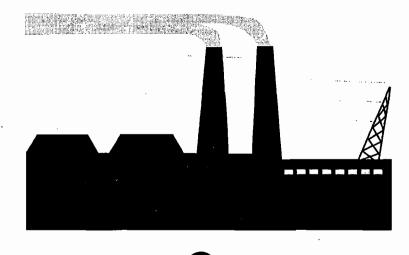
# TITLE V PERMIT APPLICATION



# Fort Myers Plant







June 10, 1996

Clair H. Fancy, P.E., Chief Bureau of Air Regulation State of Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Re: Submittal of FPL Fort Myers Plant Title V Application

Dear Mr. Fancy:

Enclosed, pursuant to DEP Rules 62-210.300(2), F.A.C., and 62-213.420(1)(a)1.a., F.A.C., please find four (4) hard copies of the subject Title V permit application. Due to the recent FDEP recall of the <u>ELSA</u> program, the diskettes containing the electronic application are not included at this time. FPL has worked diligently to prepare an electronic submittal and will submit diskettes containing the electronic application at a later date (when the ELSA program deficiencies have been resolved).

If you have any questions regarding this application, please do not hesitate to contact me at (561) 625-7661.

Very truly yours,

Richard Piper

**Environmental Specialist** 

Florida Power & Light Company

cc: DEP Southwest District Office (w/o att)

WORKING

# TABLE OF CONTENTS FORT MYERS TITLE V APPLICATION

Section 1 Application Information

Section 2 Facility Information

Section 3 Emission Unit Information
(Includes Emission Point, Segment, Pollutant, Visible Emission, Continuous Monitor, and PSD Information)

EU1 - Unit 1 Boiler

EU2 - Unit 2 Boiler

EU3 - GT Units 1 - 12

EU4 - Unregulated Emission Units

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# DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR RESOURCES MANAGEMENT

#### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy form.

#### Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and a brief reference to the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Florida Power & Light Company					
2. Site Name: FPL Fort Myers Plant					
3. Facility Identification Number: Unknown					
4. Facility Location Information: Facility Street Address: 10650 State Road 80					
City: Ft. Myers	County: Lee	Zip Code: 33905			
5. Relocatable Facility? (Y/N): N	6. Y	Existing Permitted Facility?(Y/N):			

### **Application Processing Information (DEP Use)**

1. Date of Receipt of Application:		
2. Permit Number:		
3. PSD Number (if applicable):		
4. Siting Number (if applicable):		

1

### Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Name: Robert P. Fritz

Title: Plant General Manager

2. Owner or Responsible Official Mailing Address:

Organization/Firm: FPL Environmental Affairs Department

Street Address: 11770 U.S. Highway One

City: North Palm Beach

State: FL

**Zip Code: 33408** 

3. Owner or Responsible Official Telephone Numbers:

Telephone: 8136944201

Fax: 8136934333

4. Owner or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative\* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200 F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statues of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature Laborat Ont Date 5-20-96

<sup>\*</sup> Attach letter of authorization if not currently on file.

# **Scope of Application**

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emission s Unit Id	Description of Emissions Unit	Permit Type
01 - 02 - 03 04	Oil-fired Steam Turbine Electric Generator, Unit 1, (ARMS ID 52FTM36000201)  Oil-fired Steam Turbine Electric Generator, Unit 2, (ARMS ID 52FTM36000202)  Combustion Turbines 1-12 (ARMS ID 52FTM36000203)  Unregulated Emission Units	

#### Purpose of Application and Category

Enter the Letter that applies and related information (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 17-213, F.A.C.

This Application for Air Permit is submitted to obtain (A,B,C,D,E,F): A

- [A] Initial air operation permit under Chapter 17-213, F.A.C., for an existing facility which is classified as a Title V source.
- [B] Initial air operation permit under Chapter 17-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number:

[C] Air operation permit renewal under Chapter 17-213, F.A.C., for a Title V source.

Operation permit to be renewed:

[D] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number:

Operation permit to be revised:

[E] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application for such emissions unit(s). Also check appropriate item under Category III.

Operation permit to be revised/corrected:

[F] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised:

Reason for Revision:

# Category II: All Air Operation Permit Applications Subject to Processing Under Rule 17-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain (A,B,C):

[A] Initial air operation permit under Rule 17-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

[B] Renewal air operation permit under Rule 17-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed:

[C] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units addressed herein.

Operation permit to be revised:

Reason for revision:

# Category III: All Air Construction Permit Applications for All Facilities and Emissions

This Application for Air Permit is submitted to obtain (A,B,C):

[A] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any:

[B] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing permitted emissions units.

Current operation permit number(s):

[C] Air construction permit for one or more existing, but unpermitted, emissions units.

### **Application Processing Fee**

Check one:

[N] Applicable (Y/N)

Attached - Amount: \$

#### **Construction/Modification Information**

- 1. Description of Proposed Project or Alterations : N/A
- 2. Projected or Actual Date of Commencement of Construction (DD-MON-YYYY):
- 3. Projected Dates of Completion of Construction (DD-MON-YYYY):

#### **Professional Engineer Certification**

- 1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996
- 2. Professional Engineer Mailing Address:

Organization/Firm: KBN Engineering & Applied Sciences

Street Address: 6241 NW 23rd Street

City: Gainesville

3. Professional Engineer Telephone Numbers:

Telephone: 3523365600 Fax: 3523366603

State: FL Zip Code: 326531500

#### **Application Contact Information**

1. Name and Title of Application Contact:

Name: Richard G. Piper

Title: Environmental Specialist

2. Application Contact Mailing Address:

Organization/Firm: FPL Environmental Services Department

Street Address: P.O. Box 088801

City: North Palm Beach State: FL Zip Code: 33408

3. Application Contact Telephone Numbers:

Telephone: 5616257661 Fax: 5616257251

#### **Application Comment**

This application is for the FPL Ft. Myers Power Plant, which is located on state road 80 in Lee County, approximately 3.5 miles east of Tice, Florida.

The plant consists of two conventional steam electric generating stations, designated as units 1, and 2, twelve simple-cycle gas turbines, five residual fuel oil storage tanks, two distillate fuel oil storage tanks, a gasoline and diesel fuel tank for vehicles, a 500 kilowatt diesel generator, and miscellaneous other unregulated sources.

Unit 1 is comprised of a Babcock and Wilcox outdoor-type boiler/steam generator and Westinghouse outdoor reheat condensing steam turbine which drives a hydrogen-cooled generator with generator nameplate rating of -156 megawatts.

Unit 2 is comprised of a Foster-Wheeler outdoor-type boiler/steam generator and General Electric outdoor reheat condensing steam turbine which drives a hydrogen-cooled generator with generator nameplate rating of 402 megawatts.

Note that the megawatt rating is taken from information provided to the PSC previously in the 10-year Site Plan. The actual output of the generator may vary seasonally, or with changes in the efficiency of the units.

ok

MW

402.1

8

DEP Form No. 62-210.900(1)

### FT. MYERS PLANT

### 4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein\*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for a emission unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check her [X] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emission units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Date 6/5/96

ach afix exception to certification statement.

#### **`II. FACILITY INFORMATION**

#### A. GENERAL FACILITY INFORMATION

Information for Facility-Id: 1 Facility Location and Type

1. Facility UTM Coordinates:

Zone: 17

East: 422268

North: 2952920

2. Facility Latitude/Longitude:

Latitude (DD/MM/SS): 26 - 41 - 49

Longitude (DD/MM/SS): 81 - 46 - 55

3. Governmental Facility Code: None (non-governmental facility)

4. Facility Status Code: Active

5. Facility Major Group SIC Code: 49

6. Facility SIC(s): 4911

7. Facility Comment: (limit to 500 characters)

### **Facility Contact**

1. Name and Title of Facility Contact:

Name: Bernie Tibble

Title: Environmental Specialist

2. Facility Contact Mailing Address:

Organization/Firm: FPL Ft. Myers Plant

Street Address: P.O. Box 430

City: Ft. Myers

State: FL

Zip Code: 33905 -

3. Facility Contact Telephone Numbers:

Telephone: 8136934390

Fax: 8136934333

1

#### **Facility Regulatory Classifications**

- 1. Small Business Stationary Source? (Yes/No/Unknown)(Y/N/U): N
- 2. Title V Source? (Yes/No) (Y/N): Y
- 3. Synthetic Non-Title V Source? (Yes/No) (Y/N): N
- 4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? (Yes/No) (Y/N): Y
- 5. Synthetic Minor Source of Pollutants Other than HAPs? (Yes/No) (Y/N): N
- 6. Major Source of HAPs? (Yes/No/Possible) (Y/N/P): Y
- 7. Synthetic Minor Source of HAPs? (Yes/No) (Y/N): N
- 8. One or More Emissions Units Subject to NSPS? (Yes/No) (Y/N): N
- 9. One or More Emissions Units Subject to NESHAP? (Yes/No) (Y/N): Y
- 10. Title V Source by EPA Designation? (Yes/No) (Y/N): N
- 11. Facility Regulatory Classifications Comment (limit to 200 characters): This facility is subject to the asbestos NESHAP, 40 CFR 61, Subpart M.

### **B. FACILITY REGULATIONS**

<u>Rule Applicability Discussion</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable

DEP Form No. 62-210.900(1)

# <u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

# Information for Facility-Id: 1

40 CFR 61.05 40 CFR 61.12(b) 40 CFR 61.145 40 CFR 61.148 40 CFR 61.150 40 CFR 61.19 F.A.C. 62-204.800(8)(b)8. (state only) F.A.C. 62-204.800(8)(d) (state only) F.A.C. 62-210.300(2) (except (b)) F.A.C. 62-210.300(3)(a)10. F.A.C. 62-210.300(3)(a)11. F.A.C. 62-210.300(3)(a)12. F.A.C. 62-210.300(3)(a)15. F.A.C. 62-210.300(3)(a)16. F.A.C. 62-210.300(3)(a)17. F.A.C. 62-210.300(3)(a)20. F.A.C. 62-210.300(3)(a)20. F.A.C. 62-210.300(3)(a)21.	F.A.C. 62-210.300(3)(a)22. F.A.C. 62-210.300(3)(a)23. F.A.C. 62-210.300(3)(a)24. F.A.C. 62-210.300(3)(a)4. F.A.C. 62-210.300(3)(a)5. F.A.C. 62-210.300(3)(a)7. F.A.C. 62-210.300(3)(a)8. F.A.C. 62-210.300(3)(a)9. F.A.C. 62-210.300(3)(b) F.A.C. 62-210.300(3) F.A.C. 62-210.300(3) F.A.C. 62-210.300(3) F.A.C. 62-210.300(5) F.A.C. 62-213.205(1)(a) F.A.C. 62-213.205(1)(b) F.A.C. 62-213.205(1)(c) F.A.C. 62-213.205(1)(c) F.A.C. 62-213.205(1)(g) F.A.C. 62-213.205(1)(g)	F.A.C. 62-213.205(1)(i) F.A.C. 62-213.205(1)(j) F.A.C. 62-213.205(4) F.A.C. 62-213.205(5) F.A.C. 62-213.400 F.A.C. 62-213.410 F.A.C. 62-213.420(1)(b)2. F.A.C. 62-213.420(1)(b)3. F.A.C. 62-213.430(3) F.A.C. 62-213.460 F.A.C. 62-256.300(1) F.A.C. 62-256.300(2) F.A.C. 62-256.300(2) F.A.C. 62-256.300(3) F.A.C. 62-256.300(4) F.A.C. 62-256.300(7) F.A.C. 62-256.300(8) F.A.C. 62-256.300(9)	F.A.C. 62-256.500 F.A.C. 62-256.600 F.A.C. 62-256.700 F.A.C. 62-257.300 F.A.C. 62-257.301 F.A.C. 62-257.350 F.A.C. 62-257.400 F.A.C. 62-257.401 F.A.C. 62-257.401 F.A.C. 62-257.401 F.A.C. 62-296.320(2) (state only) F.A.C. 62-296.320(3)(b) (state only) F.A.C. 62-296.320(4)(c) F.A.C. 62-296.320(4)(c) F.A.C. 62-296.320(4)(c) F.A.C. 62-296.320(4)(c) F.A.C. 62-296.320(4)(c) F.A.C. 62-297.310(7)(a)10. F.A.C. 62-4.030 F.A.C. 62-4.040(1)(a) F.A.C. 62-4.040(1)(b) F.A.C. 62-4.100 F.A.C. 62-4.130
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# C. FACILITY POLLUTANTS

# **Facility Pollutant Information:**

1. Pollutant Emitted:	2. Pollutant Classification
SO2	A
NOX	A
СО	A
PM	A
PM10	A
VOC	A
H113	A
H133	A
SAM	A
H106	A
H107	A
H148	A
HAP	A

#### E. FACILITY SUPPLEMENTAL INFORMATION

#### Supplemental Requirements for All Applications For Facility: 1

1. Area Map Showing Facility Location: PFMFS_1.bmp (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
2. Facility Plot Plan: PFMFS_2.bmp (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
3. Process Flow Diagram(s): PFMFS_3.bmp (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: PFMFS_4.txt  (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
5. Fugitive Emissions Identification: PFMFS_5.txt  (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
6. Supplemental Information for Construction Permit Application: NA (Enter the Attached Document ID, NA - Not Applicable)

#### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: Not Applicable

(Enter the Attached Document ID, NA - Not Applicable)

8. List of Equipment/Activities Regulated under Title VI: PFMFS\_8.txt
(Enter the Attached Document ID, Equipment/Activities Onsite but not Required to be Individually Listed, NA - Not Applicable)

9. Alternative Methods of Operation: PFMFS\_9.txt
(Enter the Attached Document ID, NA - Not Applicable)

10. Alternative Modes of Operation (Emissions Trading): NA
(Enter the Attached Document ID, NA - Not Applicable)

11. Identification of Additional Applicable Requirements: PFMFS\_11.txt
(Enter the Attached Document ID, NA - Not Applicable)

12. Compliance Assurance Monitoring Plan: Not Applicable
(Enter the Attached Document ID, NA - Not Applicable)

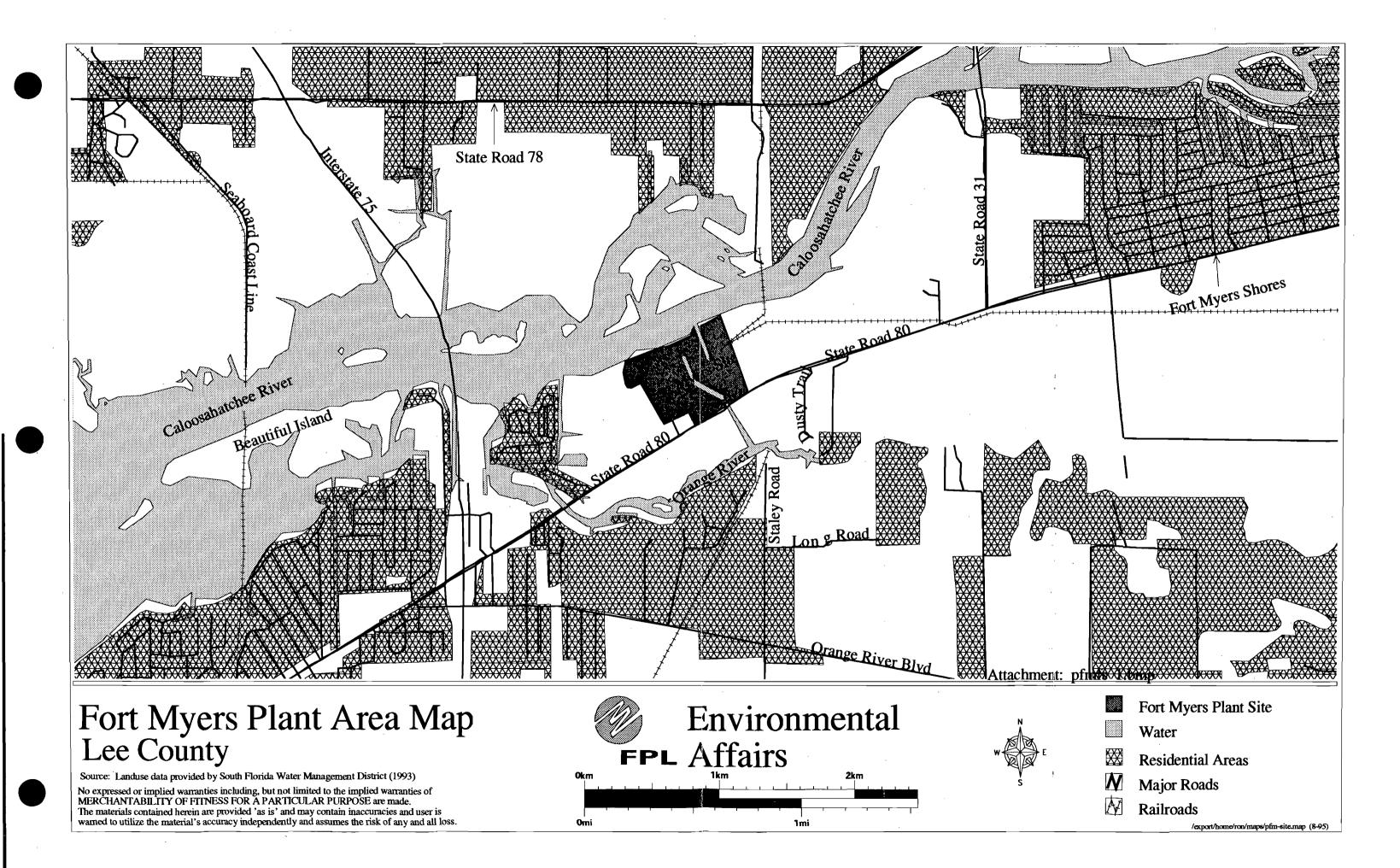
13. Risk Management Plan Verification: Plan to be Submitted to Implementing Agency by Required Date

