Florida Department of Environmental Protection

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PERMITTEE:

City of Gainesville, GRU
Post Office Box 147117 (A132)
Gainesville, Florida 32614

I.D. Number:	0010129
Permit/Cert Number:	0010129-001-AC
Date of Issue:	July 25, 2007
Expiration Date:	July 25, 2009
County:	Alachua
Latitude/Longitude:	29º38'24"N; 82º21'12"W
UTM:	E- (17) 370.29; N-3279.46
Project:	Initial Air Construction Permit

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210, 62-212, 62-272, 62-296, 62-297 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

PROJECT

For the construction of a Combined Heat and Power (CHP) facility.

FACILITY DESCRIPTION

The facility consists of two combustion turbine generators (CTGs), two fired heat recovery steam generators (HRSGs), one auxiliary steam boiler, three small cooling towers, and three emergency diesel-engine driven generators.

The manufacturer and the model number of each unit are as described in the table below.

Unit	Manufacturer	Model Number
Auxiliary Boiler	Cleaver Brooks	CBL-LN (4-pass, 5 ft^2/HP)
HRSG	ERI	S3-3216-HRSG
Gas Turbines	Solar	Mercury 50-6000R
Diesel Engines	Caterpillar	3516 B TA (2.25MW), C15 ATAAC (0.5 MW)

The facility will provide steam and power to the Shands Hospital complex, as well as power to the electrical transmission grid.

Combustion Turbine Generator (CTG) & Heat Recovery Steam Generator (HRSG). The combustion turbine generators will be fired exclusively with natural gas. In simple cycle mode, the CTG exhaust will discharge directly to the atmosphere. In combined cycle mode, the hot exhaust gases from each CTG will be routed to a heat recovery steam generator to generate steam. The HRSG will include natural gas fired duct burners (low NOx burner) for supplemental steam generation by the HRSGs. Following the recovery of waste heat by the HRSG, the CTG exhaust gases will be discharged to the atmosphere.

The combustion turbine generators will each have a nominal heat input of approximately 53 MMBtu/hour at 3200 °F and a power generation capacity of approximately 4,600 kilowatts. Each heat recovery steam generator can produce up to 45,000 pounds per hour of steam and will include a natural gas fired duct burner with a nominal heat input of 36 MMBtu/hour.

The combustion turbine generators (CTGs) & heat recovery steam generators (HRSGs) are subject to 40 CFR 60, NSPS, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines.

Auxiliary Steam Boiler. The dual fuel (natural gas and low sulfur distillate fuel oil) fired auxiliary boiler will have a heat input rate of approximately 41 MMBtu/hour.

The boiler is subject to 40 CFR 60, NSPS, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The boiler is also subject to Rule 62-296.406, F.A.C., for Fossil Fuel Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emissions Units.

Emergency Diesel Engine Generators. Two emergency diesel generators will each have a rated capacity of 2,250 kw, and the third smaller emergency diesel generator will have a rated capacity of 500 kw. The emergency generators will provide power in the event of outages.

The diesel engines are subject to 40 CFR 60, NSPS, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

REGULATORY CLASSIFICATION

The facility is classified as a synthetic Non-Title V source. The facility consists of the following emission units.

E.U. ID No.	Brief Description
001	Combustion Turbine Generator (CTG) Heat Recovery Steam Generator (HRSG) unit No.1
002	Combustion Turbine Generator (CTG) Heat Recovery Steam Generator (HRSG) unit No.2
003	Auxiliary Steam Boiler
004	Emergency Diesel Generator No.1
005	Emergency Diesel Generator No.2
006	Emergency Diesel Generator No.3

OPERATING LOCATION

Located at SW 14th Street between SW 13th and SW 14th Avenues, Gainesville, Alachua County, Florida.

PERMIT CONTENT

This permit consists of the following sections:

Section	Description
A	Facility Wide Conditions
B	Specific Conditions for Emissions Unit 001 & 002 – No.1 & 2 Combustion Turbine Generator (CTG) Heat Recovery Steam Generator (HRSG)
C	Specific Conditions for Emissions Unit 003 – Auxiliary Steam Boiler
D	Specific Conditions for Emissions Unit 004, 005 & 006 – No.1, 2 & 3 Emergency Generator
E	General Conditions from Rule 62-4.160, F.A.C.

