

Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

**Permittee:**  
Florida Power Corporation  
3201 34<sup>th</sup> Street South  
St. Petersburg, Florida 33711

**FINAL Permit No.:** 1030013-001-AV  
**Facility ID No.:** 1030013  
**SIC Nos.:** 49, 4911  
**Project:** Initial Title V Air Operation Permit

This permit is for the operation of the Bayboro Facility. This facility is located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Pinellas County; UTM Coordinates: Zone 17, 338.8 km East and 3071.3 km North; Latitude: 27° 45' 28" North and Longitude: 82° 38' 13" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. 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 permitting authority, in accordance with the terms and conditions of this permit.

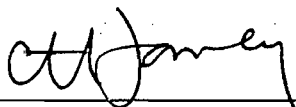
**Referenced attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Appendix I-1, List of Insignificant Emissions Units and/or Activities  
APPENDIX TV-3, TITLE V CONDITIONS (version dated 04/30/99)  
Appendix- Bayboro Combustion Turbine Fuel Heat Input vs. Temperature

**Effective Date:** August 26, 1999

**Renewal Application Due Date:** February 28, 2004

**Expiration Date:** August 26, 2004

*HLR*  
  
\_\_\_\_\_  
Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sms/ejs

Ed Irec

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

Mr. J. Jeffery Pardue  
Director, Environmental Services Department  
Florida Power Corporation  
3201 34th Street South  
St. Petersburg, Florida 33711

FINAL Permit No.: 1030013-001-AV  
Bayboro Facility

Enclosed is FINAL Permit Number 1030013-001-AV for the operation of the Bayboro Facility located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Pinellas County issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 9/2/99 to the person(s) listed or as otherwise noted:

- Mr. Kennard Kosky, PE, Golder Associates, Inc.
- Mr. Scott Osbourn, FPC
- Mr. Peter Hessling, PCDEM
- Mr. Gregg Worley, USEPA, Region 4 (INTERNET E-mail Memorandum)
- Ms. Elizabeth Bartlett, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

Barbara J. Boutwell 9/2/99  
(Clerk) (Date)

**FINAL PERMIT DETERMINATION**

**I. Comment(s).**

No comments were received from USEPA. However, the permittee has requested that a small emergency generator be added to Appendix I-1, List of Insignificant Emissions Units and/or Activities. The request meets the requirements of an insignificant emissions unit and the PROPOSED Title V permit was changed. The comment was not considered significant enough to reissue a DRAFT Title V permit and require another public notice. The change made is shown below.

**A. Add to Appendix I-1, List of Insignificant Emissions Units and/or Activities**

12. One emergency diesel generator, maximum fuel firing rate of 25 gal/hr, not to exceed 10,000 gal/yr

**II. Conclusion.**

In conclusion, the changes that have been made are insignificant in nature and do not impose additional noticing requirements. The permitting authority hereby issues the FINAL Title V permit, with any changes noted above.

Florida Power Corporation  
Bayboro Facility  
**Facility ID No.:** 1030013  
Pinellas County

Initial Title V Air Operation Permit  
**FINAL Permit No.:** 1030013-001-AV

Permitting Authority:

State of Florida  
Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
Title V Section

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344  
Fax: 850/922-6979

Compliance Authority:

Pinellas County Department of Environmental Management  
Air Quality Division  
300 South Garden Avenue  
Clearwater, Florida 34616  
Telephone: 813/464-4422  
Fax: 813/464-4420

Initial Title V Air Operation Permit  
FINAL Permit No.: 1030013-001-AV

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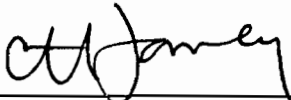
This permit is for the operation of the Bayboro Facility. This facility is located at 13<sup>th</sup> Avenue and 2<sup>nd</sup> Street South, St. Petersburg, Pinellas County; UTM Coordinates: Zone 17, 338.8 km East and 3071.3 km North; Latitude: 27° 45' 28" North and Longitude: 82° 38' 13" West.

