Jeb Bush
Governor

M. Rony François, M.D., M.S.P.H., Ph.D.
Secretary, Department of Health

AIR POLLUTION OPERATION PERMIT

PALM BEACH COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH AND ENGINEERING
P.O. Box 29 (901 Evernia Street)
West Palm Beach, Florida 33402-0029
Telephone: (561) 355-3136

ISSUED TO:

Permittee:
Florida Gas Transmission Company
P.O. Box 4657
Houston, TX 77101-4657

Authorized Representative:
Rick Craig, Vice President, Southeast

ARMS No.:	0990333
Permit No:	0990333-005-AO
Issued:	12/19/2005
Expires:	12/18/2010

Note: A renewal application must be submitted by 10-18-2010

LOCATED AT:

Florida Gas Transmission Company
6789 Belvedere Road
West Palm Beach, FL 33414-1011

Description: Compressor Field Station No. 21
[SIC: 4922]
UTM: Zone 17 ; 584.4 km E ; 2954.7 km N
Directions: *Located on the east-side of the Florida Turnpike and on the north side of Belvedere Road within the city limits of West Palm Beach.*

STATEMENT OF BASIS:

The Palm Beach County Health Department (Health Department) issues this permit under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4 through 62-297 the Florida Administrative Code (F.A.C.). The Florida Department of Environmental Protection (DEP) has permitting jurisdiction under Chapter 403.087, F.S. However, in accordance with Section 403.182, F.S., the DEP recognizes the Health Department as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits for this type of air pollution source located in Palm Beach County. The above named permittee is authorized to operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

ISSUED BY:

Executed in West Palm Beach, Florida.
PALM BEACH COUNTY HEALTH DEPARTMENT

_____
James E. Stormer, Q.E.P., Environmental Administrator
Air Pollution Control Section
Division of Environmental Health and Engineering

SECTION I. SUMMARY INFORMATION

PERMIT HISTORY

September 23, 1993:	Florida Department of Environmental Protection's (DEP) Bureau of Air Regulation issued Permit No. AC50-229440, Initial Air Construction Permit.
January 14, 1995:	Health Department issued Permit No. 099-0333-002-AC, Modification Permit.
January 4, 1996:	Health Department Issued Permit No. 099-0333-001-AO, Initial Operating Permit.
May 21, 1998:	Health Department Issued Permit No. 099-0333-003-AO, Minor Change to the Initial Operating Permit.
December 4, 2000:	Health Department receives renewal application for Permit No. 099-0333-003-AO.
January 25, 2001:	Health Department issues Permit No. 099-0333-004-AO, Operating Permit Renewal.
November 3, 2005	Health Department receives renewal application for Permit No. 099-0333-004-AO.
December 19, 2005	Health Department issues Permit No. 0990333-005-AO, Operating Permit Renewal.

PERMIT CONTENT

Section I:	Summary Information
Section II:	Facility-Wide Specific Conditions
Section III:	Emissions Unit Specific Conditions
Section IV:	Appendices

Appendix A - General Permit Conditions
Appendix B - Definitions, Abbreviations, and Citation Format
Appendix C - Exempt and Insignificant Activities
Appendix D - Summary of General Compliance Test Requirements
Appendix E - NSPS Subpart GG Requirements for Gas Turbines

REGULATORY CLASSIFICATIONS

PROGRAM	PROGRAM DESCRIPTION	CLASSIFICATION
PSD	Prevention of Significant Deterioration Rule 62-212.400, F.A.C	New Source Synthetic Minor (Nitrogen Oxides)
NSR-NAA	New Source Review for Nonattainment Areas Rule 62-212.500, F.A.C.	Not Applicable
NSPS	New Source Performance Standards 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines	New Source
NESHAP	National Emission Standards for Hazardous Air Pollutants 40 CFR Parts 61 and 63	Existing Source Natural Minor
Title V Operating Permit	Federal Operating Permit Program Rule 62-213, F.A.C.	Synthetic Minor (Nitrogen Oxides)

EMISSIONS UNIT SUMMARY

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
01	Unit No. 2101 - Combustion turbine with compressor
02	Unit No. 2102 - Combustion turbine with compressor
03	Support equipment

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

II.1 ADMINISTRATIVE

II.1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department (Health Department) at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida, 33402-0029, and phone number (561) 355-3136. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401 **[Specific Operating Agreement]**

II.1.2 General Permit Conditions: The permittee shall be aware of, and operate under, the attached General Permit Conditions listed in *Appendix A* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**

II.1.3 Citation Format: The format for citing applicable regulations is provided in *Appendix B* of this permit.