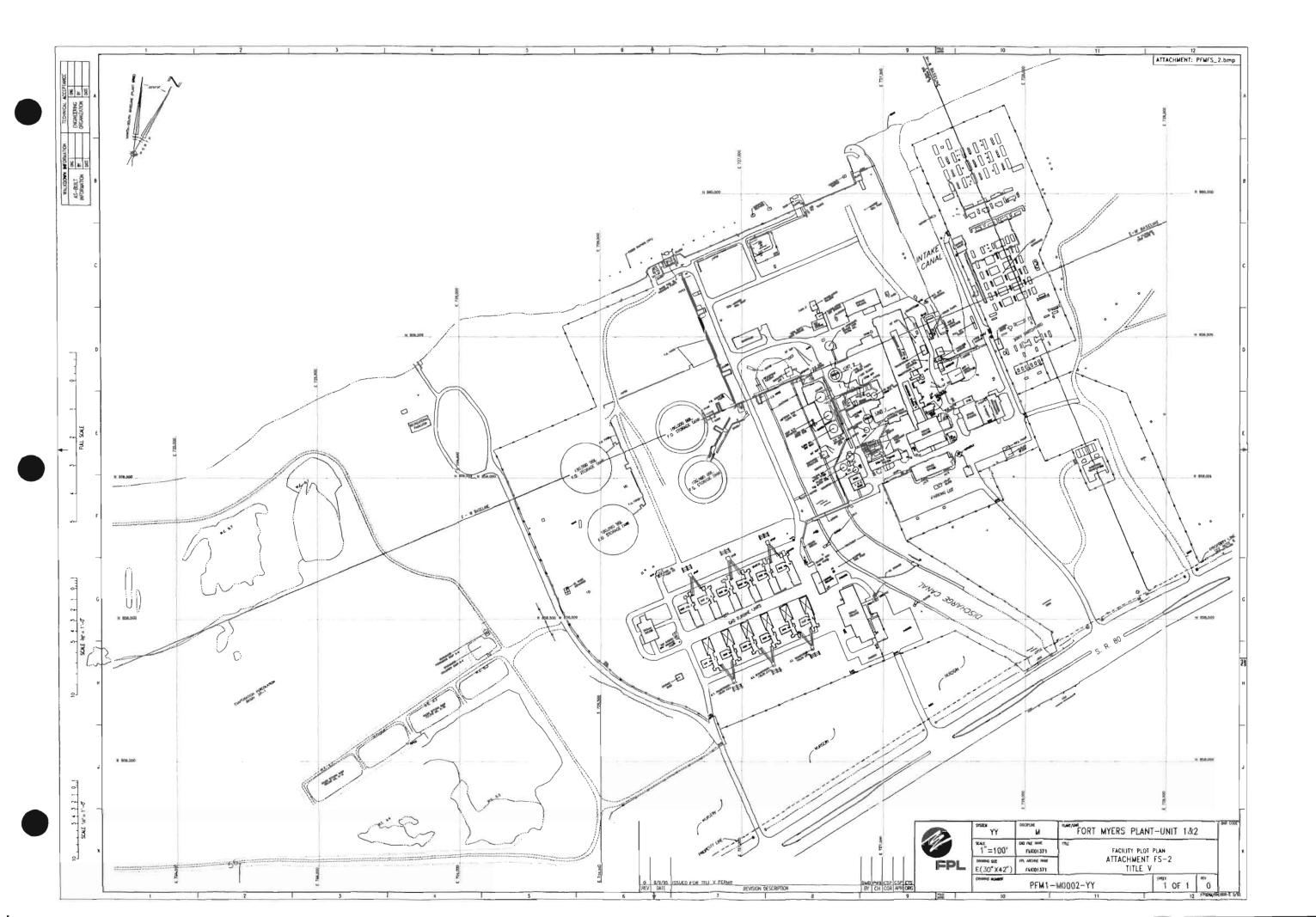
Plan Submitted to Implementing Agency - Verification Attached(Attached Document ID)

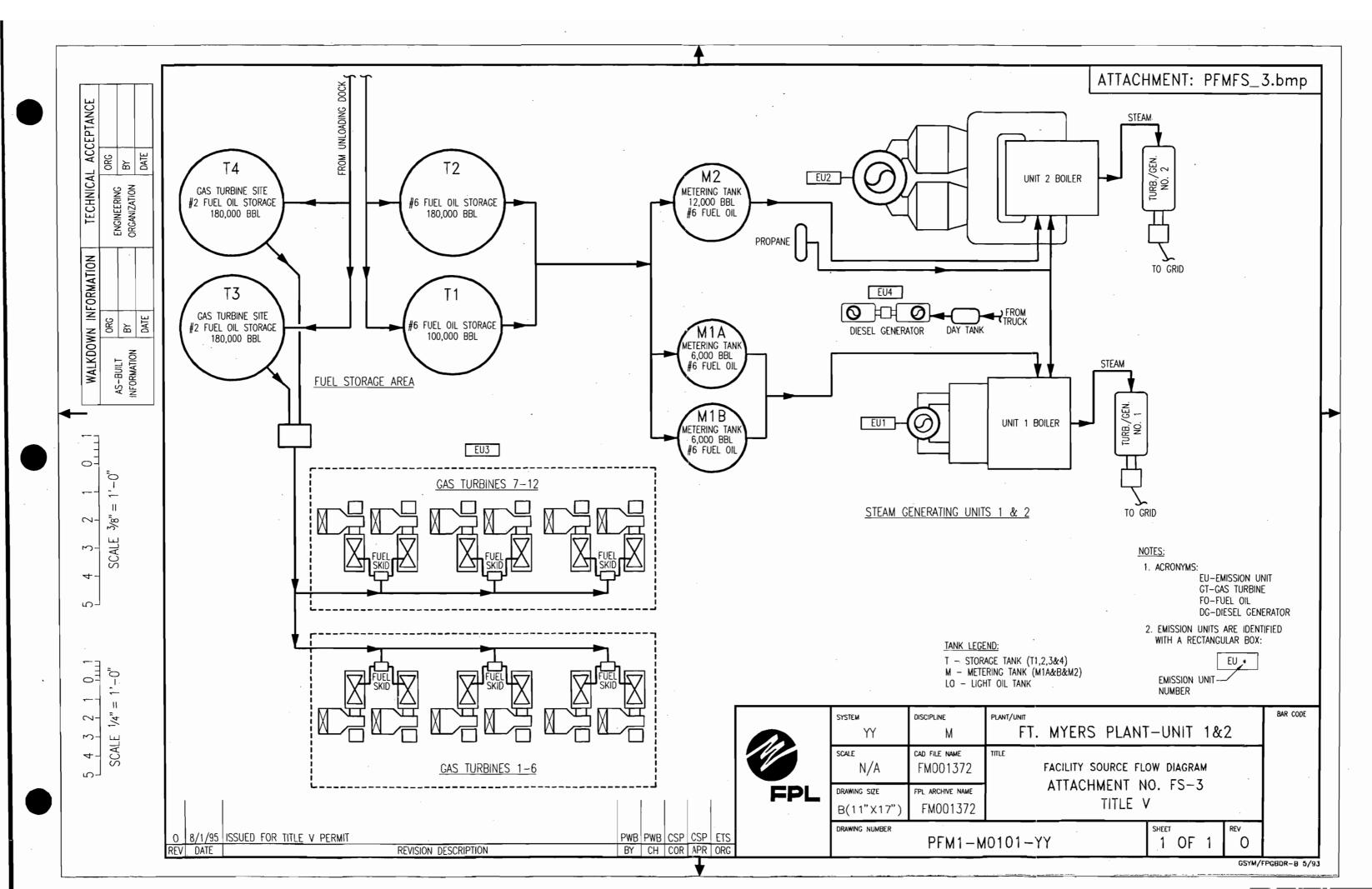
Plan to be Submitted to Implementing Agency by Required Date

Not Applicable (NA)

- 14. Compliance Report and Plan: PFMFS\_13.txt (Enter the Attached Document ID, NA Not Applicable)
- 15. Compliance Statement (Hard-copy Required): PFMFS\_14.txt (Enter the Attached Document ID, NA Not Applicable)







# Attachment PFMFS\_4.txt Precautions to Prevent Emissions of Unconfined Particulate Matter

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of particulate matter include:

- fugitive dust from unpaved roads
- sandblasting abrasive material from plant maintenance activities
- fugitive particulates from the use of bagged chemical products (soda ash, di-, tri- and monosodium phosphate, and other chemicals as needed)

Several precautions were taken to prevent emissions of particulate matter in the *original* design of the facility. These include:

- Paving of roads, parking areas and equipment yards
- Landscaping and planting of vegetation

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 17-296.310 F.A.C.:

- Use of thick poly flaps over the doorways to prevent any sandblasting material from leaving the sandblastfacility. The facility also constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
- Maintenance of paved areas as needed
- Regular mowing of grass and care of vegetation
- Limiting access to plant property by unnecessary vehicles.
- Bagged chemical products are stored in weather-tight buildings until they are used. Spills of powdered cheical products are cleaned up as soon as practicable.
- Vehicles are restricted to slow speeds on the plant site

# Attachment PFMFS\_5.txt Fugitive Emission Identification

#### Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PFMFS\_4.DOC. FPL is not aware of fugitive emissions of sulfur dioxide, nitrogen oxides, carbon monoxide or lead compounds which would exceed the reporting thresholds defined in the permit application instructions.

### Fugitive HAPs Emissions

FPL is not aware of fugitive emissions of HAP pollutants which would exceed the reporting thresholds defined in the permit application instrucitons.

# Attachment PFMFS\_8.txt

# EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

The Fort Myers facility currently has no equipment containing more than 50 pounds of CFC's. There are several air conditioning and refrigeration units on the plant site, but these contain less than the threshold quanitity of CFC's.

# Attachment PFMFS\_9.txt Alternative Methods of Operation

There are no known methods of operation at the current time at Ft. Myers which would simultaneously affect emissions at more than one emissions unit but would not constitute emissions trading.

# Attachment PFMFS\_13.txt Ft. Myers Plant Compliance Report and Plan

The facility and emissions units identified in this application are in compliance with the Applicable Requirements identified in Sections II.B. and III.D. of the application form and attachments referenced in Section III.L. 12 (if included). Compliance is certified as of the date this application is submitted to the Florida Department of Environmental Regulation as required in Rule 62-213.420(1)(a) F.A.C.

# Attachment PFMFS 14.txt Fort Myers Plant Compliance Statement

I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Signature, Responsible Official

<u>5-20-96</u> Date

Proposed Schedule for submittal of periodic compliance statements to the Department:

FPL will submit an annual compliance statement to the Department's Central District Office concurrently with the submittal of the Annual Operating Report for this facility.

#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 Emission Unit #: 1

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Units? Check one:

[	x ]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[	]	The emissions unit addressed in this Emissions Unit Information Section is a unregulated emissions unit.

2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 1

- [1] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [2] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point(stack or vent) but may also produce fugitive emissions.
- [3] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

<b>Emission</b> U	Unit :	Information	Section	of
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# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

# **Emissions Unit Description and Status**

<ol> <li>Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unit 1 Steam Generator</li> </ol>
2. Emissions Unit Identification Number: 001 (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C): A
4. Acid Rain Unit? (Y/N): Y
5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters):  The generator nameplate rating given on page 4 is reflective of the information provided to the Florida Public Service Commission (PSC) annually in the 10-year Site Plan. Actual generator output may exceed the value given, or may vary seasonally, with changes in unit efficiency, or due to fluctuations in system load demand.  The method of compliance for heat input is fuel sampling and laboratory analysis, along with fuel flow monitoring.

# **Emissions Unit Control Equipment**

- A. Control Equipment #:
  - 1. Description (limit to 200 characters):
    Unit 1 does not employ emissions control equipment
  - 2. Control Device or Method Code:

B. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

Emission Unit Information Section of	mation Section of
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# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units)

#### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY): 11/01/58

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: Babcock & Wilcox

Model

Number:

4. Generator Nameplate Rating: 156 MW

146.8

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 1690 mmBtu/hr

2. Maximum Incineration Rate: lbs/hr

tons/day

3. Maximum Process or Throughput Rate: Units:

4. Maximum Production Rate:

Units:

5. Operating Capacity Comment (limit to 200 characters):

Maximum heat input rate above reflects residual oil firing. There is currently no natural gas at the Ft. Myers plant. The method of compliance for heat input is fuel sampling and analysis.

### **Emissions Unit Operating Schedule**

Emission Unit Information Section of				
		•		
Γ				
	Requested Maximum Opera	ting Schedule:	·	
	hours/day	days/week		
	weeks/yr	8760 hours/yr		

Emission Chit information Section of	<b>Emission</b>	<b>Unit Information Sect</b>	tion of	
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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

	Not Applicable
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DEP Form No. 62-210.900(1)

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

# Emissions Unit ID 1

<b>r</b>			
40 C.F.R. 279.72	40 C.F.R. 75 Appendix B	40 C.F.R. 75.35	F.A.C. 62-214.300
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.36	F.A.C. 62-214.330
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.4(a)(4)(ii)	F.A.C. 62-214.350 F.A.C. 62-214.350 (2)
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix D	40 C.F.R. 75.5	
40 C.F.R. 72.21(a)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.51(c)	F.A.C. 62-214.350 (3)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(b)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.22(a)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(c)	1	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.23	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.54	F.A.C. 62-214.370 (4)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.55(c)	F.A.C. 62-214.370 (7)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.55(e)	F.A.C. 62-214.430
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.56	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(b)	40 C.F.R. 75.60(a)	paragraph 2
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(c)		F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.30(d) 40 C.F.R. 72.32	40 C.F.R. 75.10(d)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(c)1.j.
40 C.F.R. 72.32 40 C.F.R. 72.33(b)	40 C.F.R. 75.10(f)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(e)(1)
	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(c)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.61(b)	F.A.C.
40 C.F.R. 72.40(a)	40 C.F.R. 75.11(d)	40 C.F.R. 75.62	62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(b)	40 C.F.R. 75.12(a)	40 C.F.R. 75.63	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(c)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(a)	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(b)	F.A.C. 62-296.500(2)(c)
40 C.F.R. 72.51	40 C.F.R. 75.13(b)	40 C.F.R. 75.64(c)	F.A.C. 62-297.310(1)
40 C.F.R. 72.90	40 C.F.R. 75.14(a)	40 C.F.R. 75.64(d)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.65	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(a)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(d)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(a)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(b)	40 C.F.R. 76.13	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(c)	40 C.F.R. 77.3	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(d)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(6)(c)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(e)	40 C.F.R. 77.6	F.A.C. 62-297.310(6)(d)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.21(f)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 73.33	40 C.F.R. 75.22	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 73.35	40 C.F.R. 75.24	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(f) F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(1)	(state only)	F.A.C. 62-297.310(0)(g)
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(2)	F.A.C. 62-204.800(14)	
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.30(a)(3)	(state only)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.31	F.A.C. 62-210.650	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.32	F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.32 40 C.F.R. 75.33	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)5.
	40 C.P.K. /3.33	F.A.C. 62-210.700 (3)	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(7)(c)
		F.A.C. 62-210.700 (6)	F.A.C. 62-297.310(8)
			Table 62-297.310-1
	<u> </u>	<u> </u>	

# E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #: 1

1. Identification of Point on Plot Plan or Flow Diagram: Unit 1 boiler
2. Emission Point Type Code (1,2,3,4): 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 1, Fort Myers Unit 1 boiler
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 301 ft
7. Exit Diameter: 9.5 ft
8. Exit Temperature: 304.1 °F
9. Actual Volumetric Flow Rate: 500580.4 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates:  Zone: 17 East: 469840 North: 2952827
14. Emission Point Comment (limit to 200 characters): Information provided in items 8 and 9 above was measured during the March 1995 particulate test at this unit. Data collected at other times may vary.