ATTACHED APPENDICES ARE MADE A PART OF THIS PERMIT

A	40 CFR 60, Subpart A – General Provisions
B	BACT for Heat Recovery Steam Generator (HRSG) of emissions unit 001 & 002
C	BACT for Auxiliary Boiler

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RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

Application for Air Permit - Long Form received April 4, 2007
Request for Additional Information dated May 2, 2007
Additional Information received May 23, 2007
E-mail received June 8, 2007

SECTION A. FACILITY WIDE CONDITIONS.

1. The I.D. No. and Project name for this source shall be used on all correspondence.

2. Facility Wide NOx Emissions Cap: The facility wide NOx emissions shall not exceed 90 tons per any 12-consecutive month period. Compliance with the NOx emissions cap shall be demonstrated with all valid NOx emissions data including during periods of startup and shutdown. The owner or operator shall maintain a record of the NOx emissions rate on monthly basis. The latest monthly emissions rate shall be added to the NOx emissions rate from the previous 11 consecutive months to continuously demonstrate that the facility is meeting the facility wide NOx emissions cap. All the supporting information and records used to compute the NOx emissions rate shall also be maintained on site. All the records shall be kept on site for at least 3 years.

3. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
[Rule 62-212.400(12), F.A.C.]

4. General Visible Emissions Standard: Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharge into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on Ringelmann Chart (20% opacity). Compliance shall be determined by EPA Method 9 upon the Department's request, incorporated and adopted by reference in Rule 62-297, F.A.C.
[Rule 62-296.320(4)(b) 1., F.A.C.]

5. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants that cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

6. Open Burning Prohibition: Open burning is prohibited, except when determined by the Department to be the only feasible method of operation and authorized by this permit or an emergency exists which requires immediate action to protect human health and safety.
[Rule 62-296.320(3)(a)&(b), F.A.C.]

7. Unconfined Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of material; construction, alteration, demolition or wrecking; or industrially activity such as loading, unloading, storing and handling; without taking reasonable precaution to prevent such emissions. Reasonable precautions may include but are not limited to the followings, as necessary:
   b. Restrict all vehicular traffic within the site to no more than 5 miles per hour.
   c. Application of water, mulch or an approved chemical dust suppressant to unpaved roads, yard, open stock pile and similar activity.
   d. Removal of particulate matter from roads and paved areas under the facility's control in order to prevent reentrainment, and from any building or work areas to prevent the particulates from becoming airborne.
   e. Landscaping or planting of vegetation.
   f. If deemed necessary, pave or lay asphalt in extreme sensitive areas.
   [Rule 62-296.320(4)(c), F.A.C. and application received October 3, 2006]

8. Circumvention: No person shall 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.]

9. Plant Operation – Problems: If the permittee is 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 immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its 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 Department rules.
[Rule 62-4.130, F.A.C.]

EXCESS EMISSIONS

10. 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.]

11. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

12. Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.
A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

    Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors.
Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this subparagraph.
[Rule 62-210.700(3), F.A.C.]

13. 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 startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

14. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

    In case of excess emissions resulting from malfunctions, each owner or operator 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(5), F.A.C.]

GENERAL TESTING REQUIREMENTS

15. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which 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 emissions 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.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

16. Compliance Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.414(3)(b), F.A.C.]

17. 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), F.A.C.]

18. Compliance 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.]

19. Compliance Report Submittal: Reports of the required compliance tests shall be submitted as soon as practical but no later than 45 days after the last test is completed. Each test report shall include the maximum input / production rate at which this source was operated since the most recent test.
[Rule 62-297.310(8)(b), F.A.C.]

ADMINISTRATIVE

20. Issuance of this permit does not relive the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations.
[Rule 62-210.300, F.A.C.]

21. 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. [Rule 62-210.300(1), F.A.C.]

22. 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(1), F.A.C.]

23. Any revision(s) to a permit (and application) must be submitted to the Department, in writing, and approved by the Department prior to implementation.

24. A completed **Application for Air Permit – Non-Title V Source** [DEP Form No. 62-210.900(3)] shall be submitted to the Department at least 60 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.
[Rules 62-4.055 and 62-4.220, F.A.C.]