II.1.4 Application for Operation Permit: The permittee shall apply for a renewal permit at least 60 days prior to the expiration of this operation permit. The application shall include: the Short Form Application [DEP Form No. 62-210.900(4)]; the correct application processing fee; all required test reports; and a summary of any changes or substitutions to the original equipment, processes, fuels, controls, etc. When the renewal application is timely and sufficient, the existing permit shall remain in effect until final action is taken by the Health Department. [Rules 62-4.090 and 62-210.900, F.A.C.]

II.1.5 Applicable Regulations: This facility is subject to the following regulations: Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. Specifically, the combustion gas turbines are subject to the New Source Performance Standards (NSPS) for Stationary Gas Turbines identified by the Code of Federal Regulations Section 40, Part 60, Subpart GG, and incorporated by reference in the Florida Administrative Code regulation 62-296.800. A copy of these standards is included in *Appendix E* of this permit. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. **[Rule 62-210.300(1), F.A.C. and the SOA]**

II.1.6 Exempt Activities are listed in *Appendix C* of this permit.

II.2 EMISSION LIMITING AND PERFORMANCE STANDARDS

II.2.1 General VOC Standards: The permittee shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents without applying known and existing vapor emission control devices or systems. This includes: **[Rule 62-296.320(1), F.A.C.]**

(a) Regular inspection and maintenance of piping, valves, flanges, tanks, and containers used for storage and transfer of organic liquids and gases in order to minimize fugitive emissions.

(b) When not in use, directing solvent-containing materials to containers that prevent evaporation.

II.2.2 Objectionable Odors: The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**

Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-210.200(200), F.A.C.]

II.2.3 General Visible Emissions Standard: Unless otherwise specified by permit, the permittee shall not cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to or greater than 20 percent. **[Rule 62-296.320(4)(b), F.A.C.]**

II.2.4 Unconfined Emissions of Particulate Matter: The permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as

loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include the following: **[Rule 62-296.320(4)(c), F.A.C.]**

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

(b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

(c) Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.

(d) Removal of particulate matter from roads and other paved areas under the control of the permittee of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.

(e) Landscaping or planting of vegetation.

(f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

(g) Confining abrasive blasting where possible.

(h) Enclosure or covering of conveyor systems.

{Permitting note: Facilities that cause frequent, valid complaints will be required by the Health Department to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular facility, the Health Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.}

II.3 OPERATION AND MAINTENANCE REQUIREMENTS

II.3.1 Changes/Modifications: The permittee shall submit to the Health Department for review any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. Routine maintenance of equipment would not constitute a modification of this permit. **[Rules 62-4.030 and 62-210.300, F.A.C.]**

II.3.2 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall notify the Health Department 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; the 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 and the regulations. **[Rule 62-4.130, F.A.C.]**

II.3.3 Circumvention: Unless otherwise specified, the permittee shall not circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. **[Rule 62-210.650, F.A.C.]**

II.3.2 Excess Emissions: Unless otherwise specified, excess emissions shall be regulated according to the following: **[Rule 62-210.700, F.A.C.]**

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units 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 Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Pollution Control Section of the Palm Beach County Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

II.4 COMPLIANCE MONITORING REQUIREMENTS

II.4.1 Duration: The permittee shall maintain all records and reports required by this permit for at least 3 years from the date the information is recorded to verify the facility's status as a synthetic minor source under the PSD and Title V Operating Permit Programs. **[Rule 62-4.070(3), F.A.C.]**

II.4.2 Test Procedures: The permittee shall meet all applicable requirements of the Chapter 62-297, F.A.C. See *Appendix D* of this permit for a summary of these requirements. **[Rule 62-297.100, F.A.C.]**

II.4.3 Operational Rate During Testing: Unless otherwise stated in the applicable emission limiting standard for a rule, 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 impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load 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.]**

II.4.4 Stack Testing Facilities: The owner or operator shall maintain permanent stack testing facilities in accordance with **Rule 62-297.310(6), F.A.C.** These requirements are summarized in *Appendix D* of this permit.