<b>Emission</b>	Unit In	formation	Section	of

# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment Description and Rate:</u> Information for Facility\_ID: *I* Emission Unit #: 1 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler burning propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 1.69
5. Maximum Annual Rate: 169
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn various combinations of #6 oil, #2 oil, propane or on-spec. used oil from FPL operations. Propane is used primarily for lighting off the boiler for start-up.

<b>Emission</b>	Unit	Information	Section	of

### F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

#### **Segment Description and Rate:**

Information for Facility ID: 1 Emission Unit #: 1 Segment #: 2

	Type and Associated Operating Method/Mode) (limit to
500 characters):	
500 characters): Unit 1 Boiler burning No. 6 residual oil	•
2	

- 2. Source Classification Code (SCC): 1-01-004-01
- 3. SCC Units: thousand gallons burned
- 4. Maximum Hourly Rate: 11.2
- 5. Maximum Annual Rate: 98073
- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur: 2.5
- 8. Maximum Percent Ash: 0.1
- 9. Million Btu per SCC Unit: 152
- 10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information Section</b>	ion of	
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### F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment Description and Rate:</u> Information for Facility\_ID: *I* Emission Unit #: *I* Segment #: 3

1. Segment Description-(Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler burning No.2 diesel fuel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 12.43
5. Maximum Annual Rate: 108856
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  The Unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

### **Segment Description and Rate:**

Information for Facility\_ID:1 Emission Unit #: 1 Segment #: 4

Segment Description (Process/Fuel-Type and Associated Operating Method/Mode) (limit to 500 characters):     Unit 1 Boiler burning on-specification used oil
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 12.43
5. Maximum Annual Rate: 108856
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information Section</b>	of
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment Description and Rate:</u> Information for Facility\_ID: *I* Emission Unit #: 1 Segment #: 5

1. Segment Description-(Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler chemical cleaning waste evaporation. This process may be undertaken while firing #6 oil.
2. Source Classification Code (SCC): 1-01-013-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 3
5. Maximum Annual Rate: 500
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  Items 6,7,8 & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with DARM guidance, and EPA waste rules (40 CFR 279.72).

<b>Emission Unit Information S</b>	Section	of	-
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result in a max. SO2 emission rate of 2.75 lbs/mmBtu.

## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<b>Segment Description and Rate:</b>
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Information for Facility\_ID:1 Emission Unit #: 1 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 co-firing all possible combinations of residual oil, on specification used oil, #2 fuel oil, and propane.
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: million cubic feet and thousand gallons
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):

Air Operation Permit # AO-36-221394 allows Unit 1 to burn a mixture of the above fuels in a ratio that will

1

DEP Form No. 62-210.900(1)

<b>Emission</b>	Unit	Information Section	of

# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

### Information for Facility\_ID: 1 Emission Unit #: 1

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
СО	NA	NA	NS
HCL	NA	NA	NS
NOX	NA	NA	NS
H133	NA	NA	NS
PM	NA	NA	EL
PM10	NA	NA	NS
SAM	NA	NA	NS
SO2	NA	NA	EL
VOC	NA	NA	NS
HAPS	NA	NA	NS

## H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Information for Facility\_ID: / Emission Unit #: / Pollutant #: /

#### **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 4647.5 lbs/hr 20356.05 tons/yr	
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr	
6. Emission Factor: 2.75 Units lb/mmBtu Reference: Rule 62-296.405(1)(c)1.j.	
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0	
[]1 []2 []3	[ ] 5
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmBtu * 1690 mmBtu/hr = 4647.5 lb/hr	
(4647.5 lb/hr * 8760 hr/yr) / 2000 lb/ton = 20356.05 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200	characters):

Emission Unit Information Section	of
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Information for Facility\_ID: / Emission Unit #: / Pollutant #: / Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

1	Basis for	Allowable	Emissions	Code	Emissions	limit requi	ired by rule

- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 2.75 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 4647.5 lbs/hr 20356.05 tons/yr
- 5. Method of Compliance: Fuel sampling & analysis
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

156

2.75 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.

## H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Information for Facility\_ID: 1 Emission Unit #: 1 Pollutant #: 2

### **Pollutant Detail Information**

Pollutant Emitted: Particulate Matter - Total	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 211.25 lbs/hr 925.275 tons/yr	
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr	
6. Emission Factor: 0.125 Units lb/mmBtu Reference: Rule 62-296.405(1)(b) and 62-210.700(3)	
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0 [ ] 1	[ ] 5
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmBtu x 1690mmBtu/hr = 211.25 lb/hr 211.25 lb/hr x 8760 hr/yr x ton/2000lb = 925.275 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 20 #3 above is reflective of 21 hours/day of normal operation and 3 hours/oparticulate matter emissions factor (#6) is equivalent to an avg of 0.125 lb/mm	day of sootblowing. Therefore, the

<b>Emission Unit</b>	Information	Section	of
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Information for Facility\_ID: / Emission Unit #: / Pollutant #: 2 Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

- 1. Basis for Allowable Emissions Code: Emissions limit required by rule
- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 0.1 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 169 lbs/hr 647.7 tons/yr
- 5. Method of Compliance: Rule 62-296.405(1)(e)2.
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

151

0.1 lb/mmBtu is the current regulatory limit on PM emissions [Rule 62-296.405(1)(b)]. Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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#### Information for Facility\_ID: / Emission Unit #: / Pollutant #: 2 Basis For Allowable Emission #: 2

### Allowable Emissions (Pollutant identified on front page)

1.	Basis for Allowable Emissions Code: Emissions limit required by rule
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 0.3 Units: lb/mmBtu
4.	Equivalent Allowable Emissions: 507 lbs/hr 277.6 tons/yr
5.	Method of Compliance: Rule 62-296.405(1)(e)2.

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

199

Data for sootblowing / loadchanging [62-210.700(3)]. Equiv. allow. emis. based on 3hr of sootblowing /24hr. Stack test only req'd if fuel oil fired > 400 hr/yr. 3 test runs / 6 are while sootblowing.

<b>Emission Unit Information S</b>	Section of	f
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### I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: VE40
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hr
4. Method of Compliance Code: EPA Method 9
5. Visible Emissions Comment (limit to 200 characters):  DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible Emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.

Emission Unit Into mation Section of	<b>Emission</b>	Unit Information Section	of
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#### I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1 Visible Emissions Limitation #: 2

1. Visible Emissions Subtype: VE60

[ ] Other 2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule

3. Allowable Opacity: % Exceptional Conditions: 100 Normal Conditions: 60 % Maximum Period of Excess Opacity Allowed: 24

4. Method of Compliance Code: EPA Method 9

min/hr

5. Visible Emissions Comment (limit to 200 characters): Rule 62-210.700(3), F.A.C. limits soot blowing & load changing to 60% opacity for up to 3 hrs/24 hrs, with < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.

Emission Unit Information Section	of
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Visible Emissions Limitation #: 3

1. Visible Emissions Subtype: VE100
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
Allowable Opacity:     Normal Conditions:
4. Method of Compliance Code: EPA Method 9
5. Visible Emissions Comment (limit to 200 characters): Rules 62-210.700(1) and (2), F.A.C. allow up to 100% opacity for an unlimited time during startup and shutdown, and up to 2 hrs/24 hrs for malfunctions

<b>Emission Unit Information Section</b>	of
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#### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Continuous Monitor #: 1

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Sulfur Dioxide

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: TECO

Model Number: 43B

Serial Number: 43B-46684-276

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(1)

Emission Unit Information Section of	<b>Emission</b>	Unit In	formation	Section	of
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#### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Continuous Monitor #: 2

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Nitrogen Oxides

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: TECO

Model Number: 42

Serial Number: 42-46953-277

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(2)

<b>Emission</b>	Unit	Informati	ion Section	of

### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Continuous Monitor #: 3

#### Continuous Monitoring System

1. Parameter Code:

2. Pollutant(s):

Carbon dioxide

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: Milton Roy

Model Number: 3300

Serial Number: N3K4405T

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)3)(i)

<b>Emission Unit Information Section</b>	of	
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#### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Continuous Monitor #: 4

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Volumetric flow rate

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: Air Monitor

Model Number: MASSTRON

Serial Number: 6079D

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(1)

<b>Emission Unit Information Section</b>	of
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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 1

Continuous Monitor #: 5

### **Continuous Monitoring System**

Parameter C     Pollutant(s)	• •				
3. CMS Requi	rement Code(R/O): RULE	Rule	/ Other		
4. Monitor Inf Manufacture Model Num	er: Lear Siegler	Serial Numl	ber: 952		
5. Installation Date (DD-MON-YYYY): 04/21/94					
6. Performance Specification Test Date (DD-MON-YYYY): 12/12/94					
	Monitor Comment (limit to 200 cha	aracters):			

Emission	Unit	Infor	mation	Section	of
Em1221011	Ullit	THIUL	mauvn	Section	01

### K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #:1

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [4] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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Emission	Unit	Informa	tion	Section	of

#### 2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [2] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Incr	ement Consu	ming/Expanding Code: (C, E, U- unkown):
PM	U	
SO2	U	
NO2	U	
4. Base PM SO2 NO2	eline Emissio lbs/hr lbs/hr tons/yr	ns: tons/yr tons/yr



5. PSD Comment (limit to 200 characters):

This emission unit was constructed in 11/1/58 which pre-dates the major source PSD baseline date of 1/5/75. FPL believes PSD does not apply to this emission unit.

<b>Emission</b>	Unit	Information	Section	of

## L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #:1

### **Supplemental Requirements for All Applications**

1. Process Flow Diagram: PFMU1_1.bmp Attached Document ID / Not Applicable / Waiver Requested
2. Fuel Analysis or Specification: PFMU1_2.txt Attached Document ID / Not Applicable / Waiver Requested
3. Detailed Description of Control Equipment: Not Applicable Attached Document ID / Not Applicable / Waiver Requested
4. Description of Stack Sampling Facilities: PFMU1_4.bmp Attached Document ID / Not Applicable / Waiver Requested
5. Compliance Test Report: PFMU1_5.txt Attached Document ID / Previously-submitted, Date / Not Applicable  H155/WG
6. Procedures for Startup and Shutdown: PFMU1_6.txt Attached Document ID / Not Applicable
7. Operation and Maintenance Plan: Not Applicable Attached Document ID / Not Applicable
8. Supplemental Information for Construction Permit Application: Not Applicable Attached Document ID / Not Applicable
9. Other Information Required by Rule or Statute: Not Applicable Attached Document ID / Not Applicable

#### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: PFMU1\_10.txt Attached Document ID / Not Applicable
- V
- 11. Alternative Modes of Operation (Emissions Trading): Not Applicable Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements: PFMU1\_12.txt
  Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

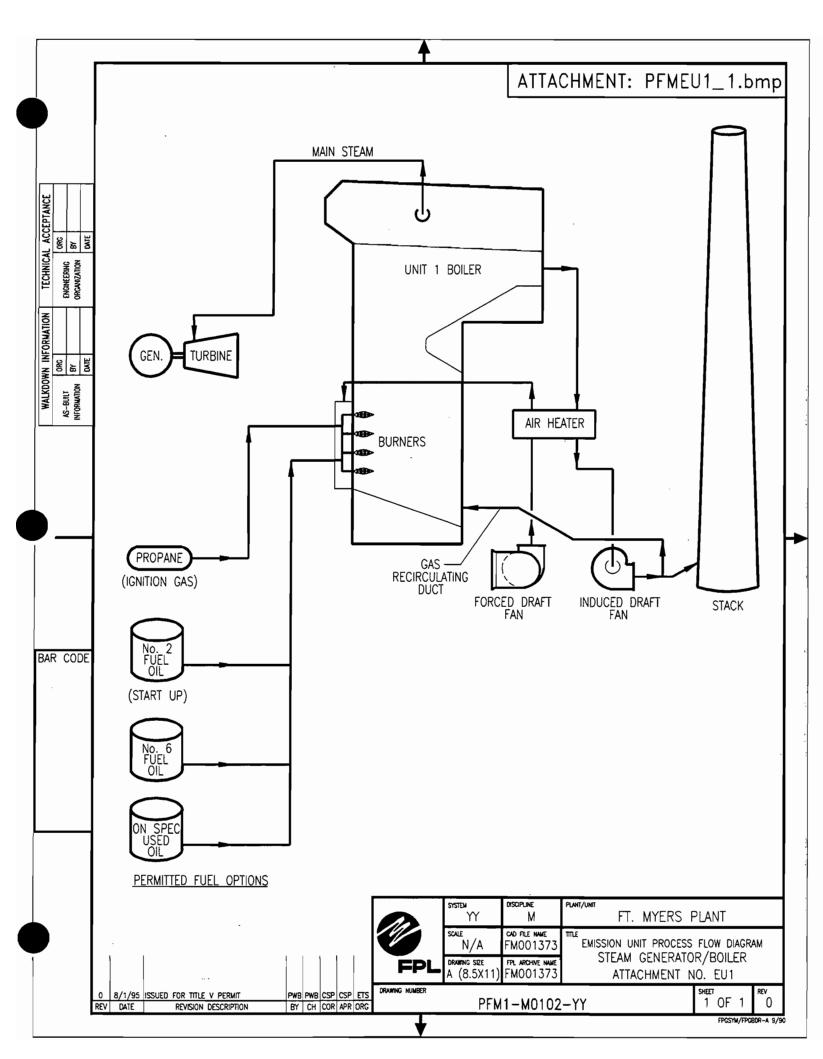
PRUMOUSE & SURALIZED

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: Not Applicable

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Not Applicable



#### Fuel Analysis No.6 Oil Analysis (typical)4

<u>Parameter</u>	<u>Typical value</u>	Specifications
API gravity (@ 60° F)	6 - 12	none
Heat content (MBtu/bbl)	6,310 - 6420	6,340¹
% Sulfur	2.0 5	$2.5 \text{ max}^3$
% Nitrogen	$0.2 - 0.5^2$	none
% Ash	$0.06 - 0.09^2$	$0.10 \text{ max}^1$

#### Footnotes:

- Data taken from FPL fuel specifications.
- (2) Data taken from laboratory analysis.
- (3) Maximum permitted from current air operation permit.
- (4)
- The values are "typical" based upon the following:
   Information gathered by FPL through laboratory analysis,
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.
- Sulfur content values typically range between 1.6% and 2.4% and are derived from as-fired laboratory analysis of fuel oil fired at Fort Myers Power Plant.

### Fuel Analysis No. 2 Distillate oil (typical)3

<u>Parameter</u>	<u>Typical value</u>	Specifications
API gravity (@ 60 F)	<u>Typical value</u> 35.0 <sup>2</sup>	30 - 40 <sup>1</sup>
Heat content (MBtu/bbl)	$5,700 - 5,800^2$	none
% sulfur	$0.3 - 0.5^{1}$	0.5 maximum <sup>1</sup>
% nitrogen	no specification	none
% ash	<0.012	0.01 <sup>1</sup>

#### Footnotes:

- (1) Data taken from FPL fuel specifications.
- Data taken from laboratory analysis. (2)
- (3)
- The values are "typical" based upon the following:
   Information gathered by FPL through laboratory analysis,
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

#### Fuel Analysis Propane (typical)<sup>1</sup>

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C3H8.