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Christopher L. Kirts, P. E.
District Air Program Administrator

Section B. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001	Combustion Turbine Generator (CTG) Heat Recovery Steam Generator (HRSG) unit No.1
002	Combustion Turbine Generator (CTG) Heat Recovery Steam Generator (HRSG) unit No.2

The Combustion Turbine Generator (CTG) Heat Recovery Steam Generator is subject to the following regulation.

- 40 CFR 60, NSPS, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

The Heat Recovery Steam Generator is subject to the following regulation.

- Rule 62-296.406, F.A.C. – Fossil Fuel Steam Generators with Less Than 250 MMBtu/hour of Heat Input

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. Hours of Operation: The hours of operation are not restricted.
   [Rules 62-4.160(2)&(14)(b), 62-210.200(PTE), F.A.C.]

2. Maximum Heat Input Rate: The maximum heat input rate for each unit is as described below.

Emission Unit	Maximum Heat Input Rate (MMBtu/hour, HHV @ 32 °F)	
	Combustion Turbine Generator	Heat Recovery Steam Generator
001	53	35.5
002		

[Rules 62-4.160(2)&(14)(b), 62-210.200(PTE), F.A.C.]

3. Method of Operation: Both units are natural gas fired only. Both units can be operated in simple cycle mode or combined cycle mode.
   [Rules 62-4.160(2)&(14)(b) & 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Emissions Limits: The units are subject to the following emissions limiting standards.

Pollutant	Emissions Limit	Rule
Nitrogen Oxide (NOx)	42 ppmvd @ 15% O2 **OR** 290 ng/J (2.3 lb/MWh) of useful output	40 CFR 60.4320 (a)
Sulfur Dioxide (SO_2)	Shall not burn any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input, **OR** Shall not cause to be discharged into the atmosphere any gases which contain SO2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output	40 CFR 60.4330 (a)(1) & (2)
Visible Emissions (VE)	Shall not exceed 20 percent opacity except for one six-minute period per hour during which opacity shall not exceed 27 percent	Rule 62-296.406 (1), F.A.C.

5. Best Available Control Technology (BACT): The amount of particulate matter and sulfur dioxide emissions from each Heat Recovery Steam Generator shall be limited by the firing of natural gas.
[Rule 62-296.406(2)&(3), F.A.C.]

6. General Requirements: The owner or operator shall operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing air pollution at all time including during startup, shutdown, and malfunction.
[40 CFR 60.4333 (a)]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR NOX EMISSIONS LIMIT

7. Initial and Subsequent Performance Tests for NOx: The owner or operator shall conduct an initial performance test, as described by 40 CFR 60.8. Subsequent tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). If the NOx emissions result from the performance test is less than or equal to 75% of the NOx emissions limit for the combustion turbine, the owner or operator may reduce the subsequent performance to once every two years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the NOx emissions limit for the turbine, the owner or operator shall resume annual performance tests.
[40 CFR 60. 4340(a) and 40 CFR 60.4400(a)]

8. NOx Performance Tests Requirements: There are two general methodologies that the owner or operator may use to conduct the performance tests. For each run:

   (i) Measure the NOx concentration (in part per million (ppm)), using EPA Method 7E or EPA Method 20 in Appendix A of this permit. For units complying with the output based standard, concurrently measure the stack gas flowrate using EPA Method 1 and 2 in Appendix A of this permit, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NOx emission rate:

$$E = \frac{1.194 \times 10^{-7} * (NO_X)_c * Q_{std}}{P} \qquad \text{(Eq. 5)}$$

   Where:
   E = NOx emission rate, in lb/MWh
   1.194×10^{-7} = conversion constant, in lb/dscf-ppm
   (NOx)c = average NOx concentration for the run, in ppm
   Qstd = stack gas volumetric flow rate, in dscf/hr
   P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to specific condition No.13 of this section; **or**

   (ii) Measure the NOx and diluent gas concentrations, using either EPA Method 7E and 3A, or EPA Method 20 in Appendix A of this permit. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of this permit. to calculate the NOx emission rate in lb/MMBtu. Then, use equation 1, and if necessary, use equation 2 and 3 in specific condition No.13 of this section to calculate the NOx emission rate in lb/MWh.