II.4.5 Test Notification: Unless otherwise specified, the permittee shall notify the Health Department, in writing, at least 15 days prior to the date on which each formal compliance test is to begin, of the test date, the expected test time, the location of the test, the facility contact person responsible for coordinating the test, and the person or company conducting test. The 15 day notification requirement may be waived at the discretion of the Health Department. Likewise, if circumstances prevent testing during the test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window. **[Rule 62-297.310(7)(a)9., F.A.C.]**

II.4.6 Special Compliance Tests**:** When the Health 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 DEP rule or permit 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 Health Department. **[Rule 62-297.310(7)(b), F.A.C.]**

II.5 REPORTS REQUIRED

II.5.1 Annual Operations Report: Before March 1st of each year, the permittee shall submit an Annual Operations Report *[DEP Form No. 62-210.900(5)]* to the Health Department which summarizes operations for the previous calendar year. **[Rule 62-210.370(3), F.A.C.]**

II.5.2 Excess Emissions Report: If excess emissions occur, the permittee shall notify the Air Compliance Section of the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

II.5.3 Emission Compliance Stack Test Reports: For each required emissions compliance test, a report indicating the results of the test shall be filed with the Health Department as soon as practical, but no later than 45 days after the last sampling run is completed. The report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Health Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310(8)(c), F.A.C.** and summarized in *Appendix D* of this permit. Additional report information may be specified for a given group of emissions units in this permit. **[Rule 62-297.310(8), F.A.C.]**

II.6 WASTE REQUIREMENTS

II.6.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION A. This portion of the permit addresses the following emissions unit:

EMISSION UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	**Unit No. 2101:** 6500 bhp natural gas-fired combustion turbine with compressor.
002	**Unit No. 2102:** 6500 bhp natural gas-fired combustion turbine with compressor.

III.A. DEFINITIONS

As used in this permit, all terms not defined herein shall have a meaning given them in the (Clean Air) Act and in 40 CFR 60, Subpart A.

(a) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals

(b) Peak load means 100 percent of the manufacture's design capacity of the turbine at ISO standard day conditions.

(c) Base load means the load level at which a gas turbine ins normally operated.

[40 CFR 60.331]

III.A.1 OPERATING RESTRICTIONS

III.A.1.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the units in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228), and 62-210.300, F.A.C., and Construction Permit No. AC50-229440]

(a) *Heat Input Rates*: For each stationary gas turbine, the maximum design heat input shall not exceed (71.52) mm BTU per hour *(based on the daily average fuel consumption and the typical heat content of the natural gas determined from the most recent fuel analysis).*

(b) *Natural Gas Consumption Rates*: Fuel for each turbine is limited to natural gas with a maximum fuel consumption rate not to exceed (0.0684) million cubic feet per hour *(based on a daily average).*

III.A.1.2 Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in increased short-term or long-term emissions, without prior authorization from the Permitting Authority. The authorized methods of operation include the following:

(a) *Stationary Gas Turbine*: The permittee is authorized to operate two, natural gas fired combustion turbines.

(b) *Fuels*: The permittee is authorized to fire only, clean pipeline quality natural gas in each turbine.

(c) *Hours of Operation*: The permittee is authorized to operate each turbine continuously.

[Rules 62-4.160(2) and 62-210.300, F.A.C., and Construction Permit AC50-229440]

III.A.2 EMISSION LIMITATIONS AND STANDARDS

III.A.2.1 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 E of this permit. [Rule 62-210.800, F.A.C.; 40 CFR 60, Subpart GG]

III.A.2.2 Visible Emissions: Unless otherwise specified in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to or greater than 20 percent based on the highest 6-minute average.