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**Referenced attachments made a part of this permit:**

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Appendix- Bayboro Combustion Turbine Fuel Heat Input vs. Temperature

Effective Date: 26 Aug 1999  
Renewal Application Due Date: 28 Feb 2004  
Expiration Date: 26 Aug 2004

*Hv*  
  
Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sms/ejs

**Section I. Facility Information.**

**Subsection A. Facility Description.**

These facility's emissions units are No. 2 fuel oil fired combustion turbines manufactured by Pratt & Whitney (model number FT4C-1LF) and are designated as Bayboro Peaking Units #1, #2, #3 and #4. Each combustion turbine has two (2) turbine engines with each engine having its own stack. The manufacturers fuel flow and heat input ratings at 30°F for each turbine is 5,609 gallons per hour of No. 2 fuel oil (corresponds to approximately 774 million Btu per hour). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units to run a nominal 56.7 MW generator (each). Emissions from the combustion turbines are uncontrolled. In addition, the facility may have relocatable diesel generator(s). The generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

<u>Facility ID No.</u>	<u>E. U. ID No.</u>	<u>Brief Description</u>
1030013	-001	Bayboro Peaking Unit #1 Gas Turbine
	-002	Bayboro Peaking Unit #2 Gas Turbine
	-003	Bayboro Peaking Unit #3 Gas Turbine
	-004	Bayboro Peaking Unit #4 Gas Turbine
7775047	-001	Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled.

Unregulated Emissions Units and/or Activities

- 005 Internal floating roof fuel oil tank - 1,088,304 gallons
- 006 Internal floating roof fuel oil tank - 786,232 gallons
- 007 Waste oil tank - 12,000 gallons
- 008 Lube oil storage tank - 500 gallons
- 009 Fuel filter building vents
- 010 Overboard tanks for the peaking unit turbines
- 011 Lube oil vents with demisters for the peaking unit turbines

*Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996

Letter received October 21, 1998, from Mr. Scott Osbourn.

Electronic Mail received August 9, 1999, from Mr. Scott Osbourn.



## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.; and, Pinellas County Ordinance 97-05, Section 33, Sec. 58-178]
3. General Particulate Emission Limiting Standards. 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 discharged 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 the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

**7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

[Rule 62-296.320(1)(a), F.A.C.]

{Permitting note: There are no requirements deemed necessary and ordered by the Department, at this time.}

**8. Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas as needed, regular grass mowing and care of vegetation, and limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the initial Title V permit application received June 14, 1996.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 58. of APPENDIX TV-3, TITLE V CONDITIONS.)}

**9.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

**10.** The permittee shall submit all compliance related notifications and reports required of this permit to the Pinellas County Department of Environmental Management (PCDEM) office:

Pinellas County Department of Environmental Management  
Air Quality Division  
300 South Garden Avenue  
Clearwater, Florida 34616  
Telephone: 813/464-4422  
Fax: 813/464-4420

**11.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Operating Permits Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9099  
Fax: 404/562-9095

### Section III. Emissions Unit(s) and Conditions.

#### Subsection A. This section addresses the following emissions unit(s).

##### E.U.

<u>ID No.</u>	<u>Brief Description</u>
-001	Bayboro Peaking Unit #1
-002	Bayboro Peaking Unit #2
-003	Bayboro Peaking Unit #3
-004	Bayboro Peaking Unit #4

These emissions units are No. 2 fuel oil fired combustion turbines manufactured by Pratt & Whitney (model number FT4C-1LF) and are designated as Bayboro Peaking Units #1, #2, #3 and #4. Each combustion turbine has two (2) turbine engines with each engine having its own stack. The manufacturers fuel flow and heat input ratings at 30°F for each turbine is 5,609 gallons per hour of No. 2 fuel oil (corresponds to approximately 774 million Btu per hour). The actual heat input rate of the turbine is a function of the ambient temperature. These combustion turbines are used as peaking units to run a nominal 56.7 MW generator (each). Emissions from the combustion turbines are uncontrolled.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Each combustion turbine engine has its own stack. Each combustion turbine began commercial operation in 1973.}

**The following specific conditions apply to the emissions units listed above:**

#### Essential Potential to Emit (PTE) Parameters

**A.1. Permitted Capacity.** The maximum capacity for each gas turbine is as follows:

(a) 774.0 million Btu per hour at 30° F.