<u>Parameter</u>	Typical value	Specifications
Specific gravity (@ 60 F)	0.51 <sup>1</sup>	none
Heat content (MBtu/bbl)	600 - 1,000	none
% sulfur	0.0031	none
% nitrogen	no specification	none
% ash	no specification	none

#### Footnotes:

- - The values are "typical" based upon the following:
     Information gathered by FPL through laboratory analysis, and
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

#### Fuel Analysis On Specification Used Oil

The boiler may occasionally burn used oil during normal operation. All used oil fired in the unit meets the specifications mandated by 40 CFR 279.11. Used oil fired by this boiler is typically derived from plant maintenance activities, and may include used lube oils, transformer oils, etc. that meet the analytical specifications. Criteria used oil values follow:

7		G
<u>Parameter</u>	<u>lypical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	<u>Typical value</u> 30.0¹	none
Heat content (MBtu/bbl)	6,000¹	none
% sulfur	0.3 <sup>1</sup>	none
% nitrogen	negligible	none
% ash	$0.\overline{0}1^{1}$	0.01

#### <u>Footnotes:</u>

- The values are "typical" based upon the following:

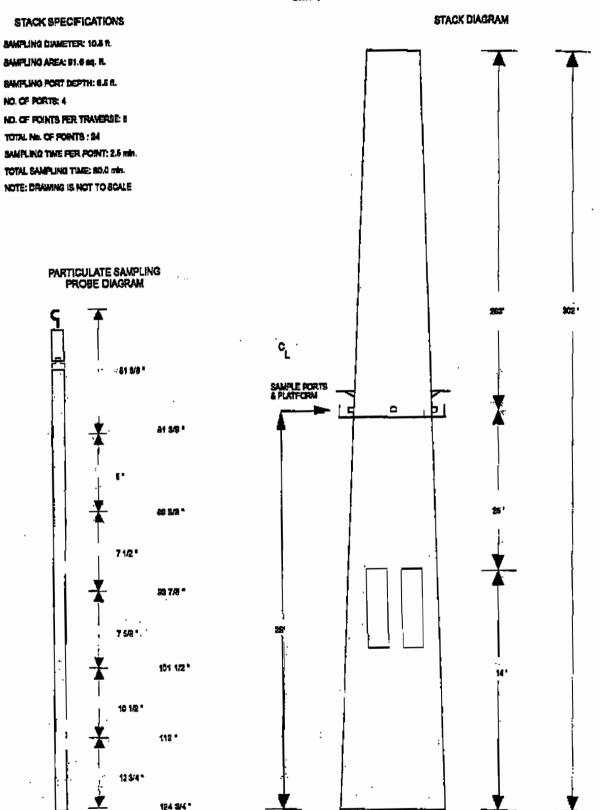
   Information gathered by FPL through laboratory analysis,
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

### **BEST AVAILABLE COPY**

#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES FORT MYERS

PFMU4\_.BMP

#### FOSSIL FLIEL STEAM GENERATORS UNIT 1



Access to the sampling ports is provided by a ladder. Channel from with a trolley system is above each port for probe support. AC power is available on the platform and at the base of thestack.

#### Startup & Shutdown Procedures - Minimizing Excess Emissions

Startup of the fossil-fuel boiler begins when fuel (either natural gas or oil) is introduced into one or more burners within the boiler and lighted (commencement of combustion). Startup is complete and steady-state operation begins when the combustion process has stabilized and the megawatt load on the unit is stable.

Shutdown of the fossil-fuel boilers begins when unit megawatt load is decreased to below 10% of maximum and continues until the final burner gun is removed from service and the final Induced-draft or Forced-draft fan is removed from service.

Excess emissions may be detected during all modes of boiler operation by any one of several continuous emissions monitors. Continuous emission monitors are currently in place for  $NO_x$ ,  $SO_2$  and opacity. An audible and visual alarm are activated whenever permitted values for any of the above parameters are approached.

Countermeasures which may be taken in the event of excess emissions include, but are not limited to:

- proper excess air adjustments
- recognizing and removal of faulty burners
- fuel oil temperature adjustments
- proper and timely operation of boiler cleaning devices
- removal of the unit from system-dispatch mode
- reduction of unit megawatt load
- stopping and restarting of boiler cleaning devices
- lowering load rate
- pressure rate changes

Best Operational Practices to prevent excess emissions, and knowledge of the appropriate countermeasures to take if an excess emissions condition exists, are taught during routine operator training.

### Attachment PFMU1\_10.txt Alternative Methods of Operation

#### Operation at Various Capacities and Heat Input Rates

The Fort Myers Unit 1 boiler may be operated up to 8760 hours per year at heat input rates from zero to 1690 MMBtu per hour on No.#6 oil.

#### <u>Different Fuel Types</u>

The unit may be fired with a variable combination of No. 6 residual fuel oil or No. 2 fuel oil. The unit generally utilizes propane fuel to light off (start up) the boiler, then switches to another fuel, such as No.6 residual oil. The unit may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11.

Current emissions limitations are as follows:

Pollutant Emission Limit

Particulate matter 0.1 lb/MMBtu (steady-state) 0.3 lb/MMBtu (sootblowing)

Sulfur dioxide 2.75 lb/MMBtu

Soot blowing

The unit may blow soot for up to 24 hours per day, so long as excess emissions are limited to 60% opacity for 3 hours in 24 hours with no more than four, 6-minute periods of up to 100% opacity.

#### Utilization of Additives

When residual oil is fired, additives such as Magnesium hydroxide Mg(OH)<sub>2</sub> are added to the boiler on a continuous basis. This material is typically added to the fuel oil just prior to its being fed into the furnace, but it may also be injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel. FPL reserves the right to use other additives if they are suitable.

#### Off-Stoichiometric Combustion

This technique involves operating selected burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and results in reduced NOx emissions. At Ft. Myers, the method for performing off-stoichiometric combustion is to terminate the fuel flow to selected burners and utilize these burners as excess air ports. The other burners are then operated at a fuel-rich mixture ratio. This is also known as a bias-firing scheme.

#### Attachment PFMU1\_10.txt Alternative Methods of Operation

#### Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at Ft. Myers Unit 1 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

The solutions and rinsewaters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis. If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved hazardous waste facility for the appropriate disposal.

If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposal by evaporation in the units boiler. Introduction into the boiler will occur at a rate that will not cause an exceedence of the opacity limit of the unit in which evaporation is occurring (in this case, 40 percent opacity).

#### Identification of Additional Applicable Requirements

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g. emission limitations and consent orders).

Air operation permit No. AO36-221394 contains the following conditions:

- 1. Heat input rate for Unit 1 is not to exceed 1,690 mmBtu/hour. FPL tracks heat input on a continuous basis using fuel sampling and analysis and fuel flow measurement.
- 2. The boiler shall be fired with a variable combination of No.6 residual fuel oil, No.2 fuel oil, propane gas or on-specification used oil from FPL operations. FPL tracks the fuel usage on a continuous basis.
- 3. The maximum allowable emissions for Unit 1 are as follows:

Pollutant	Fuel	Emission Limit	Test Method
Particulate Matter - Steady-State	Oil	0.1 lb/mmBtu	EPA Method 5 or 17
Soot Blowing or Load Changing.	Oil	0.3 lb/mmBtu (3 hrs/24 hrs.)	EPA Method 5 or 17
Sulfur Dioxide -	Oil	2.75 lb/mmBtu	Monthly Fuel Analysis
<u>Visible Emissions</u> - Steady-State	Oil	40 percent opacity	DEP Method 9
Soot Blowing or Load Changing.	Oil	60 percent opacity (3 hrs/24 hrs.)	DEP Method 9

FPL conducts annual compliance testing to determine compliance with permitted emission limitations.

<b>Emission</b>	Unit	Informatio	on Section	of

#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 Emission Unit #: 2

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

#### Type of Emissions Unit Addressed in This Section

- Regulated or Unregulated Emissions Units? Check one:
   The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- [ ] The emissions unit addressed in this Emissions Unit Information Section is a unregulated emissions unit.
- 2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3):  $\underline{1}$ 

- [1] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [2] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point(stack or vent) but may also produce fugitive emissions.
- [3] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emission Unit Information Section of
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### B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Description and Status**

1.	Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unit 2 Steam Generator
2.	Emissions Unit Identification Number: 002 (No Corresponding ID or Unknown)
3.	Emission Unit Status Code: (A or C): A
4.	Acid Rain Unit? (Y/N): Y
5.	Emissions Unit Major Group SIC Code: 49

6. Emissions Unit Comment (limit to 500 characters):

The generator nameplate rating given on page 4 is reflective of the information provided to the Florida Public Service Commission (PSC) annually in the 10-year Site Plan. Actual generator output may exceed the value given, or may vary seasonally, with changes in unit efficiency, or due to fluctuations in system load demand.

The method of compliance for heat input is fuel sampling and laboratory analysis, along with fuel flow monitoring.

#### **Emissions Unit Control Equipment**

- A. Control Equipment #:
  - 1. Description (limit to 200 characters):
    Multiple cyclone with fly ash reinjection
  - 2. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

В.	Control	Equipment #	:
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1. Description (limit to 200 characters):

2. Control Device or Method Code:

# **C.** Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units)

#### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY): 07/16/69

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: Foster-Wheeler

Model Number:

4. Generator Nameplate Rating: 402 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 4000 mmBtu/hr

2. Maximum Incineration Rate:

lbs/hr

tons/day

3. Maximum Process or Throughput Rate: Units:

4. Maximum Production Rate:

Units:

5. Operating Capacity Comment (limit to 200 characters):

The maximum heat input rate given above is for residual oil firing. The method of compliance for heat input is fuel sampling and analysis, in conjunction with fuel flow monitoring.

### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

Emission Unit Information Section of	
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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable
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DEP Form No. 62-210.900(1)

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

### Emissions Unit ID 2

	т		
40 C.F.R. 279.72	40 C.F.R. 75 Appendix B	40 C.F.R. 75.35	F.A.C. 62-214.300
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.4(a)(4)(ii)	F.A.C. 62-214.330
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.5	F.A.C. 62-214.350 (2)
40 C.F.R. 72.21(a)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.51(c)	F.A.C. 62-214.350 (3)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix F 40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-2 40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(b)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.22(a)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(c)	40 C.F.R. 75 Appendix H 40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.23	```	40 C.F.R. 75.54	F.A.C. 62-214.370 (4)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.55(c)	F.A.C. 62-214.370 (7)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.55(e)	F.A.C. 62-214.430
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.56	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(b)	40 C.F.R. 75.60(a)	paragraph 2
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(c)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.32	40 C.F.R. 75.10(d)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(c)1.j.
40 C.F.R. 72.33(b)	40 C.F.R. 75.10(f)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(c)	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(1) 40 C.F.R. 75.61(a)(5)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(a)(3)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.33(d) 40 C.F.R. 72.40(a)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.62	F.A.C.
40 C.F.R. 72.40(a) 40 C.F.R. 72.40(b)	40 C.F.R. 75.11(d)		62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(6) 40 C.F.R. 72.40(c)	40 C.F.R. 75.12(a)	40 C.F.R. 75.63	F.A.C. 62-296.405(1)(f)1.b.
(.)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(a)	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(b)	F.A.C. 62-296.500(2)(c)
40 C.F.R. 72.51	40 C.F.R. 75.13(b)	40 C.F.R. 75.64(c)	F.A.C. 62-297.310(1)
40 C.F.R. 72.90	40 C.F.R. 75.14(a)	40 C.F.R. 75.64(d)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.65	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(a)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(d)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(a)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(b)	40 C.F.R. 76.13	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(c)	40 C.F.R. 77.3	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(d)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(6)(c)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(e)	40 C.F.R. 77.6	F.A.C. 62-297.310(6)(d)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.21(f)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 73.33	40 C.F.R. 75.22	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 73.35	40 C.F.R. 75.24	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(1)	(state only)	F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(2)	F.A.C. 62-204.800(14)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.30(a)(3)	(state only)	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.31	F.A.C. 62-210.650	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.32	F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.33	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)3.
		F.A.C. 62-210.700 (3)	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(7)(c) F.A.C. 62-297.310(8)
		F.A.C. 62-210.700 (6)	` '
			Table 62-297.310-1

# E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

# **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:2

1. Identification of Point on Plot Plan or Flow Diagram: Unit 2 boiler	
2. Emission Point Type Code (1,2,3,4): 1	
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 cha	racters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Commo Emission unit 2, Fort Myers Unit 2 boiler	n:
5. Discharge Type Code (D, F, H, P, R, V, W): V	
6. Stack Height: 397.5 ft	
7. Exit Diameter: 18.1 ft	
8. Exit Temperature: 295.4 °F	
9. Actual Volumetric Flow Rate: 1264612.6 acfm	
10. Percent Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm	
12. Nonstack Emission Point Height: ft	
13. Emission Point UTM Coordinates:  Zone: 17 East: 469805 North: 2952875	
14. Emission Point Comment (limit to 200 characters): Information provided in items 8 and 9 above was measured during the April 1995 particulate test unit. Data collected at other times may vary.	at this

Emission	Unit.	Informa	tion	Section	of

# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

$\underline{\mathbf{S}}$	<u>egment</u>	<u>De</u>	scripti	ion an	d R	late:

Information for Facility\_ID:1 Emission Unit #: 2 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler burning propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.85
5. Maximum Annual Rate: 3850
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn various combinations of #6 oil, #2 oil, propane or on-spec.used oil from FPL operations. Propane is used primarily for lighting off the boiler for start-up.

	<b>Emission</b>	Unit Information Section	of
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Descript	tion and	d Rate:
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Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler burning No. 6 residual oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 25.5
5. Maximum Annual Rate: 223421
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission</b> U	Jnit I	nformation	Section	of
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment Description and Rate:</u> Information for Facility\_ID: 1 Emission Unit #: 2 Segment #: 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler burning No.2 diesel fuel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 28.31
5. Maximum Annual Rate: 247985
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  The Unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

Emission Unit Information Section of	<b>Emission</b>	Unit Ir	formation	Section	of
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment Description and Rate:</u> Information for Facility\_ID: *1* Emission Unit #: 2 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler burning on-specification used oil
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 28.31
5. Maximum Annual Rate: 247985
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.
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DEP Form No. 62-210.900(1)

Emission Unit Information Section of	
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate:	Cleaning
Information for Facility_ID: / Emission Unit #: 2 Segment #: 5	for (186)
1. Segment Description (Process/Fuel Type and Associated Ope 500 characters): Unit 2 Boiler chemical cleaning waste evaporation. This process may be und	•
2. Source Classification Code (SCC): 1-01-013-01	
3. SCC Units: thousand gallons burned	
4. Maximum Hourly Rate: 3	
5. Maximum Annual Rate: 500	
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	
8. Maximum Percent Ash:	
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):  Items 6,7,8 & 9 do not apply. This activity to be undertaken on a perioguidance, and EPA waste rules (40 CFR 279.72).	odic basis in accordance with DARM

Emission Chit initiation Section of	<b>Emission</b>	Unit	Information	Section	of
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# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Descrip	tion and	Rate:
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Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 co-firing all possible combinations of residual oil, on specification used oil, #2 fuel oil, and propane.
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: million cubic feet and thousand gallons
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  Air Operation Permit # AO-36-221396 allows Unit 2 to burn a mixture of the above fuels in a ratio that will result in a max. SO2 emission rate of 2.75 lbs/mmBtu.

# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

# Information for Facility\_ID: / Emission Unit #: 2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
со	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
H133	NA	NA	NS
NOX	NA	NA	NS
PM	NA	NA	EL
PM10	077	NA	NS
SAM	NA	NA	NS
SO2	NA	NA	EL
VOC	NA	NA	NS
HAP	NA	NA	NS

# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 1

# **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide				
2. Total Percent Efficiency of Control: %				
3. Potential Emissions: 11000 lbs/hr 48180 tons/yr				
4. Synthetically Limited? (Yes/No): No				
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr				
6. Emission Factor: 2.75 Units lb/mmBtu Reference: Rule 62-296.405(1)(c)1.j.				
7. Emissions Method Code: (0, 1, 2, 3, 4, 5): 0 [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4	[ ] 5			
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmBtu * 4000 mmBtu/hr = 11000 lb/hr				
(11000 lb/hr * 8760 hr/yr) / 2000 lb/ton = 48180 tons/yr				
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):				

<b>Emission Unit Inform</b>	nation Section	of
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# Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: / Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

1.	Basis for Allowable Emissions	Code:	Emissions limit required by rule	

- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 2.75 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 11000 lbs/hr 48180 tons/yr
- 5. Method of Compliance: Fuel sampling & analysis
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

156

2.75 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.