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

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

III.A.2.3 Nitrogen Oxides: The permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of 42 parts per million by volume at 15 percent oxygen, on a dry basis nor in excess of the following:

$$STD = (0.015)\ (14.4\ /\ Y) + F$$

Where:

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

Y = Manufacturer's rated heat rate at manufacturer's rated peak 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.

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a) (4) of 40 CFR 60.332.

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
$0.015 \leq N \leq 0.1$	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 fuel (percent by weight).

Department Requirement: The permittee is authorized to fire only pipeline quality natural gas. The fuel-bound nitrogen is not a factor in NOx emissions when burning natural gas.

{ Permitting Note: The "Y" value for this gas turbine is approximately 12.9 for natural gas. The equivalent emission standard is 167 ppmvd corrected to 15% oxygen. The emission standards established in Construction Permit AC50-229440 are much more stringent than that established by the NSPS.}

[Construction Permit No. AC50-229440 and 40 CFR 60.332(a)(2), (c)]

III.A.2.4 Natural Gas Sulfur Content: The permittee shall not allow the firing of natural gas with a sulfur content in excess of 0.8 percent by weight nor greater than 10 grains per 100 standard cubic foot of gas on a monthly average.

[40 CFR 60.333(b) and Construction Permit AC50-229440]

{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.}

III.A.2.5 Excess Emissions. Reportable periods of excess emissions shall be defined as follows:

(a) *Nitrogen oxides*. If the permittee claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the permittee to calculate STD in Condition III.A.2.2.), he/she shall monitor the nitrogen content of the fuel combusted in the turbine. 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 which was (0.015). Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions**. [40 CFR 60.334(c)]**

{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 40 CFR 60.332. The permit prohibits the permittee from claiming the allowance for fuel nitrogen. Therefore, no fuel nitrogen monitoring is required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}

(b) *Sulfur dioxide*. The permittee 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 40 CFR 60.331(v), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring.

40 CFR 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."

[40 CFR 60.334(c)]

The permittee elects not to monitor the sulfur content of natural gas based on 40 CFR 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_2 emissions are required. The fuel monitoring provisions were revised pursuant to the final July 2004 amendments to Subpart GG.}

III.A.3 TEST METHODS AND PROCEDURES

III.A.3.1 Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

(a) Test Method: The test method for visible emissions shall be EPA Method 9, incorporated in Rule 62-297.401(9), F.A.C. and the required minimum period of observation for a compliance test shall be thirty (30) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C. and Construction Permit No. AC50-229440]

(b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

III.A.3.2 Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using the following procedures:

(a) EPA Method 20: Method 20 is described in 40 CFR 60, Appendix A and incorporated in Rule 62-297.401(20), F.A.C..

(b) *Span Values*: The span values shall be 100 ppm of nitrogen oxide and 21 percent oxygen. [40 CFR 60.335(c) and Permit 099-0333-002-AC]

(c) *NO_X Correction for NSPS*: The nitrogen oxides emissions (NO_X) shall be computed for each run using the following equation **[40 CFR 60.335(c)(1)]**:

$$NO_X = (NO_{XO})\ (P_R\ /\ P_O)^{0.5}\ (e^{19})\ (Ho - 0.00633)\ (288°K\ /\ T_A)^{1.53}$$

Where:

NO_X	=	NO_X emissions at 15% O_2 and ISO standard ambient conditions, volume percent.
NO_{XO}	=	Observed NO_X concentration, ppm by volume.
P_R	=	Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.
P_O	=	Observed combustor inlet absolute pressure at test, mm Hg.
Ho	=	Observed humidity of ambient air, grams H_2O per gram of air.
e	=	Transcendental constant, 2.718.
T_A	=	Ambient temperature, °K.