(b) The peak capacity shall be determined from the graph of Fuel Heat Input versus Ambient Temperature shown on "Appendix - Bayboro Combustion Turbine".

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

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever

emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **A.14.**  
[Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation - Fuels.** Only new No. 2 fuel oil shall be fired in the combustion turbines. New No. 2 fuel oil is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives.  
[Rule 62-213.410(1), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.4. Hours of Operation.** These emissions units may operate continuously, i.e., 8,760 hours/year  
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

### **Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**A.5. Visible Emissions.** Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.  
[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.6. Not federally enforceable. Sulfur Dioxide - Sulfur Content.** The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight.  
[AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

### **Excess Emissions**

**A.7.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by PCDEM for longer duration.  
[Rule 62-210.700(1), F.A.C.]

**A.8.** 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.]

**Monitoring of Operations**

**A.9. Not federally enforceable.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor, or the permittee, upon each fuel delivery. See specific condition **A.13**.  
[Rule 62-213.440, F.A.C.]

**A.10. Not federally enforceable.** In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, the permittee shall perform at least one audit sample analysis from a fuel oil delivery during each calendar year period. The fuel oil shall be analyzed for the following:

- Btu content
- API gravity
- Density
- Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the permittee provided fuel analysis to demonstrate compliance with the fuel oil sulfur limitation. See specific condition **A.9**.  
[Rules 62-4.070(3) and 62-213.440, F.A.C.]

**A.11. Determination of Process Variables.**

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

**Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**A.12.** The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.  
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

**A.13.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or latest edition.  
[Rules 62-213.440 and 62-297.440, F.A.C.]

**A.14.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the peak heat input rate based on the average ambient temperature during the test. The peak heat input rate is defined by a graph of Fuel Heat Input verses Ambient Temperature for each gas turbine. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); 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.  
[Rule 62-297.310(2), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.15.** Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

**A.16. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) **General Compliance Testing.**

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;

9. The owner or operator shall notify the PCDEM in writing, 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.

(b) **Special Compliance Tests.** When the PCDEM, 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 may 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 PCDEM.

(c) **Waiver of Compliance Test Requirements.** If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

**A.17. Visible Emissions Testing - Annual.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only liquid fuels for less than 400 hours per year.

See specific condition **A.18.**

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

**A.18. Visible Emissions Testing - Waiver.** In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the PCDEM, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Regardless of fuel usage, a waiver will not be granted for the visible emissions test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal.

[Rule 62-4.070(3), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

### **Recordkeeping and Reporting Requirements**

**A.19. Monthly Recordkeeping.** Florida Power Corporation shall maintain a monthly record of the hours of operation of the peaking units. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent five year period and shall be made available to the Department and PCDEM, Air Quality Division, upon request.

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**A.20. Malfunction Reporting.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the PCDEM in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

### **A.21. Test Reports.**

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with PCDEM on the results of each such test.

(b) The required test report shall be filed with PCDEM as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) Each test report shall include:

(1) A statement of the maximum turbine performance based on the turbine performance criteria defined by specific condition **A.1.**

(2) A copy of the graph of Fuel Heat Input verses Ambient Temperature for each peaking unit noting the maximum heat input and the ambient temperature during the compliance test; and

(3) A copy of the fuel oil analysis.

[Rule 62-297.310(8), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]



**A.22. Not federally enforceable. Operating Reports.** Submit to the Southwest District office, Air Compliance Section of the Department of Environmental Protection, and the PCDEM, Air Quality Division, each calendar year, on or before March 1, completed DEP Form 62-210.900(5), "*Annual Operating Report for Air Pollutant Emitting Facility*", including the Emissions Report, for the preceding calendar year.

