p>
<p>1. Article Addressed to:</p> <p>Mr. Richard Craig, V.P. of Southeastern Operations          Florida Gas Transmission Company          Post Office Box 4657          Houston, TX 77101-4657</p>	<p>B. Received by (Printed Name) C. Date of Delivery          SALAZAR MAY 10 2005</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          If YES, enter delivery address below:</p>
<p>2. Article Number          (Transfer from service label) 7001 0320 0001 3692 2022</p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>PS Form 3811, August 2001</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p> <p>Domestic Return Receipt 102595-02-M-1540</p>

U.S. Postal Service <b>CERTIFIED MAIL RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)									
OFFICIAL USE									
<table border="1"> <tr> <td>Postage</td> <td>\$</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> </table>	Postage	\$	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		<p>Postmark Here</p>
Postage	\$								
Certified Fee									
Return Receipt Fee (Endorsement Required)									
Restricted Delivery Fee (Endorsement Required)									
<p>7001 0320 0001 3692 2022</p> <p>Mr. Richard Craig, V.P. of Southeastern Operations          Florida Gas Transmission Company          Post Office Box 4657          Houston, TX 77101-4657</p>	<p>See Reverse for Instructions</p>								
<p>PS Form 3800, January 2001</p>									

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Richard Craig, V.P. of Southeastern  
Operations  
Florida Gas Transmission Company  
Post Office Box 4657  
Houston, TX 77101-4657

2. Article Number  
(Transfer from service label)

7000 1670 0013 3109 9144

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
*J. Salazar*  Addressee

B. Received by (Printed Name) C. Date of Delivery  
*J. Salazar* FEB 23 2005

D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

4416 BOTE ETD 0013 1670 0013 3109 9144

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	

Postmark  
Here

Mr. Richard Craig, V.P. of Southeastern  
Operations  
Florida Gas Transmission Company  
Post Office Box 4657  
Houston, TX 77101-4657