[40 CFR 60.4400 (a)(1)]

9. Sampling Traverse Points Requirements: Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
[40 CFR 60.4400 (a)(2)]

10. Notwithstanding specific condition 9 of this section, the owner or operator may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in Appendix A of this permit if the following conditions are met:
    (i) The owner or operator may perform a stratification test for NO_X and diluent pursuant to
    (A) [Reserved], or
    (B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of 40 CFR 75.

    (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
    (A) If each of the individual traverse point NO_X concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO_2 (or O_2) from the mean for all traverse points, then the owner or operator shall may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_X concentration during the stratification test; or
    (B) For turbines with a NO_X standard greater than 15 ppm @ 15% O_2, the owner or operator shall may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points; or
    (C) For turbines with a NO_X standard less than or equal to 15 ppm @ 15% O_2, the owner or operator shall may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO_2 (or O_2) from the mean for all traverse points.
[40 CFR 60.4400 (a)(3)]

11. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. The owner or operator may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. The owner or operator shall conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.
    (i) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.
    (ii) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), the owner or operator shall measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.
    (iii) Compliance with the applicable emission limit shall be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit.
    (iv) The ambient temperature must be greater than 0 °F during the performance test.
[40 CFR 60.4400 (b)]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR SULFUR DIOXIDE (SO2) LIMIT

12. Initial and Subsequent Performance Tests for SO2: The owner or operator shall conduct an initial performance test, as required in 40 CFR 60.8. Subsequent SO_2 performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that the owner or operator may use to conduct the performance tests.

    (a) If the owner or operator chooses to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see 40 CFR 60.17) for natural gas or ASTM D4177 (incorporated by reference, see 40 CFR 60.17) for oil. Alternatively, for oil, the owner or operator may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see 40 CFR 60.17). The fuel analyses may be performed either by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
        (i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453 (all of which are incorporated by reference, see 40 CFR 60.17); or
        (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR 60.17).

    (b) Measure the SO_2 concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19–10–1981–Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see 40 CFR 60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of this permit, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO_2 emission rate:

    $$E = \frac{1.664 \times 10^{-7} * (SO_2)_c * Q_{std}}{P} \qquad \text{(Eq. 6)}$$

    Where:
    E = SO_2 emission rate, in lb/MWh
    1.664×10^{-7} = conversion constant, in lb/dscf-ppm
    $(SO_2)_c$ = average SO_2 concentration for the run, in ppm
    Q_{std} = stack gas volumetric flow rate, in dscf/hr
    P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to specific condition No. 13 of this section; or

    (c) Measure the SO_2 and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in Appendix A of this permit. In addition, the owner or operator may use the manual methods for sulfur dioxide ASME PTC 19–10–1981–Part 10 (incorporated by reference, see 40 CFR 60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of this permit to calculate the SO_2 emission rate in lb/MMBtu. Then, use equation 1, and if necessary, use equation 2 and 3 in specific condition No. 13 of this section to calculate the SO_2 emission rate in lb/MWh.

    [40 CFR 60.4415]

13. Gross and Useful Energy Calculations: Calculate the hourly average NO_X emission rates, in units of the emission standards under 40 CFR 60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:

For simple-cycle operation:

$$E = \frac{(NO_X)_h * (HI)_h}{P} \qquad \text{(Eq. 1)}$$

Where:
E = hourly NO_X emission rate, in lb/MWh,
$(NO_X)_h$= hourly NO_X emission rate, in lb/MMBtu,
$(HI)_h$= hourly heat input rate to the unit, in MMBtu/h, measured using the fuel flowmeter(s), *e.g.* , calculated using Equation D–15a in appendix D to part 75 of this chapter, and
P = gross energy output of the combustion turbine in MW.