<b>Emission</b>	Unit	Information	Section	of
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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: 2

### **Pollutant Detail Information**

1. Pollutant Emitted: Particulate Matter - Total		
2. Total Percent Efficiency of Control: %		
3. Potential Emissions: 500 lbs/hr 2190 tons/yr		
4. Synthetically Limited? (Yes/No): No		
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr		
6. Emission Factor: 0.125 Units lb/mmBtu Reference: Rule 62-296.405(1)(b) and 62-210.700(3)		
7. Emissions Method Code: (0, 1, 2, 3, 4, 5): 0 [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmBtu x 4000 mmBtu/hr = 500 lb/hr 500 lb/hr x 8760 hr/yr x to/2000lb = 2190 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): #3 above is reflective of 21 hours/day of normal operation and 3 hours/day of sootblowing. The particulate emission factor (#6) is equivalent to an average of 0.125 lb/mmBtu.		

DEP Form No. 62-210.900(1)

<b>Emission Unit Information S</b>	Section (	of
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# Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: 2 Basis For Allowable Emission #: 1

# Allowable Emissions (Pollutant identified on front page)

allowable emissions are given for residual oil firing.

Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 400 lbs/hr 1752 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  156  0.1 lb/mmRtu is the current permit limit on particulate emissions [Rule 62-296 405(1)/b)]. Equivalent

<b>Emission</b>	Unit	Inform	ation	Section	of	Ť

Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: 2 Basis For Allowable Emission #: 2

Allowable Emissions (Pollutant identified on front page)

- 1. Basis for Allowable Emissions Code: Emissions limit required by rule
- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 0.3 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 1200 lbs/hr 657 tons/yr
- 5. Method of Compliance: Rule 62-296.405(1)(e)2.
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

199

Data for sootblowing / loadchanging [62-210.700(3)]. Equiv. allow. emis. based on 3hr of sootblowing /24hr. Stack test only req'd if fuel oil fired > 400 hr/yr. 3 test runs / 6 are while sootblowing.

1

<b>Emission</b>	Unit	Information	Section	of

# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 2

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: VE40
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hr
4. Method of Compliance Code: EPA Method 9
5. Visible Emissions Comment (limit to 200 characters):  DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible Emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.

	<b>Emission</b>	<b>Unit Informati</b>	on Section	of
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 2 Visible Emissions Limitation #: 2

1. Visible Emissions Subtype: VE60	
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other	
3. Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hr	
4. Method of Compliance Code: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Rule 62-210.700(3), F.A.C. limits soot blowing & load changing to 60% opacity for up to 3 hrs/24 hrs, w < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	ith

<b>Emission</b>	Unit	Information	Section	of

# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 2

Visible Emissions Limitation #: 3

1. Visible Emissions Subtype: VE100
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hr
4. Method of Compliance Code: EPA Method 9
5. Visible Emissions Comment (limit to 200 characters): Rules 62-210.700(1) and (2), F.A.C. allow up to 100% opacity for an unlimited time during startup and shutdown, and up to 2 hrs/24 hrs for malfunctions.

Emission Unit Information Section	of	
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Information for Facility-ID: 1 Emission Unit #: 2

Continuous Monitor #: 1

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Sulfur Dioxide

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: TECO

Model Number: 43B

Serial Number: 43B-46688-276

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(1)

Emission Unit Information Section of	Unit Information Section of
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Information for Facility-ID: 1 Emission Unit #: 2

Continuous Monitor #: 2

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Nitrogen Oxides

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: TECO

Model Number: 42

Serial Number: 42-46955-277

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(2)

Emission Chit thio mation section of	<b>Emission</b>	Unit Information Section	of
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Information for Facility-ID: 1 Emission Unit #: 2

Continuous Monitor #: 3

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Carbon dioxide

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: Milton Roy

Model Number: 3300

Serial Number: N3K4376T

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(3)(i)

<b>Emission Unit Information Section</b>	of
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Information for Facility-ID: 1 Emission Unit #: 2

Continuous Monitor #: 4

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Volumetric flow rate

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: Air Monitor

Model Number: MASSTRON

Serial Number: 6080D

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/14/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(1)

<b>Emission Unit Information Section</b>	of
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Information for Facility-ID: 1 Emission Unit #: 2

Continuous Monitor #: 5

#### **Continuous Monitoring System**

1. Parameter Code:

2. Pollutant(s):

Visible emissions (opacity)

3. CMS Requirement Code(R/O): RULE

Rule

/ Other

4. Monitor Information:

Manufacturer: Lear Siegler

Model Number: RM41

Serial Number: 863

5. Installation Date (DD-MON-YYYY): 04/21/94

6. Performance Specification Test Date (DD-MON-YYYY): 12/12/94

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(4)

Emission Unit Information Section of
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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #: 2

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

<b>Emission Unit Information S</b>	Section	of
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### 2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [2] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [4] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: (C, E, U- unkown):			
PM	U		
SO2	U		
NO2	U		
4. Base	eline Emissions	·	
PM	lbs/hr	tons/yr	
SO2	lbs/hr	tons/yr	
NO2	tons/yr	·	

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

5. PSD Comment (limit to 200 characters):
This emission unit was constructed in 1969 which pre-dates the major source PSD baseline date of 1/5/75.

### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 2

#### Supplemental Requirements for All Applications

- 1. Process Flow Diagram: PFMU2 1.bmp Attached Document ID / Not Applicable / Waiver Requested
- 2. Fuel Analysis or Specification: PFMU1 2.txt Attached Document ID / Not Applicable / Waiver Requested
- 3. Detailed Description of Control Equipment: PFMU2\_3.txt Attached Document ID / Not Applicable / Waiver Requested
- CFAVES 4. Description of Stack Sampling Facilities: PFMU2 4.bmp Attached Document ID / Not Applicable / Waiver Requested
- 5. Compliance Test Report: Previously submitted Attached Document ID / Previously\_submitted, Date / Not Applicable
- 6. Procedures for Startup and Shutdown, PFMU1 6.txt Attached Document ID / Not Applicable
- 11/188108
- 7. Operation and Maintenance Plan: Not Applicable Attached Document ID / Not Applicable
- 8. Supplemental Information for Construction Permit Application: Not Applicable Attached Document ID / Not Applicable
- 9. Other Information Required by Rule or Statute: Not Applicable Attached Document ID / Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation : PFMU2\_10.txt Attached Document ID / Not Applicable



- 11. Alternative Modes of Operation (Emissions Trading): Not Applicable Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements: PFMU1\_12.txt Attached Document ID / Not Applicable



- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

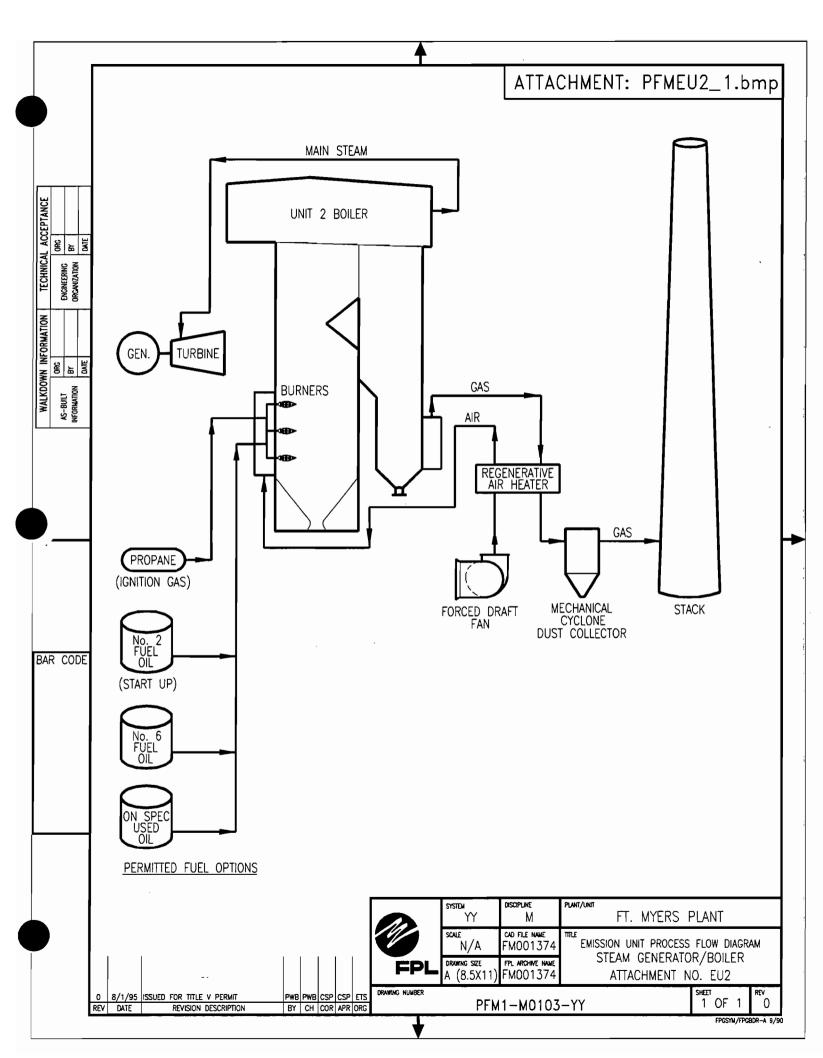
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: Not Applicable

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Not Applicable



#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES FORT MYERS

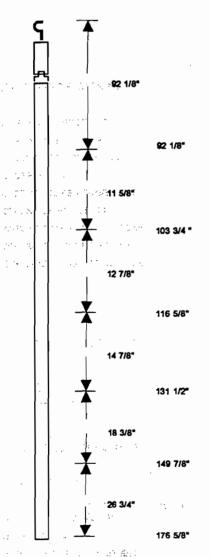
#### FOSSIL FUEL STEAM GENERATORS UNIT 2

PFMU2 18MP

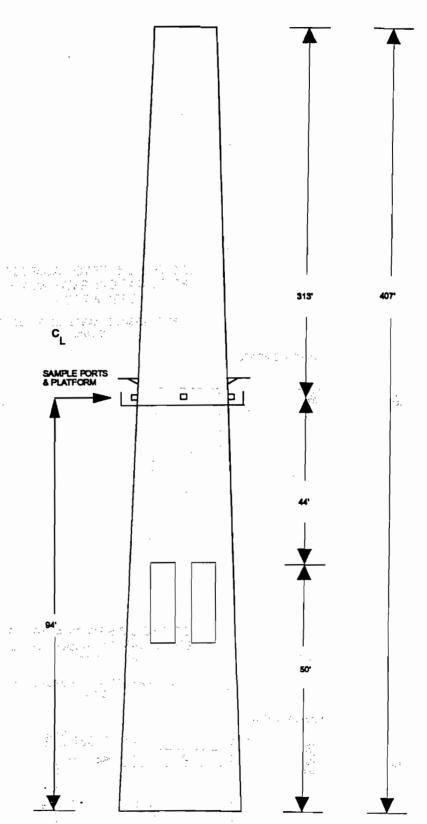
#### STACK SPECIFICATIONS

SAMPLING DIAMETER: 252 in. SAMPLING AREA: 348.4 sq. ft. SAMPLING PORT DEPTH: 86.9 in. No. OF PORTS: 4 No. OF POINTS PER TRAVERSE: 6 TOTAL No. OF POINTS: 24 SAMPLING TIME PER POINT: 2.5 min. TOTAL SAMPLING TIME: 60.0 min. NOTE: DRAWING IS NOT TO SCALE

# PARTICULATE SAMPLING PROBE DIAGRAM



#### STACK DIAGRAM



Access to the sampling ports is provided by a ladder. Channel iron with a trolley system is above each port for probe support. AC power is available on the platform and at the base of thestack.

### Fuel Analysis No.6 Oil Analysis (typical)4

<u>Parameter</u>	Typical value	<u>Specifications</u>
API gravity (@ 60° F)	8 - 12	$10.1 \text{ min}^1$
Heat content (MBtu/bbl)	6,310 - 6420	6,340¹
% Sulfur	2.0 5	$2.5 \text{ max}^3$
% Nitrogen	$0.2 - 0.5^2$	none
% Ash	$0.06 - 0.09^2$	$0.10~{ m max^1}$

- (1) Data taken from FPL fuel specifications.
- (2) Data taken from laboratory analysis.
- (3) Maximum permitted from current air operation permit.
- (4)
- The values are "typical" based upon the following:
   Information gathered by FPL through laboratory analysis,
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.
- Sulfur content values typically range between 1.6% and 2.4% and are derived from as-fired laboratory analysis of fuel oil (5) fired at Fort Myers Power Plant.

#### Fuel Analysis No. 2 Distillate oil (typical)3

Parameter	Typical value	Specifications
API gravity (@ 60 F)	Typical value 35.0 <sup>2</sup>	30 - 40 <sup>1</sup>
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none
% sulfur	$0.3 - 0.5^{1}$	0.5 maximum <sup>1</sup>
% nitrogen	no specification	none
% ash	$<0.01^{2}$	0.011

- (1) Data taken from FPL fuel specifications.
- Data taken from laboratory analysis. (2)
- (3)
- The values are "typical" based upon the following:

   Information gathered by FPL through laboratory analysis, and
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

#### Fuel Analysis Propane (typical)<sup>1</sup>

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C<sub>3</sub>H<sub>8</sub>.

Parameter	Typical value	Specifications
Specific gravity (@ 60 F)	0.511	none
Heat content (MBtu/bbl)	600 - 1,000	none
% sulfur	0.0031	none
% nitrogen	no specification	none
% ash	no specification	none

- The values are "typical" based upon the following:
   Information gathered by FPL through laboratory analysis, and
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

# Fuel Analysis On Specification Used Oil

The boiler may occasionally burn used oil during normal operation. All used oil fired in the unit meets the specifications mandated by 40 CFR 279.11. Used oil fired by this boiler is typically derived from plant maintenance activities, and may include used lube oils, transformer oils, etc. that meet the analytical specifications. Criteria used oil values follow:

Parameter	Typical value	Specifications
API gravity (@ 60 F)	30.0¹	none
Heat content (MBtu/bbl)	6,000¹	none
% sulfur	$0.3^{1}$	none
% nitrogen	negligible	none
% ash	0.011	0.01

- (1) The values are "typical" based upon the following:
  - Information gathered by FPL through laboratory analysis, and
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

### Attachment PFMU2\_3.txt Detailed Description of Control Equipment

**A. Cyclone Separator** - This steam generator (boiler) is supplied with two 104B-GHS #19-684 UOP tubular mechanical dust collectors with side inlet and universal outlet. Each dust collector consists of 695 tubes and four dust collection hoppers. The dust collector has the following efficiency at 2.55 inches of water @ peak load:

Particle Range (micron)	Mean Diameter <u>(micron)</u>	Estimated Efficiency (percent)
0-5	2.5	30.3
5 - 10	7.5	66.2
10 - 20	15	88.6
20 - 45	32.5	99.1
45 +	45	99.5

#### Attachment PFMU2\_10.txt Alternative Methods of Operation

#### Operation at Various Capacities and Heat Input Rates

The Fort Myers Unit 2 boiler may be operated up to 8760 hours per year at heat input rates from zero to 3850 MMBtu per hour on No.#6 oil. FPL has included a heat input value of 4,000 mmBtu per hour for this emission unit. There are 7 identical boiler units in the FPL system with the same design. The 4,000 mmBtu value is representative of each of the 7 units.

#### <u>Different Fuel Types</u>

The unit may be fired with a variable combination of No. 6 residual fuel oil or No. 2 fuel oil. The unit generally utilizes propane fuel to light off (start up) the boiler, then switches to another fuel, such as No.6 residual oil. The unit may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11.

Current emissions limitations are as follows:

Pollutant

**Emission Limit** 

Particulate matter

0.1 lb/MMBtu (steady-state)

0.3 lb/MMBtu (sootblowing)

Sulfur dioxide

2.75 lb/MMBtu

#### Soot blowing

The unit may blow soot for up to 24 hours per day, so long as excess emissions are limited to 60% opacity for 3 hours in 24 hours with up to four, 6-minute periods of up to 100% opacity.

#### **Utilization of Additives**

Additives such as Magnesium hydroxide Mg(OH)<sub>2</sub> are added to the boiler periodically at various loads. When magnesium oxide is used, it is injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel. FPL reserves the right to use other additives if they are suitable.

#### Off-Stoichiometric Combustion

This technique involves operating selected burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and results in reduced NOx emissions. At Ft. Myers, the method for performing off-stoichiometric combustion is to terminate the fuel flow to selected burners and utilize these burners as excess air ports. The other burners are then operated at a fuel-rich mixture ratio. This is also known as a bias-firing scheme.

