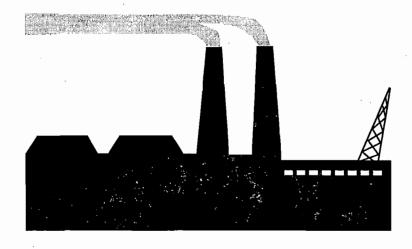
TITLE V PERMIT APPLICATION



Port Everglades 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 RECEIVED

JUN 12 1996

BUREAU OF AIR REGULATION

Re: Submittal of FPL Port Everglades 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 <u>ELSA</u> 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 Southeast District Office (w/o att)

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Emission Unit Information

(Includes Emission Unit, Emission Point, Applicable Regulations, Segment, Pollutant, Visible Emission, Continuous Monitor, PSD Information and Supplemental Information)

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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: Port Everglades Plant						
3. Facility Identification Number	3. Facility Identification Number: 0110036					
4. Facility Location Information: Facility Street Address: 8100 Eisenhower Blvd City: Fort Lauderdale County: Broward Zip Code: 33316						
5. Relocatable Facility? (Y/N): N 6. Existing Permitted Facility?(Y/N): Y						

Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

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

Name: John Stanton

Title: Plant General Manager

2. Owner or Responsible Official Mailing Address:

Organization/Firm: FPL Environmental Services 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: 9545273601

Fax: 9545273636

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 Date

^{*} 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
06	Unregulated Trivial & De Minimis Emission Units	
01	Fossil Fuel Steam Generator, Unit 1 (ARMS ID # 50BRO06003601)	
02	Fossil Fuel Steam Generator, Unit 2 (ARMS ID # 50BRO06003602)	
03	Fossil Fuel Steam Generator, Unit 3 (ARMS ID # 50BRO06003603)	
04	Fossil Fuel Steam Generator, Unit 4 (ARMS ID # 50BRO06003604)	
05	Gas Turbines Electric Generating, Banks 1 - 12 (ARMS ID # 50BRO06003605)	

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 State: FL Zip Code: 326531500

3. Professional Engineer Telephone Numbers:

Telephone: 3523365600 Fax: 3523366603

PORT EVERGLADES 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.

Signature Date

n Attachany exception to certification statement.

Application Contact Information

1. Name and Title of Application Contact:

Name: Vito Giarrusso

Title: Senior 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: 5616257633

Fax: 5616257251

Application Comment

This facility contains four fossil steam generating units and one bank of twelve simple-cycle gas turbine peaking units.

`II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Information for Facility-Id: 1 Facility Location and Type

1. Facility UTM Coordinates:

Zone: 17

East: 587383

North: 2885250

2. Facility Latitude/Longitude:

Latitude (DD/MM/SS): 26 - 5 - 8

Longitude (DD/MM/SS): 80 - 7 - 31

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)

The facility contains four steam generating units, and one bank of 12 gas turbines.

Facility Contact

1. Name and Title of Facility Contact:

Name: Kathryn Pascale

Title: Environmental Specialist

2. Facility Contact Mailing Address:

Organization/Firm: FPL Port Everglades Plant

Street Address: P.O. Box 13118

City: Fort Lauderdale

State: FL

Zip Code: 33316 -

3. Facility Contact Telephone Numbers:

Telephone: 9545273643

Fax: 9545273636

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 located in a former non-attainment area for ozone (recently redesignated to an air quality maintenence area) therefore the generating units are subject to NOx-RACT.

2

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
	·

<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

				1
40 CFR 61.05 40 CFR 61.12(b) 40 CFR 61.145 40 CFR 61.148 40 CFR 61.150 40 CFR 61.150 40 CFR 82.166(k) 40 CFR 82.166(m) F.A.C. 62-204.800(8)(b)8. (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)15. F.A.C. 62-210.300(3)(a)17. F.A.C. 62-210.300(3)(a)17. 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)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. 62-210.370(3) F.A.C. 62-210.370(3) 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)(f) F.A.C. 62-213.205(1)(f) 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(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. 62-257.900 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. 62-297.310(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. 62-4.040(1)(b) F.A.C. 62-4.100 F.A.C. 62-4.130	

DEP Form No. 62-210.900(1) Form Effective: 3/21/96

C. FACILITY POLLUTANTS

Facility Pollutant Information:

1. Pollutant Emitted:	2. Pollutant Classification
SO2	A
NOX	· A
со	A
PM	A
PM10	A
VOC	A
H133	A
SAM	A
H106	A
H107	A
HAP	A

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications For Facility: 1

- 1. Area Map Showing Facility Location: PPEFS_1.bmp
 (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 2. Facility Plot Plan: PPEFS_2.bmp
 (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- Process Flow Diagram(s): PPEFS_3.bmp
 (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 4. Precautions to Prevent Emissions of Unconfined Particulate Matter: PPEFS_4.txt (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- Fugitive Emissions Identification: PPEFS_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: PPEFS_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: PPEFS_9.txt (Enter the Attached Document ID, NA Not Applicable)
- 10. Alternative Modes of Operation (Emissions Trading): Not Applicable (Enter the Attached Document ID, NA Not Applicable)
- 11. Identification of Additional Applicable Requirements: PPEFS_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)