The annual operating report shall be based on the following:

- (a) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking units, shall be based on a weighted 12-month average (calendar year) and be calculated from the fuel delivery receipts and the vendors fuel oil analysis.
- (b) Until further notice by the PCDEM, Florida Power Corporation shall calculate annual emissions (pounds per hour and tons per year), for the Annual Operating Report, by multiplying the total million Btu from fuel usage by the following emissions factors:

Emissions Factors for No. 2 Fuel Oil	
	<u>Pound per MMBtu</u>
Particulate Matter (PM)	0.061 (Total)
PM <sub>10</sub>	0.48 PM
Carbon Monoxide	0.048
Sulfur Dioxide	1.01(S)
Nitrogen Oxides	0.698
Hydrocarbons (TOC)	0.017

"S" denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12-month average "S" value.

[Rule 62-210.370(3), F.A.C.; and, AO 52-253207A, AO 52-253209A, AO 52-253211A, and AO 52-253213A]

**Section III. Emissions Unit(s) and Conditions.**

**Subsection B. This section addresses the following emissions unit(s).**

<b>Facility ID No.</b>	<b>E. U. ID No.</b>	<b>Brief Description</b>
7775047	-001	Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled.

The generators may be relocated to any of the following facilities:

1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
6. Hines Energy Complex, County Road 555, 1 mi. southwest of Homeland, Polk County.
7. Anclote Power Plant, 1729 Baileys Road, Holiday, Pasco County

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This section of the permit is only applicable when the generator(s) is(are) located at the Bayboro Facility.}

**The following specific conditions apply to the emissions units listed above regardless of location:**

**Essential Potential to Emit (PTE) Parameters**

**B.1. Permitted Capacity.** The maximum (combined) heat input rate shall not exceed 25.74 million Btu per hour.

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

**B.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **B.12.**

[Rule 62-297.310(2), F.A.C.]

**B.3. Methods of Operation - Fuels.** Only new No. 2 fuel oil with a maximum sulfur content of 0.5% by weight shall be fired in the diesel generator(s).

[Rule 62-213.410, F.A.C. and, AC 09-202080.]

**B.4. Hours of Operation.** The hours of operation expressed as “engine-hours” shall not exceed 2970 hours in any consecutive 12 month period. The total hours of operation expressed as “engine-hours” shall be the summation of the individual hours of operation of each generator.  
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC 09-202080.]

### **Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**B.5. Visible Emissions.** Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.  
[Rule 62-296.320(4)(b)1., F.A.C.; and, AC 09-202080.]

### **Excess Emissions**

**B.6.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

**B.7.** 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.]

### **Monitoring of Operations**

**B.8. Fuel Sulfur Analysis.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See specific condition **B.3.** and **B.11.**  
[Rule 62-213.440, F.A.C.]

**B.9. Determination of Process Variables.**

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

**Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**B.10.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

**B.11.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s).

[Rules 62-213.440 and 62-297.440, F.A.C.]

**B.12. Operating Rate During Testing.** Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate for each generator. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operations may be limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. 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. Failure to submit the actual operating rate may invalidate the test.

[Rules 62-297.310(2), F.A.C.; and, AC 09-202080.]

**B.13. Applicable Test Procedures.**

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

**B.14. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. 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. For each generator located in Pinellas County, FPC shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.

(b) 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 may 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.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, AO 09-205952.]

**B.15. Visible Emissions Testing - Annual**. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

**B.16.** After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See specific conditions **B.3.**, **B.5.**, and **B.8.**

[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, AO 09-205952.]

### **Recordkeeping and Reporting Requirements**

**B.17. Malfunction Reporting**. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify PCDEM, if a generator is located in Pinellas County, 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 PCDEM.

[Rule 62-210.700(6), F.A.C.]