#### Attachment PFMU2\_10.txt Alternative Methods of Operation

#### Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at Ft. Myers Unit 2 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

The solutions and rinsewaters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis. If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved hazardous waste facility for the appropriate disposal.

If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposal by evaporation in the units boiler. Introduction into the boiler will occur at a rate that will not cause an exceedence of the opacity limit of the unit in which evaporation is occurring (in this case, 40 percent opacity).

### Attachment PFMU2\_12.txt

### Identification of Additional Applicable Requirements

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g. emission limitations and consent orders).

Air operation permit No. AO36-221396 contains the following conditions:

- 1. Heat input rate for Unit 2 is not to exceed 3,850 mmBtu/hour. FPL tracks heat input on a continuous basis using fuel sampling and analysis and fuel flow measurement. In addition, FPL has used a heat input value of 4,000 mmBtu / hour for this emission unit in this application, because it shares an identical design with 6 other units in the FPL system, some of which have the 4,000 mmBtu heat input limit which is more representative of the capacity of the boilers.
- 2. The boiler shall be fired with a variable combination of No.6 residual fuel oil, No.2 fuel oil, propane gas or on-specification used oil from FPL operations. FPL tracks the fuel usage on a continuous basis.
- 3. The maximum allowable emissions for Unit 2 are as follows:

Pollutant	Fuel	Emission Limit	Test Method
<u>Particulate Matter</u> - Steady-State	Oil	0.1 lb/mmBtu	EPA Method 5 or 17 (3 runs)
Soot Blowing or Load Changing.	Oil	0.3 lb/mmBtu (3 hrs/24 hrs)	EPA Method 5 or 17 (3 runs)
<u>Sulfur Dioxide</u> -	Oil	2.75 lb/mmBtu	Monthly Fuel Analysis
<u>Visible Emissions</u> - Steady-State	Oil	40 percent opacity	DEP Method 9
Soot Blowing or Load Changing.	Oil	60 percent opacity (3 hrs/24 hrs.)	DEP Method 9

<b>Emission</b>	Unit	Informa	tion Sec	tion	of	
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#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 Emission Unit #: 3

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

## A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

#### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Units? Check one:
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- [ X ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- [ ] The emissions unit addressed in this Emissions Unit Information Section is a unregulated emissions unit.
- 2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 3

- [1] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [2] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point(stack or vent) but may also produce fugitive emissions.
- [3] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

1

Emission i	Unit Information	Section	of
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# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

<ol> <li>Description of Emissions Unit Addressed in This Section (limit to 60 characters): GT Site 1- GT's 1-12</li> </ol>
2. Emissions Unit Identification Number: 003 (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C): A
4. Acid Rain Unit? (Y/N): N
5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters):  The generator nameplate rating given on page 4 for the gas turbines is the kilowatt rating/1,000 of one gas turbine (out of a bank of 12) at a 59 degree F condition. This information was taken from the manufacturer's estimated performance chart. As with most gas turbines, ambient temperature is inversely related to heat input capability and is inversely related to megawatt output for these machines.

### **Emissions Unit Control Equipment**

A. Control Equipment #:

1. Description (limit to 200 characters): None	
2. Control Device or Method Code:	

E	nission Unit Information Section of	
В	. Control Equipment #:	
	1. Description (limit to 200 characters):	
	2. Control Device or Method Code:	
C	. Control Equipment #:	
	1. Description (limit to 200 characters):	

2. Control Device or Method Code:

### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units)

#### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY): 04/03/74

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: General Electric Model Number: MS7000B

4. Generator Nameplate Rating: 59 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

#### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 10200 mmBtu/hr FGO 4/2 3 10200

2. Maximum Incineration Rate: lbs/hr

tons/day

3. Maximum Process or Throughput Rate: Units:

4. Maximum Production Rate: Units:

5. Operating Capacity Comment (limit to 200 characters):

The heat input rate given above is for the bank of twelve gas turbines while firing distillate fuel oil. Each gas turbine is currently limited to 850 mmBtu heat input per hour at 59 degrees F.

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

	<b>Emission</b>	Unit :	Information	Section	of
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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable			

DEP Form No. 62-210.900(1)

<b>Emission</b>	Unit	Information	Section	of

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

### Emissions Unit ID 3

F.A.C 62-4.090 F.A.C. 62-103.150 F.A.C. 62-210.300 (2) F.A.C. 62-210.350 (3) F.A.C. 62-210.350(1)(a)(3) F.A.C. 62-210.400 (2) F.A.C. 62-210.700 (1) F.A.C. 62-210.700 (4)	F.A.C. 62-210.700 (5) F.A.C. 62-210.700 (6) F.A.C. 62-257.400(1) F.A.C. 62-257.400(2) F.A.C. 62-296.310 (2) F.A.C. 62-296.320 (2) F.A.C. 62-296.400 F.A.C. 62-297.330	F.A.C. 62-297.340 (1)(c) F.A.C. 62-297.340 (1)(d)1. F.A.C. 62-297.340 (1)(d)2.c. F.A.C. 62-297.340 (1)(e) F.A.C. 62-297.340 (1)(h) F.A.C. 62-297.340 (1)(i) F.A.C. 62-297.345 (1) F.A.C. 62-297.350	F.A.C. 62-297.570 F.A.C. 62-4.100 F.A.C. 62-4.130 F.A.C. 62-4.160 F.A.C. 62 - 210.650 F.A.C. 62 - 213.410 F.A.C. 62 - 213.440 F.A.C. 62 - 213.460 F.A.C. 62 - 297.310
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<b>Emission</b>	Unit	Informa	ation	Section	of

# F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rates
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Information for Facility\_ID:1 Emission Unit #: 3 Segment #: 1

<ol> <li>Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):         Gas turbine bank (1-12) burning distillate oil.</li> <li>Source Classification Code (SCC): 2-01-001-01</li> <li>SCC Units: Thousand Gallons Burned</li> <li>Maximum Hourly Rate: 75</li> <li>Maximum Annual Rate: 657000</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash: 0.01</li> </ol>	
<ol> <li>SCC Units: Thousand Gallons Burned</li> <li>Maximum Hourly Rate: 75</li> <li>Maximum Annual Rate: 657000</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> </ol>	500 characters):
<ul> <li>4. Maximum Hourly Rate: 75</li> <li>5. Maximum Annual Rate: 657000</li> <li>6. Estimated Annual Activity Factor:</li> <li>7. Maximum Percent Sulfur: 0.5</li> </ul>	2. Source Classification Code (SCC): 2-01-001-01
<ul> <li>5. Maximum Annual Rate: 657000</li> <li>6. Estimated Annual Activity Factor:</li> <li>7. Maximum Percent Sulfur: 0.5</li> </ul>	3. SCC Units: Thousand Gallons Burned
6. Estimated Annual Activity Factor:  7. Maximum Percent Sulfur: 0.5	4. Maximum Hourly Rate: 75
7. Maximum Percent Sulfur: 0.5	5. Maximum Annual Rate: 657000
	6. Estimated Annual Activity Factor:
8. Maximum Percent Ash: 0.01	7. Maximum Percent Sulfur: 0.5
	8. Maximum Percent Ash: 0.01

10. Segment Comment (limit to 200 characters):

Maximum Annual Rate information provided in #5 above, is based on 8760 hrs/yr of operation. CALCULATIONS:

10200mmbtu/hr / 136mmBtu/kgal = 75 kgal/hr

9. Million Btu per SCC Unit: 136

75 kgal/hour \* 8760 hours/year = 657000 kgal/yr

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT1			
2. Emission Point Type Code (1,2,3,4): 3			
3. Descriptions of Emissions Points Comprising This EU is comprised of 12 identical simple-cycle gas	· · · · · · · · · · · · · · · · · · ·		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W):	V		
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 acfm			
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: d	scfm		
12. Nonstack Emission Point Height:	ft		
13. Emission Point UTM Coordinates: Zone: 17 East: 469660	North: 2952564		
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 1. GT's 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT10			
2. Emission Point Type Code (1,2,3,4):3			
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 acfm			
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: dscfm			
12. Nonstack Emission Point Height: ft			
13. Emission Point UTM Coordinates: Zone: 17 East: 469700 North: 2952649			
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 10. GTs 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT11				
2. Emission Point Type Code (1,2,3,4): 3	2. Emission Point Type Code (1,2,3,4): 3			
	3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
•	4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W):	V			
6. Stack Height: 32 ft				
7. Exit Diameter: 11.4 ft				
8. Exit Temperature: 975 °F				
9. Actual Volumetric Flow Rate: 1160000 acfm				
10. Percent Water Vapor: %				
11. Maximum Dry Standard Flow Rate: dsc	efim			
12. Nonstack Emission Point Height:	ft			
13. Emission Point UTM Coordinates: Zone: 17 East: 469721	North: 2952657			
14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 11. GT's 1-12 are regulated collectively as a bank of 12.				

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT12			
2. Emission Point Type Code (1,2,3,4): 3			
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 acfm			
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: dscfm			
12. Nonstack Emission Point Height: ft			
13. Emission Point UTM Coordinates:  Zone: 17 East: 469742 North: 2952666			
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 12. GT's 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT2			
2. Emission Point Type Code (1,2,3,4): 3			
3. Descriptions of Emissions Points Comprising the This EU is comprised of 12 identical simple-cycle gas turn	,		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 a	cfm		
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: dscf	îm		
12. Nonstack Emission Point Height:	t		
13. Emission Point UTM Coordinates:  Zone: 17 East: 469681	North: 2952573		
14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 2. GT's 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

1. Identification of Point on Plot Plan or Flow Diagram: Simple-cycle GT3  2. Emission Point Type Code (1,2,3,4): 3  3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.  4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 32 ft  7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank of 12.				
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.  4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 32 ft  7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission Point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank				
This EÜ is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.  4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 32 ft  7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission Point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	2. Emission Point Type Code (1,2,3,4): 3			
The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 32 ft  7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	· · · · · · · · · · · · · · · · · · ·			
6. Stack Height: 32 ft  7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank				
7. Exit Diameter: 11.4 ft  8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	5. Discharge Type Code (D, F, H, P, R, V, W): V			
8. Exit Temperature: 975 °F  9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	6. Stack Height: 32 ft			
9. Actual Volumetric Flow Rate: 1160000 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	7. Exit Diameter: 11.4 ft			
10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	8. Exit Temperature: 975 °F			
11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	9. Actual Volumetric Flow Rate: 1160000 acfm			
<ul> <li>12. Nonstack Emission Point Height: ft</li> <li>13. Emission Point UTM Coordinates:     Zone: 17</li></ul>	10. Percent Water Vapor: %			
<ul> <li>13. Emission Point UTM Coordinates:     Zone: 17</li></ul>	11. Maximum Dry Standard Flow Rate: dscfm			
Zone: 17 East: 469702 North: 2952581  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank	12. Nonstack Emission Point Height: ft			
Emission point UTM coordinates are for simple cycle GT 3. GT's 1-12 are regulated collectively as a bank				

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT4			
2. Emission Point Type Code (1,2,3,4): 3			
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W):	V		
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 acfm			
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: d	scfm		
12. Nonstack Emission Point Height:	ft		
13. Emission Point UTM Coordinates: Zone: 17 East: 469724	North: 2952590		
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 4. GT's 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT5			
2. Emission Point Type Code (1,2,3,4): 3			
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 32 ft			
7. Exit Diameter: 11.4 ft			
8. Exit Temperature: 975 °F			
9. Actual Volumetric Flow Rate: 1160000 acfm			
10. Percent Water Vapor: %			
11. Maximum Dry Standard Flow Rate: dscfm			
12. Nonstack Emission Point Height: ft			
13. Emission Point UTM Coordinates: Zone: 17 East: 469745 North: 2952599			
14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 5. GT's 1-12 are regulated collectively as a bank of 12.			

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Simple-cycle GT6				
2. Emission Point Type Code (1,2,3,4):3	2. Emission Point Type Code (1,2,3,4): 3			
	3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002				
5. Discharge Type Code (D, F, H, P, R, V, W): V				
6. Stack Height: 32 ft				
7. Exit Diameter: 11.4 ft				
8. Exit Temperature: 975 °F				
9. Actual Volumetric Flow Rate: 1160000 acfm				
10. Percent Water Vapor: %				
11. Maximum Dry Standard Flow Rate: dscfm				
12. Nonstack Emission Point Height: ft				
13. Emission Point UTM Coordinates: Zone: 17 East: 469766 North:	2952607			
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 6. G of 12.	T's 1-12 are regulated collectively as a bank			

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

1. Identification of Point on Plot Plan or Flow Diagram: Simple-cycle GT7
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 32 ft
7. Exit Diameter: 11.4 ft
8. Exit Temperature: 975 °F
9. Actual Volumetric Flow Rate: 1160000 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates:  Zone: 17 East: 469636 North: 2952622
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 7. GT's 1-12 are regulated collectively as a bank of 12.

### **Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram     Simple-cycle GT8	ram:
2. Emission Point Type Code (1,2,3,4): 3	
3. Descriptions of Emissions Points Comprising this This EU is comprised of 12 identical simple-cycle gas turb	· · · · · · · · · · · · · · · · · · ·
4. ID Numbers or Descriptions of Emission Units w The 12 simple-cycle gas turbines share a common APIS II	
5. Discharge Type Code (D, F, H, P, R, V, W): V	
6. Stack Height: 32 ft	
7. Exit Diameter: 11.4 ft	
8. Exit Temperature: 975 °F	
9. Actual Volumetric Flow Rate: 1160000 ac	efm .
10. Percent Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfn	n
12. Nonstack Emission Point Height: ft	
13. Emission Point UTM Coordinates:  Zone: 17 East: 469657 N	orth: 2952631
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle G of 12.	T 8. GT's 1-12 are regulated collectively as a bank

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

1. Identification of Point on Plot Plan or Flow Diagram: Simple-cycle GT9				
2. Emission Point Type Code (1,2,3,4): 3				
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): This EU is comprised of 12 identical simple-cycle gas turbine units, regulated collectively.				
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: The 12 simple-cycle gas turbines share a common APIS ID number: 52FTM360002				
5. Discharge Type Code (D, F, H, P, R, V, W): V				
6. Stack Height: 32 ft				
7. Exit Diameter: 11.4 ft				
8. Exit Temperature: 975 °F				
9. Actual Volumetric Flow Rate: 1160000 acfm				
10. Percent Water Vapor: %				
11. Maximum Dry Standard Flow Rate: dscfm				
12. Nonstack Emission Point Height: ft				
13. Emission Point UTM Coordinates: Zone: 17 East: 469678 North: 2952640				
14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 9. GT's 1-12 are regulated collectively as a bank of 12.				

Emission Unit Information Section of	
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# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

### Information for Facility\_ID: 1 Emission Unit #: 3

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
СО	NA	NA	NS
H133	NA	NA	NS
H148	NA	NA	NS
H113	NA	NA	NS
NOx	NA	NA	EL
PM	NA	NA	NS
PM-10	NA	NA	NS
SAM	NA	NA	NS
SO2	NA	NA	NS
VOC	NA	NA	NS
НАР	NA	NA	NS

# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Information for Facility\_ID: 1 Emission Unit #: 3 Pollutant #: 1

NOX

### **Pollutant Detail Information**

1. Pollutant Emitted: Nitrogen Oxides 1 1 10 200				
2. Total Percent Efficiency of Control:  %				
3. Potential Emissions: 7140 lbs/hr 31273.2 tons/yr				
4. Synthetically Limited? (Yes/No): N				
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr				
6. Emission Factor: 0.7 Units lb/mmBtu Reference: Permit Limit AO36-223496				
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 3				
[]1 []2 []3 []4 []5				
8. Calculation of Emissions (limit to 600 characters): (0.7 lb / mmBtu)*(10200 mmBtu/hour) = 7140 lb / hour				
(7140 lb / hour)*(8760 hours/year)/2,000 lb/ton = 31273.2 tons per year				
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):				

<b>Emission Unit Information</b>	Section	of
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### Information for Facility\_ID: 1 Emission Unit #: 3 Pollutant #: 1 Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

- 1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 0.7 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 7140 lbs/hr 31273.2 tons/yr
- 5. Method of Compliance: Rule 62-297.300(3)(e), F.A.C.
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

200

0.7 lb/mmBtu is the current permit limit on NOx emissions [authority = Rule 62-272:300(2)]. [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equiv. allowable emissions are given for liquid fuel firing.