For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1 of this condition, except that the gross energy output is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW, as in the following equations:

$$P = (Pe)_t + (Pe)_c + Ps + Po \qquad \text{(Eq. 2)}$$

Where:

P = gross energy output of the stationary combustion turbine system in MW.
$(Pe)_t$= electrical or mechanical energy output of the combustion turbine in MW,
$(Pe)_c$= electrical or mechanical energy output (if any) of the steam turbine in MW, and

$$Ps = \frac{Q * H}{3.413 \times 10^6 \text{ Btu/MWh}} \qquad \text{(Eq. 3)}$$

Where:

Ps = useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MW,
Q = measured steam flow rate in lb/h,
H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb, and 3.413 x 10^6 = conversion from Btu/h to MW.
Po = other useful heat recovery, measured relative to ISO conditions, not used for steam generation or performance enhancement of the combustion turbine.
[40 CFR 60.4350(f)(2)]

14. Fuel's Sulfur Content Monitoring: The owner or operator shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in specific condition No. 15. The sulfur content of the fuel must be determined using total sulfur methods described in specific condition No.12. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40 CFR 60.17), which measure the major sulfur compounds, may be used.
[40 CFR 60.4360]

15. Fuel's Sulfur Content Monitoring Exemption: The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. The owner or operator shall use one of the following sources of information to make the required demonstration:
    (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO_2/J (0.42 lb SO_2/MMBtu) heat input for noncontinental areas; or
    (b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas or 180 ng SO_2/J (0.42 lb SO_2/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

    [40 CFR 60.4365]

16. The Frequency of Determining the Sulfur Content of the Fuel: The frequency of determining the sulfur content of the fuel shall be as follows:

    (a) *Gaseous fuel.* If the owner or operator elects not to demonstrate sulfur content using options in specific condition No.15, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.
    (b) *Custom schedules.* Notwithstanding the requirements of paragraph (a) of this condition, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (b)(1) and (b)(2) of this condition, custom schedules shall be substantiated with data and shall be approved by the Department before they can be used to comply with the standard in specific condition 4 of this section.
        (1) The two custom sulfur monitoring schedules set forth in paragraphs (i) through (iv) and in paragraph (b)(2) of this condition are acceptable, without prior Department approval:

            (i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable.
            (ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.
            (iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:

                (A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (b)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (b)(1)(iii)(B) of this condition.
                (B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (b)(1)(iv) of this condition. Otherwise, follow the procedures in paragraph (b)(1)(iii)(C) of this condition.

(C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (b)(1)(iv) of this condition. Otherwise, continue to monitor at this frequency.

(iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (b)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (b)(1)(ii) or (iii) of this condition shall be followed.

(2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to 40 CFR75 to determine a custom sulfur sampling schedule, as follows:

(i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of 40 CFR 60, subpart KKKK.

(ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.

(iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (b)(1)(iii) of this condition.

(iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (b)(1)(iv) of this condition.

[40 CFR 60.4370]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR OPACITY LIMIT

17. Compliance Testing: The owner or operator shall conduct visible emissions test for each Heat Recovery Steam Generator prior to obtaining initial air operation permit. The subsequent test frequency shall be at least once during each federal fiscal year (October 1 – September 30). The test method for visible emissions shall be DEP Method 9.
[Rule 62-297.310(7)(a), F.A.C.]

EXCESS EMISSIONS AND MONITORING DOWNTIME FOR SO_2

18. Definition of Excess Emissions and Monitoring Downtime: If the owner or operator chooses the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

(a) For samples of gaseous fuel obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(b) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

[40 CFR 60.4385]

REPORTING REQUIREMENTS

19. For the unit that is required to periodically determining the fuel sulfur content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

    For the unit that performs annual performance tests, the owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.
    [40 CFR 4375]

20. All reports required under 40 CFR 60.7(c) must be postmarked by the 30th day following the end of each 6-month period.
    [40 CFR 4395]

Section C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
003	Auxiliary Steam Boiler

The unit is subject to the following regulations.

- Rule 62-296.406, F.A.C. – Fossil Fuel Steam Generators with Less Than 250 MMBtu/hour of Heat Input
- 40 CFR 60, NSPS, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. Hours of Operation: The hours of operation are not restricted.
[Rules 62-4.160(2)&(14)(b), 62-210.200(PTE), F.A.C.]

2. Maximum Heat Input Rate: The maximum heat input rate of the unit is 41.4 MMBtu/hour, HHV.
[Rules 62-4.160(2)&(14)(b), 62-210.200(PTE), F.A.C.]

3. Method of Operation: The boiler may combust natural gas continuously. The boiler is allowed to combust low sulfur distillate fuel oil for no more than 500 hours per year as backup fuel.
[Rules 62-4.160(2)&(14)(b), 62-210.200(PTE), F.A.C., BACT and Applicant's Request]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Emissions Limit (s): The unit is subject to the following emissions limits.