**B.18. Test Reports.**

- (a) Each generator shall be tested on an annual basis within 30 days of the date October 25.
  - (b) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
  - (c) The required test report shall be filed with the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management, if a generator is located in Pinellas County, as soon as practical but no later than 45 days after the last sampling run of each test is completed.
  - (d) The test reports for a unit that has been relocated shall be submitted to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management, if a generator is located in Pinellas County, within 45 days of testing.
- [Rule 62-297.310(8), F.A.C.; and, AO 09-25952.]

**B.19.** To demonstrate compliance with specific condition **B.4.**, records shall indicate the daily hours of operation for each of the generators, the daily hours of operation expressed as “engine- hours” and the cumulative total hours of operation expressed as “engine-hours” for each month. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management upon request.

[Rules 62-213.440 and 62-297.310(8), F.A.C.; and, AO 09-205952.]

**B.20.** To demonstrate compliance with specific condition **B.3.**, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Southwest District Office and the Air Quality Division of the Pinellas County Department of Environmental Management upon request.

[Rule 62-297.310(8), F.A.C.; and, AC 09-202080.]

**Source Obligation**

**B.21.** Specific conditions in construction permit AC 09-202080, limiting the “engine hours”, were accepted by the applicant to escape Prevention of Significant Deterioration review. If Florida Power Corporation requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(5), F.A.C., as though construction had not yet begun.

[Rule 62-212.400(2)(g), F.A.C.; and, AC 09-202080.]

**B.22.** Florida Power Corporation shall notify the Department's Southwest District Office, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following;

- a. which generator, by serial number, is being relocated,
- b. which location the generator is being relocated from and which location it is being relocated to, and
- c. the approximate startup date at the new location.

If a diesel generator is to be relocated within Pinellas County, then Florida Power Corporation shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.

[Rule 62-4.070(3), F.A.C.; and, AC 09-202080]



# INTEROFFICE MEMORANDUM

**Date:** 09-Aug-1999 01:49pm  
**From:** Scott.H.Osborn  
Scott.H.Osborn@fpc.com

**Dept:**

**Tel No:**

**To:** svec\_e ( svec\_e@dep.state.fl.us )  
**CC:** rmanning ( rmanning@hgss.com )

**Subject:** Bayboro Title V Permit

The plant manager for the Bayboro site reviewed the Proposed permit and commented that it did not include a small emergency diesel generator that was added to the site last year (after our original application was submitted). The generator is intended mostly to provide emergency power for our Power Marketing Dep't should a failure occur. The maximum fuel rating for the unit is 25 gal/hr. Please add this unit to our insignificant emission unit list.

RFC-822-headers:

Received: from epic50.dep.state.fl.us ([199.73.180.33])  
by mail.epic1.dep.state.fl.us (PMDF V5.2-32 #37976)  
with ESMTP id <01JEKDH8QTHE000087@mail.epic1.dep.state.fl.us> for  
SVEC\_E@a1.epic1.dep.state.fl.us (ORCPT rfc822;svec\_e@dep.state.fl.us); Mon,  
9 Aug 1999 13:46:08 EDT

Received: from fpc.com ([199.184.211.2]) by mail.epic50.dep.state.fl.us  
(PMDF V5.2-32 #31508)  
with SMTP id <01JEKDPDJ5GY000YX5@mail.epic50.dep.state.fl.us> for  
SVEC\_E@a1.epic1.dep.state.fl.us (ORCPT rfc822;svec\_e@dep.state.fl.us); Mon,  
09 Aug 1999 13:52:54 -0400 (EDT)

Received: from sv003.fpc.com ([148.152.8.60]) by fpc.com (4.1/SMI-4.1)  
id AA15245; Mon, 09 Aug 1999 12:47:53 -0500 (EST)

Received: from localhost (root@localhost)  
by sv003.fpc.com (8.8.6 (PHNE\_17135)/8.8.6) with SMTP id NAA25160; Mon,  
09 Aug 1999 13:44:35 -0400 (EDT)

Content-disposition: inline; filename="cc:Mail"

X-Openmail-Hops: 1