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<b>Emission</b>	Unit	Information	Section	of	

# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 3

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: VE20	
2. Basis for Allowable Opacity Code(R/O): Rule [ ] Rule [ ] Oth	her
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hr	
4. Method of Compliance Code:	
<ol> <li>Visible Emissions Comment (limit to 200 characters):         The Maximum Period of Excess Opacity Allowed is 2 hours in 24 hours as stated in rule 62-210.     </li> <li>F.A.C</li> </ol>	700(1),

<b>Emission Unit Information Section</b>	on of
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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 3

Continuous Monitor #: 1

### **Continuous Monitoring System**

<ol> <li>Parameter Code:</li> <li>Pollutant(s):</li> </ol>				
3. CMS Requirement Code(R/O):	Rule	/ Other		
4. Monitor Information: Manufacturer: Model Number:	Serial Numb	er:		
5. Installation Date (DD-MON-YYYY):				
6. Performance Specification Test Date (DD-MON-YYYY):				
7. Continuous Monitor Comment (limit to 200 characters):  This emission unit is not required to install continuous monitors because it is exempted per 40 CFR 72.6(b)(1).				

	Emission	Unit In	formation	Section	of
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### K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #: 3

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [4] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emission emit into mation section of	<b>Emission</b>	Unit	Information	Section	of
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2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

#### Select (1-5): 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [4] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Incre	ment Consumir	g/Expanding Code: (C, E, U- unkown):
PM	U	
SO2	U	
NO2	U	
4. Basel PM SO2 NO2	ine Emissions: lbs/hr lbs/hr tons/yr	tons/yr tons/yr

Emission Unit Info	rmation Section	of
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5. PSD Comment (limit to 200 characters):

## L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #:3

### Supplemental Requirements for All Applications

1. Process Flow Diagram: PFMU3_1.bmp Attached Document ID / Not Applicable / Waiver Requested
2. Fuel Analysis or Specification: PFMU3_2.txt Attached Document ID / Not Applicable / Waiver Requested
3. Detailed Description of Control Equipment: NA Attached Document ID / Not Applicable / Waiver Requested
4. Description of Stack Sampling Facilities: NA Attached Document ID / Not Applicable / Waiver Requested
5. Compliance Test Report: Not Applicable Attached Document ID / Previously submitted, Date / Not Applicable
6. Procedures for Startup and Shutdown: PFMU3_6.txt Attached Document ID / Not Applicable
7. Operation and Maintenance Plan: Not Applicable Attached Document ID / Not Applicable
8. Supplemental Information for Construction Permit Application: Not Applicable Attached Document ID / Not Applicable
9. Other Information Required by Rule or Statute : Not Applicable Attached Document ID / Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: PFMU3\_10.txt Attached Document ID / Not Applicable
- 11. Alternative Modes of Operation (Emissions Trading): NA Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements: PFMU3\_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

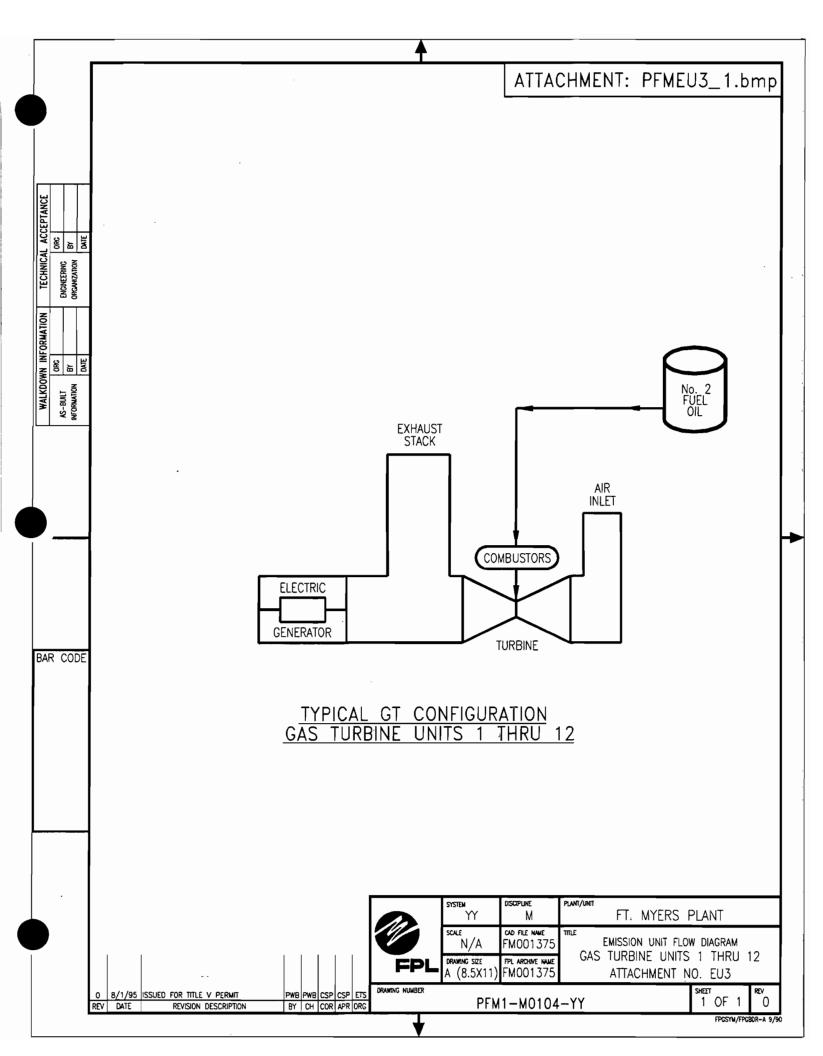
Manusely 500 Mars 1953

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: Not Applicable

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Not Applicable



### Attachment PFMU3\_2.txt

## Fuel Analysis No. 2 Distillate oil (typical)<sup>3</sup>

<u>Parameter</u>	Typical value	Specifications	_
API gravity (@ 60 F)	35.0 <sup>2</sup>	30 - 40¹	
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none	
% sulfur	0.3 - 0.5 <sup>1</sup>	0.5 maximum <sup>1</sup>	
% nitrogen	no specification	none	
% ash	<0.01 <sup>2</sup>	0.01 <sup>1</sup>	

#### Footnotes:

- (1) Data taken from FPL fuel specifications.
- (2) Data taken from laboratory analysis.
- (3) The values are "typical" based upon the following:
  - · Information gathered by FPL through laboratory analysis, and
  - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

### Attachment PFMU3\_6.txt

#### Procedures for Startup and Shutdown - Simple-Cycle Gas Turbines

The gas turbines do not currently employ any hardware for monitoring or control of emissions due to the fact that they are "peaking" units which have a combined annual capacity factor limitation of 10%. Therefore, the only method for determining excess emissions at present is visual (EPA Method 9 Opacity Readings).

All FPL operators undergo extensive training prior to operating FPL generating equipment. This training includes an overview of plant emission limits and best operational practices undertaken in the event excess emissions are encountered.

If excess emissions (e.g. opacity) are exhibited during startup of a gas turbine unit, corrective actions may include adjusting load rates, changing from automatic to manual operational control or shutting down the unit to investigate the cause of the opacity problem.

# Attachment PFMU3\_10.txt

### Alternative Methods of Operation

Each of the 12 gas turbines will be operated independently from any other on number 2 diesel fuel. FPL may operate from one to twelve gas turbine units at any time, and in any combination.

Each gas turbine may operate from zero to 850 mmBtu per hour (at 50 degrees F), which is equivalent to 10,200 mmBtu/hour for the bank of twelve. The emission limits for these units are:

NOx

0.7 lb/mmBtu and 595 lb/hour per GT

VE

20 percent opacity for each GT unit-

There is currently one permit which governs the operation of the simple-cycle gas turbines; Air Operating permit # AO06-223496.

Plant personnel may occasionally inject a detergent formula into the air inlet area of each gas turbine, in order to clean deposits from the turbine blades.

### Attachment PFMU3\_12.txt

### Identification of Additional Applicable Requirements

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g. emission limitations and consent orders).

Air operation permit No. AO36-223496 contains the following conditions:

- 1. Heat input rate for each combustion turbine shall not to exceed 850 mmBtu/hour. FPL tracks heat input on a continuous basis using fuel sampling and analysis and fuel flow measurement.
- 2. The only fuel permitted to be burned in these combustion turbines is No.2 distillate fuel oil. FPL tracks the fuel usage on a continuous basis.
- 3. The maximum allowable emissions for each combustion turbine are as follows:

Pollutant	Fuel	Emission-Limit	Test Method
Nitrogen Oxides	Oil Oil	0.70 lb/mmBtu _595.lb/hour	Not Applicable Not Applicable
Visible Emissions	Oil	20 percent opacity	DEP Method 9

FPL conducts visible emissions compliance testing for each combustion turbine within the five-year term of the air operation permit to determine compliance with the permitted emission limitation.

Emission Unit Information Section of	
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#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 Emission Unit #: 4

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

#### Type of Emissions Unit Addressed in This Section

1. F	Regul	ated or Unregulated Emissions Units? Check one:
[	]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ >	( ]	The emissions unit addressed in this Emissions Unit Information Section is a unregulated emissions unit.
2. \$	Singl	e Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 2

- [1] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [2] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point(stack or vent) but may also produce fugitive emissions.
- [3] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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# **B. GENERAL EMISSIONS UNIT INFORMATION** (Regulated and Unregulated Emissions Units)

# **Emissions Unit Description and Status**

Description of Emissions Unit Addressed in This Section (limit to 60 characters):     Unregulated emission units
2. Emissions Unit Identification Number: Unk (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C): A
4. Acid Rain Unit? (Y/N): N
5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters):  This emission unit section contains information regarding all unregulated emission units at the facility.  Refer to Attachment PFM-FW for a list of all included unregulated emission units.

# Emissions Unit Control Equipment A. Control Equipment #:

	Description (limit to 200 characters): None
2. (	Control Device or Method Code:

B. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units)

### **Emissions Unit Details**

Sittle Commoning

1. Initial Startup Date (DD-MON-YYYY): 07/01/69

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: Detroit Diesel

Model Number: 7124-3000

4. Generator Nameplate Rating: 0.5 MW

5. Incinerator Information:

Dwell Temperature:

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 3.128 mmBtu/hr

2. Maximum Incineration Rate:

lbs/hr

tons/day

3. Maximum Process or Throughput Rate: Units:

4. Maximum Production Rate:

Units:

5. Operating Capacity Comment (limit to 200 characters):

Information provided above is for the emergency diesel generator, which will be limited to 400 hpy of operation. Other emission units may operate up to 8760 hours / year.

### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

400 hours/yr

	D. EMISSIONS UN		NS
tule Applicability Analys	is (Required for Cate	ssions Units Only) egory II application	s and Category III application
nvolving non Title-V sour	es. See Instructions.	)	
Not Applicable			

DEP Form No. 62-210.900(1)

<b>Emission Unit Information Section</b>	of
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<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

# Emissions Unit ID 4

F.A.C. 62-210.700(1) F.A.C. 62-210.700(4)	F.A.C. 62-210.700(6) F.A.C. 62-296.320(4)(b)	F.A.C. 62-296.320(4)(c) F.A.C. 62-297.310(2)(b)	F.A.C. 62-297.310(4)(a)2. F.A.C. 62-297.310(5) F.A.C. 62-297.310(7)(a)9. F.A.C. 62-297.310(8)
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DEP Form No. 62-210.900(1)

# E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

# **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:4



Identification of Point on Plot Plan or Flow Diagram:     Unregulated emission units
2. Emission Point Type Code (1,2,3,4): 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code (D, F, H, P, R, V, W): H
6. Stack Height: 12 ft
7. Exit Diameter: 0.5 ft
8. Exit Temperature: 950 °F
9. Actual Volumetric Flow Rate: 2970 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates:  Zone: 17 East: 469835 North: 2952855
14. Emission Point Comment (limit to 200 characters): Information provided is for the emergency diesel generator. Information on other emission units may vary.

1

Emission Unit Information Section of	
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# **Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 4 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Diesel fuel burned in the emergency diesel generator. Information on other emission units in this Emission Unit section may vary.
2. Source Classification Code (SCC): 2-01-001-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 0.023
5. Maximum Annual Rate: 9.2
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):

The maximum annual rate is calculated based upon 400 hours per year of operation.

1

Emission Unit Information Section of	
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Segment Description and Rate:	5000.00	Faule
Information for Facility ID: / Emission Unit #: 4 Segment #:	2	

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #2M - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321513392
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 2.86 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 31.66 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.02 TPY, using estimated activity factor given above.

<b>Emission</b>	Unit	Information	Section	of

Tromase FAME

<u>Segment Description and Rate:</u> Information for Facility\_ID: *1* Emission Unit #: 4 Segment #: 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #1BD - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321506144
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 1.58 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 28.65 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.02 TPY, using estimated activity factor given above.

Segment	<b>Description</b>	and	Rate:

SPONGAGE FANK

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #1AD - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321506144
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 1.58 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 28.65 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.02 TPY, using estimated activity factor given above.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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# **Segment Description and Rate:**

SPARAGE FANCE

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #1B - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321265190
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 27.63 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 87.31 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.6 TPY, using estimated activity factor given above.

1

<b>Emission Unit Information Sec</b>	ction of
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# **Segment Description and Rate:**

Storage Frank

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 6

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #2B - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321147554
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 46.77 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 130.70 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.09 TPY, using estimated activity factor given above.

<b>Emission Unit Information S</b>	Section	of
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Space FACE

<u>Segment Description and Rate:</u> Information for Facility\_ID: 1 Emission Unit #: 4 Segment #: 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #3D - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321354393
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 4263.62 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 11,927.56 lbs VOC / yr (per EPA Tanks2)  Total estimated losses = 8.09 TPY, using estimated activity factor given above.

Segment	<b>Description</b>	<u>n and Rate:</u>

SPORAGE FACE

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 7

Total estimated losses = 8.09 TPY, using estimated activity factor given above.

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):  Above-ground tank #3D - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321354393
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  Breathing loss = 4263.62 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 11,927.56 lbs VOC / yr (per EPA Tanks2)

DEP Form No. 62-210.900(1)

Emission Unit Information Section of	
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Segment	<b>Description</b>	and	Rate:

STARLE FAMIL

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 8

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #4D - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 321354393
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  Breathing loss = 4263.62 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 11,927.56 lbs VOC / yr (per EPA Tanks2)  Total estimated losses = 8.09 TPY, using estimated activity factor given above.

Emission Unit Information Section of	
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	<b>Segment</b>	<b>Description</b>	and	Rate	<b>:</b> :
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Information for Facility\_ID: 1 Emission Unit #: 4 Segment #: 9

SPARAGE FANK

<ol> <li>Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):</li> <li>Above-ground tank #unleaded - Working and breathing loss</li> </ol>
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 6500
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  Breathing loss = 1013.99 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 87.95 lbs VOC / yr (per EPA Tanks2)  Total estimated losses = 0.55 TPY, using estimated activity factor given above.

	<b>Emission</b>	Unit In	nformation	Section	of
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 4 Visible Emissions Limitation #:

1. Visible Emissions Subtype: VE20		
2. Basis for Allowable Opacity Code(R/O):	OTHER [ ] Rule	[ ] Other
3. Allowable Opacity: Normal Conditions: 20 % Maximum Period of Excess Opacity Allo	Exceptional Conditions: 100 owed: min/hr	%
4. Method of Compliance Code:		
5. Visible Emissions Comment (limit to 20) The variety of equipment in this EU may be sub PM.	0 characters): ject to the general visible emission s	standard, if they emit

<b>Emission</b>	Unit	Information	Section	of

# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 4

Continuous Monitor #:

# **Continuous Monitoring System**

<ol> <li>Parameter Code:</li> <li>Pollutant(s):</li> </ol>					
3. CMS Requirement Code(R/O):	Rule	/ Other			
4. Monitor Information:  Manufacturer:  Model Number:  Serial Number:					
5. Installation Date (DD-MON-YYYY):					
6. Performance Specification Test Date (DD-MON-YYYY):					
7. Continuous Monitor Comment (limit to 200 characters): Continuous monitors are not required for unregulated emission units.					