Pollutant	Fuel	Limit	Rule
Opacity	For natural gas or distillate fuel oil	Shall not exceed 20 percent opacity except for one six-minute period per hour during which opacity shall not exceed 27 percent.	Rule 62-296.406 (1), F.A.C. 40 CFR 60.43c (c) {For combusting distillate fuel oil only}
Particulate Matter (PM)	For distillate fuel oil only	Maximum fuel sulfur content of 0.05 %, by weight.	Rule 62-296.406 (2), F.A.C. Best Available Control Technology (BACT)
		13 ng/J (0.030 lb/MMBtu) heat input	40 CFR 60.43c (e)(1)
Sulfur Dioxide (SO_2)	For distillate fuel oil only	Maximum fuel sulfur content of 0.5 %, by weight.	40 CFR 60.42c (d)
		Maximum fuel sulfur content of 0.05 %, by weight.	Rule 62-296.406 (3), F.A.C. Best Available Control Technology (BACT)

5. The opacity standards apply at all times, **except** during periods of startup, shutdown, or malfunction.
[40 CFR 60.43c (d)]

6. The fuel oil sulfur limits apply at all times, **including** periods of startup, shutdown, and malfunction. Compliance with the fuel oil sulfur limit may be determined based on the certification from the fuel supplier in accordance with specific condition No.9.
[40 CFR 60.42c (i), 40 CFR 60.42c(h)]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR SULFUR DIOXIDE

7. Initial Performance Test Notification: The owner or operator shall provide 30-day notice for the initial compliance test as required by 40 CFR 60.8(d). If the owner or operator demonstrates compliance with the SO2 standards based on fuel supplier certification, the initial compliance demonstration shall consists of the certification that is obtained from the fuel supplier as described in specific condition No.9.
[40 CFR 60.44c (a), 40 CFR 60.44c (h)]

8. Fuel Sampling: If the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil meets the sulfur content limitations as described by specific condition No. 4. Thereafter, the owner or operator shall sample the oil in the fuel tank after each new shipment of oil is received.

   Oil samples may be collected from the fuel tank for the unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.05 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.05 weight percent sulfur or less.
[40 CFR 60.44c (g), 40 CFR 60.46c (d)(2)]

9. Fuel Supplier Certification: If the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier.
Fuel supplier certification shall include the following information:

   (i) The name of the oil supplier; and
   (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

[40 CFR 60.44c (h), 40 CFR 60.48c (f)(1)]

EMISSIONS MONITORING FOR SULFUR DIOXIDE

10. If the owner or operator seeks to demonstrate compliance with the SO2 emissions limit through fuel sampling, he/she may elect to determine the average SO_2emission rate by sampling the fuel prior to combustion. Fuel sampling shall be conducted pursuant to either paragraph (a) or (b) of this condition. Method 6B of appendix A shall be conducted pursuant to paragraph (c) of this condition.

    (a) For unit that combusts coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2input rate.

    (b) As an alternative fuel sampling procedure for unit combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.05

weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.05 weight percent sulfur or less.

(c) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2at the inlet or outlet of the SO_2control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable $SO_2$and CO_2measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of 40 CFR 60. Method 6B of appendix A, Method 6A of appendix A, or a combination of Methods 6 and 3 of appendix A or Methods 6C and 3A of appendix A are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

[40 CFR 60.46c (d)]

11. The requirements of specific conditions Nos. 8 and 10 shall not apply to the unit if the owner or operator seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification.
[40 CFR 60.46c (e)]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR PARTICULATE MATTER/OPACITY

12. Initial Compliance Test: Within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup of the unit, the owner or operator shall conduct performance test(s) and furnish the Department a written report of the results of such performance test(s). The subsequent test frequency shall be at least once during each federal fiscal year (October 1 – September 30).
[40 CFR 60.8(a)]

13. Test Methods and Procedures: If a special compliance test is requested by the Department pursuant to Rule 62-297.310 (7), F.A.C., the owner or operator shall determine compliance with the PM standard with the following procedures and test methods.