(d) *NO_X Correction for State Limit*: To show compliance with the state limit, NO_X emissions shall also be reported in parts per million by volume (ppmv) at 15% O_2 on a dry basis. **[Construction Permit AC50-229440 and 40 CFR 60.335(d)**]

(e) *NSPS Requirements*: Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. **[40 CFR 60.8(f)]**

III.A.4 COMPLIANCE DEMONSTRATIONS AND MONITORING REQUIREMENTS

III.A.4.1 Initial Compliance Demonstrations: The permittee shall have a formal compliance test conducted for visible emissions and nitrogen oxides in accordance with 40 CFR 60.8, Performance Tests for any in-kind replacement as allowed by condition III.A.6 of this permit. **[Rule 62-4.070(3), F.A.C. and 40 CFR 60.8]**

III.A.4.2 Annual Compliance Demonstrations: The permittee shall have a formal compliance test conducted for visible emissions for the emissions units annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants.

[Rule 62-297.310(7), F.A.C.]

III.A.4.3 Renewal Compliance Demonstrations: The permittee shall have formal compliance tests conducted for visible emissions and nitrogen oxides for the emissions units prior to renewal of the operating permit (Every five years), unless otherwise specified by rule, order, or permit. The most recent annual compliance tests may be submitted to satisfy the requirements of this provision.

[Rule 62-297.310(7), F.A.C.]

III.A.4.4 Daily Operation and Maintenance (O&M) Log: The permittee shall keep a daily O&M log to include, at a minimum, the following information **[Rule 62-4.070(3), F.A.C. and 40 CFR 60.7(b)]**:

(a) Date and name of operator.

(b) Periods of startup, shutdown, and malfunction of a gas turbine.

(c) Daily average fuel consumption in million cubic feet of natural gas per hour.

(d) Daily average heat input in mmBTU per hour based on the daily average fuel consumption and the typical heat content determined by the most recent sampling and analysis.

(e) Any maintenance performed on the gas turbines and/or monitoring equipment. (Indicate the problem, the maintenance or repair made, and the person or company performing the work.)

(f) Any comments on the performance of the gas turbines beneficial to the next operator.

III.A.4.5 Fugitive Leak Assessment: On the date of each visible emissions test, the owner or operator shall also perform a visual inspection of the gas turbine, compressor engine, filters, exhaust stack and ductwork, and natural gas piping system for rust spots, cracks, leaks, and/or odors. In addition, all safety mechanisms shall be inspected in order to ensure proper functioning. A report on the findings of the inspection and any corrective actions taken shall be submitted along with the required visible emission test report. **[Rule 62-4.070(3), F.A.C.]**

III.A.5 RECORDS AND REPORTS

III.A.5 Test Reports: The following reports shall be submitted to the Health Department indicating the results of the tests required by this subsection: **[40 CFR 60.335 and F.A.C. 62-4.070(3)]**

(a) *EPA Method 20*: In addition to the information required by F.A.C. Rule 62-297.570(3) and included in *Appendix D* of this permit, this report shall include:

(1) NO_X emissions in percent by volume at 15% oxygen and ISO conditions.
(2) NO_X emissions in parts per million at 15% oxygen on a dry basis.
(3) SO_2 emissions in percent by volume at 15% oxygen on a dry basis.
(4) Percent of operating capacity (6500 bhp at ISO conditions would be 100% capacity).
(5) Compliance status.

(b) *EPA Method 9*: This test report shall include the following information

(1) Visible Emissions Observation Form.
(2) Observer Certification.
(3) Percent of operating capacity (6500 bhp at ISO conditions would be 100% capacity).
(4) Compliance status.
(5) Results of Fugitive Leak Assessment.

III.A.6 GAS TURBINE REPLACEMENT PROCEDURE

III.A.6 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 the 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 emission 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, serial 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 e-mail. 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 testing 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 III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION B. This portion of the permit addresses the following activities as a single emissions unit:

EMISSION UNIT NO.	EMISSIONS UNIT DESCRIPTION
003	**Support Equipment**, including: a 184 bhp natural gas fired emergency generator; a Mobile Field Compressor; a 2000 gallon new lube oil tank; a 4200 gallon condensate tank; a 300 gallon oily water tank; a 600 gallon used lube oil tank; a 4200 gallon oily water tank; and fugitive emissions from valves, flanges, and fittings.

This emissions unit is designated as "unregulated" and includes equipment exempt from air permitting requirements (see Appendix C).