DEP Form No. 62-210.900(1)

Emission Unit Information Section of	Emission U	Unit Info	ormation	Section	of
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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #: 4

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

#### Select (1-5):5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [4] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

<b>Emission</b>	Unit	Infor	mation	Section	of	

### 2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

### Select (1-5): 5

- [1] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [2] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [5] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Incr	ement Consu	uming/Expanding Code: (C, E, U- unkown):
PM	U	
SO2	U	
NO2	U	
4. Base PM SO2 NO2	eline Emissio lbs/hr lbs/hr tons/yr	ons: tons/yr tons/yr

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

5. PSD Comment (limit to 200 characters):
PSD does not apply to the unregulated emission units.

# L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 4

# Supplemental Requirements for All Applications

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: Not Applicable Attached Document ID / Not Applicable
- 11. Alternative Modes of Operation (Emissions Trading): NA Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements : Not Applicable Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: Not Applicable

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: Not Applicable

Not Applicable

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

Following are several pages of unregulated trivial and de minimis emission units and activities at the facility. The trivial activities identified in this application are provided for information only and are identified as examples of, but not limited to, the trivial activities identified by the Division of Air Resources Management's (DARM) guidance. It is understood that such activities do not have to be included in with the Title V Application. The trivial activities identified herein are consistent, in terms of amounts of emissions and types, with those activities listed in DARM's guidance.

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provided that the emissions units listed below are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800 F.A.C..

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### UNIT 1 BOILER/STEAM GENERATOR POWER BLOCK

<u>Steam Systems</u> Steam Drum 3" Relief Valves

Steam Drum 11/2" Vents

Secondary Super Heater Inlet Header Vents - 11/2"

Secondary Super Heater Outlet Header Relief Valves With Silencer

Main Steam at Secondary Super Heater Outlet Header Bypass Vent

Reheater Outlet Header 6" Relief Valves with Silencer

Reheater Inlet Header Relief Valves with Silencer

Economizer Inlet Header 1" Vent

Main Steam at Desuperheater 6" Relief Valve

**Extraction Heater Relief Valves** 

**Evaporator Relief Valve** 

**Evaporator Vent** 

Miscellaneous Steam Free Blow Vents

After Condenser 1/4" Vent

After Condenser 4" Vent

Hogging Ejector 8" Vent with Silencer

Priming Ejector 8" Exhaust with Silencer

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

Boiler Feed, Condensate & Heater Drain Systems
Boiler Feedwater at boiler Feed Pumps - 3/4"

Relief Valves

Condensate Pumps Discharge Line Vents

Gland Seal Condenser 1/2" Vents

Gland Seal Condenser Vent Fan 6" Vent

After Condenser Feedwater Line 1/2" Vent

After Condenser Feedwater Line 3/4" Relief Valve

After Condenser 3/4" Vent

Inter Condenser 3/4" Water Box Vent

Feedwater Line at Gland Seal Condenser Relief Valve

Condensate Storage Tank (60,000 Gal.) Vent

Condensate Recovery Tank (2,600 Gal.) Vents

Vent Condenser 1/2" Vent

Flash Tank Relief Valve

Condensate Collecting Cooler - 3/4" Vent

**Drip Tank Vent** 

Evaporator 1" Vent from Tubes

Steam Line From Phosphate Pumps Relief Valves

Steam Line From Sulfite Pumps Relief Valves

Extraction heaters Feedwater Vent 3/4"

Extraction Heaters Feedwater - 1" Relief Valves

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

Service & Cooling Water Systems

Bearing Cooling Water Surge Tank 3" Vent

Bearing Cooling Water Heat Exchanger 3/4" Vent

Bearing Cooling Water Heat Exchanger Relief Valve

Hydrogen Coolers 1A & 1B - 1/2" Vents

Turbine Lube Oil Coolers 1A & 1B 34" Vents

Rain Water Tank (50,000 Gal.) 6" Vent

Elevated Water Storage Tank (100,000 Gal.) Vent

Ash Sump Pit

#### UNIT 1 BOILER/STEAM GENERATOR POWER BLOCK

#### Oil Systems

#6 Fuel Oil Storage Tank (100,000 Gal.) Vents

Oil Recovery blowback Drums Relief Valve

Oil Recovery blowback Drums Tank Vent

Service Air - 3/4" Vent at Oil Recovery blowback Drum

#2 Light Oil Storage Tank (1,000 BBL.) Vent

Fuel Oil Metering Tanks (6,000 BBL) Vent

Oil Line Vent at Day Tank Suction Heater

Oil Line at Burner Pumps Vent

Oil Line 1" Vent at Burner Heaters

Burner Booster Pumps - 3/4" Vents

Lube Oil Dump Tank 1" Vent

Lube Oil Reservoir Coolers - 34" Vents

Lube Oil Reservoir Vapor Extractor - 4" Vent

Oil Vapor Extractor Exhaust Head

Fuel Oil Unloading Pumps - 1" Relief Valve

Fuel Oil Line 2" Vent from Stripping Pumps

Auxiliary Steam Relief Valve at Docking Area

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### **UNIT 2 BOILER/STEAM GENERATOR POWER BLOCK**

Steam & Air Evacuation Systems
Steam Drum 3" Relief Valves

Steam Drum 2" Valves to Vent

Main Steam 21/2" Relief Valves with Silencer

Main Steam Stop Valves Vents

Main Steam 1" Free Bow & Vent

Reheat Outlet Header 2" Vents

Reheat Outlet Header 6" Relief Valves

Hot Reheat 2" Vents

Cold Reheat at Inlet Header 6" Relief Valves

Blowdown Tank 16" Silencer Vent

Main Steam 6" Relief Valve at Desuperheater

After Condenser 1/2" Vent from Drainer

After Condenser 2" Vents

Hogging Ejector 10" Exhaust Head with Silencer

Moisture Separator 10" Exhaust Head with Silencer

Moisture Separator 1" Vent

Vacuum Tanks 2A, B, C & D 4" Vents

Steam Relief Valves at Steam Seal Regulator

Boiler Blowdown Heat Exchanger 1" Vent

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### **UNIT 2 BOILER/STEAM GENERATOR BLOCK**

Boiler Feed Condensate, Heater Drains Condensate Storage Tank Vent

Condensate Recovery Tank Vents

Condensate Recovery Cooler - 3/4" Vent

Condensate Recovery Flash Tank - 8" Relief Valve

Vent Condenser 1/2" Vent

After Condenser 1/2" Vent

Inter-Condenser 1/2" Vent

Boiler Feed Pumps 1" Vent

Boiler Feed Pumps Relief Valves

Extraction Heater 3" & 4" Relief Valves

Service Water, Cooling Water & Fire Protection Water Storage Tank (100,000 Gal.) 6" Vent

Closed C.W. Heat Exchanger A & B 1" Vent

F.D. Fan Hydraulic Coupling Coolers 2A & 2B ¾" Vent

H, Coolers 2A, 2B, 2C & 2D 1/2" Vent

Boiler Feed Pump Hydrogen Coupling Coolers 3/4" Vent

Cooling Water Surge Tank 8" Vent

Closed Cooling Water System Units 2A & 2B 3/4" Vents

Ash Sump Pit

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### UNIT 2 BOILER/STEAM GENERATOR POWER BLOCK

Fuel Oil, Lube Oil & Lube Oil Purification

Diesel Generator Light Oil Day Tank 2" Vent (275 Gal.)

Fuel Oil Storage Tank (180,000 BBL.) 6" Vent

Fuel Oil Metering Tank (12,000 BBL.) Vent

Fuel Oil Storage Tank (180,000 BBL.) Draw-Off Sump

Blowback Tank at Metering Tank 1" Relief Valve

Blowback Tank at metering Tank 2" Valve

Blowback Tank at Fuel Oil Burner Pumps - 1" Relief Valve

Blowback Tank at Fuel Oil Burner Pumps - 2" Valve

Fuel Oil Lines 1: Relief Valves

Fuel Oil Lines 3/4" Valves

Blowback Tanks at Each Level of Burners - 2" Vent

Blowback Tanks at Each Level of Burners - 1" Relief Valve

Station Air at all Blowback Tanks 2" Vent

Fuel Oil Burner Booster Pumps A & B Vents

8" Fuel Oil Line at Heaters Vents

Lube Oil Batch Tank Filter Vent

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### **UNIT 2 BOILER/STEAM GENERATOR POWER BLOCK**

Fuel Oil, Lube Oil & Lube Oil Purification (Continued)
Generator Loop Seal Tank Exhaust Head - 4"

Oil Mist Eliminator 6" Vent

Lube Oil Coolers 1/2" Vent

Lube Oil Conditioner Filter Vent

Lube Oil Piping High Point Filter Vent

Lime Slurry, Caustic Wash, Nitrogen Purge Instrument AirNitrogen Relief Valve

High Pressure Heater Nitrogen Vents

Steam Drum Nitrogen Vent

Secondary S.H. Outlet Nitrogen Vent

Instrument Air

Air Receiver

Relief Valves

Instrument Air After Cooler 2A & 2B Relief Valves

Station Air After Cooler 2A & 2B Relief Valves

Station Air

Air Receiver

Relief Valves

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

#### UNITS 1 & 2 ANCILLARY BUILDINGS/AREAS

Miscellaneous Buildings H.V.A.C.

Control Building: Offices, Kitchen, Toilets

Service Building: Offices, Kitchen, Toilets

Switchyard Building:

C.E.M. Building

Water Treatment/Lab

Administration Building

1 & C Building

Sanitary Vents/Stacks

**Control Building** 

Service Building

Administration Building

Storage Warehouse

Port-a-Johns

Miscellaneous Buildings Vent/Exhaust Systems

Service Building

Chemical Lab

R.O. Bldg

Diesel Gen. Bldg

Gas Bottle Storage Bldg

Switchyard Control Bldg

Paint & Lube Oil

Storage Bldg

Electrical Bldg

Warehouses

Control Bldg

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

Miscellaneous Buildings Vent/Exhaust Systems (continued) Chlorination Bldg

I & C Shop

Weld Shop

Administration Bldg

Miscellaneous Maintenance Facilities

Air Compressors

Sandblasting Units

Non-Halogenated Solvent Cleaning Operations

Lawn Maintenance Engine Emissions, Fertilizers

#### UNITS 1 & 2 ANCILLARY BUILDINGS/AREAS

Cleaning, Painting, Welding, Coating Hand Held Tools & Equipment

**Products Storage in Sealed Containers** 

Application of Fungicide; Herbicide & Pesticide

Vacuum Cleaning, Solvent Storage, Office Supplies/Equipment

Miscellaneous Gasoline & Diesel Engine Portable Tools & Equipment

C.E.M. BuildingTesting Equipment

Gas Bottle Storage

Nitrogen, Hydrogen, C02 Cylinders

**Unpaved Roads** 

**Fugitive Dust** 

Sumps

Oily Wastewater Separators

Fuel Oil

Tanker Unloading Dock Area Fugitive Emissions

Filling Station

500 Gal. Unleaded Tank

1,800 Gal. Diesel Tank

#### FT. MYERS PLANT LIST OF UNREGULATED EMISSION UNITS

Centralized Hazardous Waste & Storage Area Sealed Drums & Containers

Recreational Pavilion Kitchen Exhaust Fan

Bathroom Sanitary Vent

Charcoal Grill

Storage Area Asbestos Equipment

#### GAS TURBINE SITE - ANCILLARY BUILDINGS/AREAS

Miscellaneous Buildings H.V.A.C.
General Electric Control Building

Gas Turbine Service Building

G.T. Battery Rooms

Sanitary Vents/Stacks
General Electric Control Building

Gas Turbine Service Building

Miscellaneous Buildings Vent/Exhaust Systems Service Building

Maintenance Building

G.T. Building

#### GAS TURBINE SITE UNITS 1 THRU 12 POWER BLOCK

Fuel Oil#2

Fuel Oil Storage Tanks Vent (180,000 BBL)

G.T. Fuel Skid Relief Valve

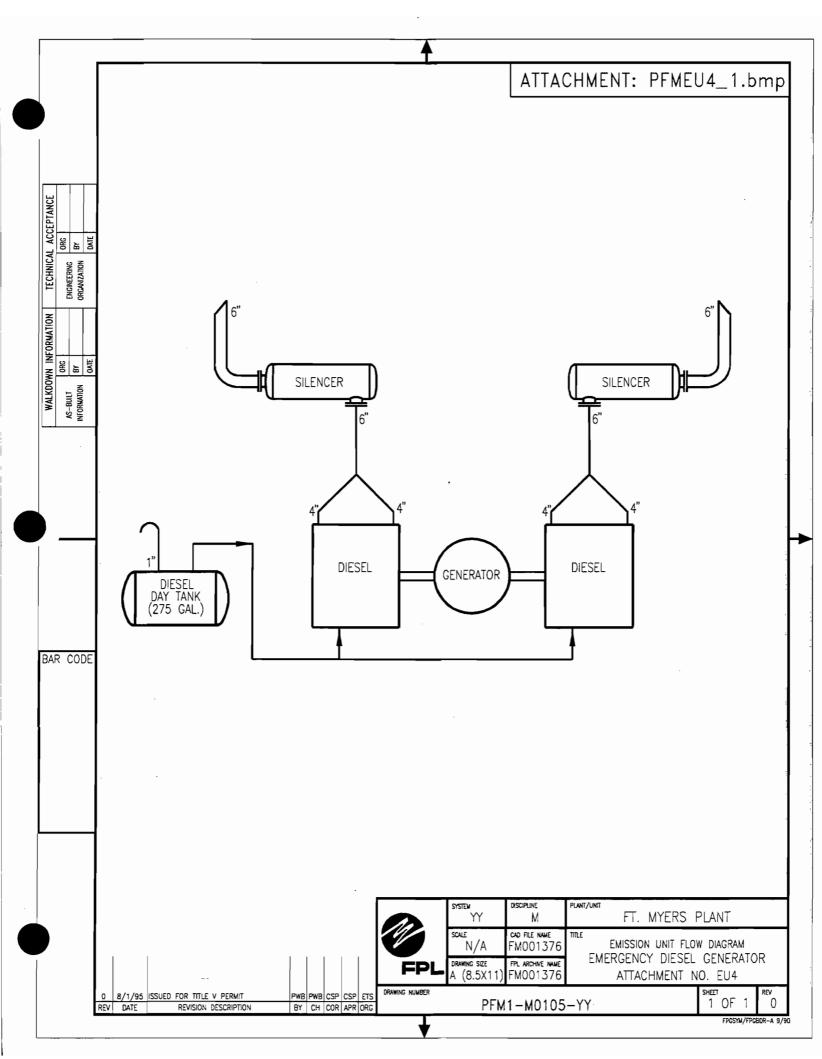
Fire Protection

C0, Fire Suppression System

**Emergency Diesel Generators** 

500 kW mobile diesel generator, 4.6 mmBtu/hr

500 kW fixed diesel generator, 3.13 mmBtu/hr



# Attachment PFMU4\_2.txt

### Fuel Analysis No. 2 Distillate oil (typical)3

Parameter	Typical value	Specifications
API gravity (@ 60 F)	35.0 <sup>2</sup>	30 - 40 <sup>1</sup>
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none
% sulfur	0.3 - 0.5¹	0.5 maximum <sup>1</sup>
% nitrogen	no specification	none
% ash	<0.01 <sup>2</sup>	0.01 <sup>1</sup>

### Footnotes:

- (1) Data taken from FPL fuel specifications.
- (2) Data taken from laboratory analysis.
- (3) The values are "typical" based upon the following:
   Information gathered by FPL through laboratory analysis, and
   FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

# Attachment PFMU4\_6.txt

# Procedures for Startup / Shutdown

The emergency diesel generator is the main backup emergency electrical power supply component for the fossil generating units. The function of the emergency diesel generator is to supply electric power to key power plant equipment during emergency loss-of-power situations. This equipment is typically test-run on a monthly basis for 1 to 2 hours to ensure that it will function properly when needed in an emergency.

Startup for the emergency diesel generator begins with actuating a switch which operates an electric motor on the diesel engine which "turns over" the diesel engine until ignition of the diesel fuel commences.

Shutdown is performed when the normal electric power supply to plant equipment is restored. Shutdown is performed by shutting off the diesel fuel supply to the emergency diesel generator.

Best Operating Practices include proper maintenance of the diesel engines by trained personnel on the generating unit in accordance with manufacturer specifications, and the purchase of diesel fuel that also meets specifications.

If excess emissions are suspected during operation of the emergency diesel generator, appropriate measures to minimize the duration of the event may include shutting down the equipment and investigating the cause of the opacity.