(a) Method 1 shall be used to select the sampling site and the number of traverse sampling points.
(b) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, or Method 17.
(c) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:
(i) Method 5 may be used only at affected facilities without wet scrubber systems.
(ii) Method 17 may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.
(iii) Method 5B may be used in conjunction with a wet scrubber system.
(d) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
(e) For Method 5 or Method 5B, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160±14 °C (320±25 °F).
(f) For determination of PM emissions, an oxygen or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.
(g) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:

(i) The oxygen or carbon dioxide measurements and PM measurements obtained under this section,
(ii) The dry basis F-factor, and
(iii) The dry basis emission rate calculation procedure contained in Method 19 (appendix A).

(h) Method 9 (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

[40 CFR 60.45c (a)]

14. The owner or operator is not required to conduct PM emissions monitoring for the unit if they maintain fuel supplier certifications of the sulfur content of the fuel burned.
[40 CFR 60.45c (c)]

PERFORMANCE TESTING AND COMPLIANCE DEMONSTRATION FOR NOX EMISSIONS CAP

15. The owner or operator shall conduct initial compliance test for NOx emissions prior to obtaining initial air operation permit. Nitrogen Oxides Emissions testing shall comply with Rule 62-297.401(7)(e), F.A.C. EPA Method 7E shall be used to measure the NO_x concentration, EPA Methods 1 through 4 shall be used to measure the volumetric flow rate and EPA Method 3A or 3B shall be used to measure the oxygen concentration to correct the NO_x concentration, incorporated and adopted by reference in Chapter 62-297, F.A.C.). The subsequent performance tests shall be performed at least once every two years.

    The test result shall be used to estimate the annual NOx emissions generated from the unit and demonstrates that the facility is meeting the facility wide NOx emissions cap of 90 tons per any 12-consecutive month period.

NOTIFICATION, REPORTING AND RECORDKEEPING REQUIREMENTS

16. Notification: The owner or operator shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7. If applicable, this notification shall include:
    (a) The design heat input capacity of the affected facility and identification of fuels to be combusted in the unit.
    (b) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 60.43c.
    (c) The annual capacity factor at which the owner or operator anticipates operating the unit based on all fuels fired and based on each individual fuel fired.
    (d) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The unit is subject to the provisions of 40 CFR 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

    [40 CFR 60.48c (a)]

17. Reporting: The owner or operator shall submit the following reports, as applicable.
    a. The PM and Opacity performance test report.
    b. Fuel oil sulfur limit report. The report shall include the following, as applicable:
        i. Calendar dates covered in the reporting period for fuel oil sulfur limit.
        ii. 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
        iii. Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
        iv. Identification of the unit's operating days for which SO_2 or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the

operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

v. Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which oil was not combusted in the steam generating unit.

vi. Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

vii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

[40 CFR 60.48c (a), (d) & (e)]

18. Reporting Period: The reporting period for the reports required is each six-month period. All reports shall be submitted to the Department and shall be postmarked by the 30th day following the end of each reporting period. [40 CFR 60.48c (j)]

19. Recordkeeping: The owner or operator shall record and maintaining records of fuel combusted during each day. The owner or operator that burns very low sulfur fuel oil or other liquid fuels or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) or less shall record and maintain records of fuel combusted during each calendar month. The owner or operator shall also record the information (as applicable) in specific condition 16 of this section. The owner or operator shall also maintain the record of hours of operation for distillate fuel oil combustion.
[40 CFR 60.48c (g)]

Section D. This section addresses the following emissions units.

E.U. ID No.	Brief Description
004	Emergency Generator No.1
005	Emergency Generator No.2
006	Emergency Generator No.3

The emergency generators are subject to the following regulation:

- 40 CFR 60, NSPS, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. Hours of Operation: The hours of operation for each unit are restricted to 400 hours per year. [Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

2. Maximum Operation Rate (Internal Combustion Engine): The maximum operation rates for the internal combustion (IC) engines are as defined in the table below.

Emissions Unit	Maximum Engine Power	Rated Speed (rpm)
EU 004 & EU 005	3447 Horse Power (HP)	1800
EU 006	766 Horse Power (HP)	

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

3. Method of Operation- Fuels: Diesel fuel is the only permitted fuel for the internal combustion engines. [Rule 62-210.200(55), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Emissions Limiting Standards: The units are subject to the emissions limiting standards as shown in the table below. [40 CFR 60.4202(a)(2), Table 1 of 40 CFR 89.112]

Emissions Unit	Emissions Standards in g/KW-hr (g/HP-hr)				
	NMHC + NOx	HC	NOx	CO	PM
004 & 005	N/A	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
006	6.4	N/A	N/A	3.5	0.20

5. Smoke emission Standard for Emissions Unit 006: Exhaust opacity from compression-ignition nonroad engines shall not exceed:
   (a) 20 percent during the acceleration mode;
   (b) 15 percent during the lugging mode; and
   (c) 50 percent during the peaks in either the acceleration or lugging modes.

   Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.

   The following engines are exempt from the requirements of this condition:
   (a) Single-cylinder engines;
   (b) Propulsion marine diesel engines; and
   (c) Constant-speed engines.
   [40 CFR 89.113]

6. The owners and operators shall operate and maintain stationary CI ICE that achieve the emission standards according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
[40 CFR 4206]

FUEL REQUIREMENTS

7. Beginning October 1, 2007, owners and operators of stationary CI ICE that use diesel fuel shall use diesel fuel that meets the following per-gallon standards:
    (a) Sulfur content. 500 parts per million (ppm) maximum.
    (b) Cetane index or aromatic content, as follows:
        (i) A minimum cetane index of 40; or
        (ii) A maximum aromatic content of 35 volume percent.
[40 CFR 80.510(a), 40 CFR 4207 (a)]

8. Beginning October 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel shall use diesel fuel that meets the following per-gallon standards for nonroad diesel fuel.
    (a) Sulfur content.
        (i) 15 ppm maximum for NR diesel fuel.
        (ii) 500 ppm maximum for LM diesel fuel.
    (b) Cetane index or aromatic content, as follows:
        (i) A minimum cetane index of 40; or
        (ii) A maximum aromatic content of 35 volume percent.
[40 CFR 80.510(b), 40 CFR 4207 (b)]

9. Owners and operators of pre-2011 model year stationary CI ICE may petition the Department for approval to use remaining non-compliant fuel that does not meet the fuel requirements of specific condition No. 7 and 8 beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Department.
[40 CFR 4207 (c)]

MONITORING REQUIREMENTS

10. The owner or operator shall operate and maintain the stationary CI internal combustion engines and control devices according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator shall also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the units.
[40 CFR 60.4211(a)]

11. The owner or operator shall comply with the emissions limiting standards by purchasing an engine certified to the emission standards in specific condition No.4, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
[40 CFR 60.4211(C)]

12. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. Anyone may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.
[40 CFR 60.4211(e)]

13. Diesel Particulate Filter Installation: If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in specific condition No.4, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
[40 CFR 60.4209(b)]

14. Non-Resettable Hour Meter Installation: The owner or operator shall install a non-resettable hour meter prior to the startup of the engine.
[40 CFR 60.4209(a)]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

15. Compliance Demonstration: The owner or operator shall comply with the emission standards specified in specific condition No.4 by purchasing an engine certified to the emission standards, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

16. NOx Emissions Performance Test: Pursuant to Rule 62-297.310(7), F.A.C., and to provide reasonable assurance that the facility is meeting the NOx emissions cap, the owner or operator shall conduct NOx performance test for the units upon Department's request.

17. 40 CFR 60, Subpart A-General Provision: The internal combustion engines are subject to the requirements of 40 CFR 60, Subpart A-General Provision (attached Appendix A).
[40 CFR 60.1]

NOTIFICATION, REPORTING AND RECORDKEEPING

18. Recordkeeping: The owner or operator shall maintain the following records.
    - (i) The fuel usage for 12-consecutive month for each unit.
    - (ii) The time of operation of the units and the reason the engine was in operation during that time. The owner or operator shall keep records of the operation of the engine that are recorded through the non-resettable hour meter.

Section E. General Conditions from Rule 62-4.160, F.A.C.

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.

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.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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 of 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.

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.

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.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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.

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 any 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.

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.

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 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.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, 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.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
(x) Compliance with New Source Performance Standards (NSPS)

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 for 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:

        - the date, exact place, and time of sampling or measurements;
        - the person responsible for performing the sampling or measurements;
        - the dates analyses were performed;
        - the person responsible for performing the analyses;
        - the analytical techniques or methods used; and
        - the results of such analyses.

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.