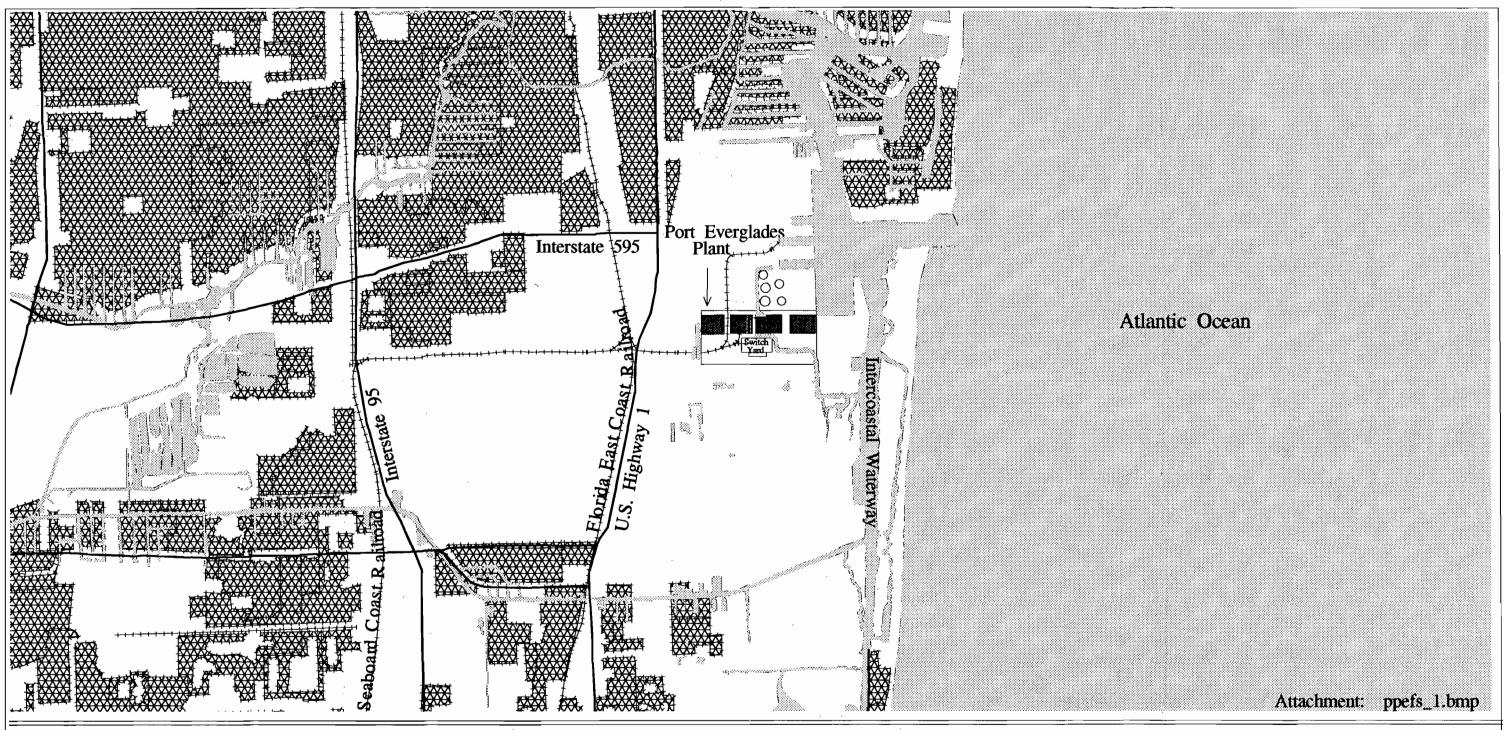
13. Risk Management Plan Verification: Plan to be Submitted to Implementing Agency by Required Date

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

Plan to be Submitted to Implementing Agency by Required Date

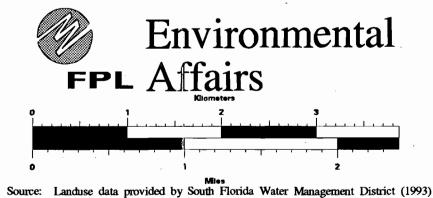
Not Applicable (NA)

- 14. Compliance Report and Plan: PPEFS_13.txt (Enter the Attached Document ID, NA Not Applicable)
- 15. Compliance Statement (Hard-copy Required): PPEFS_14.txt (Enter the Attached Document ID, NA Not Applicable)



Port Everglades Area Map Broward County

No expressed or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made. The materials contained herein are provided 'as is' and may contain inaccuracies and user is warned to utilize the material's accuracy independently and assumes the risk of any and all loss.



W E

Port Everglades Plant

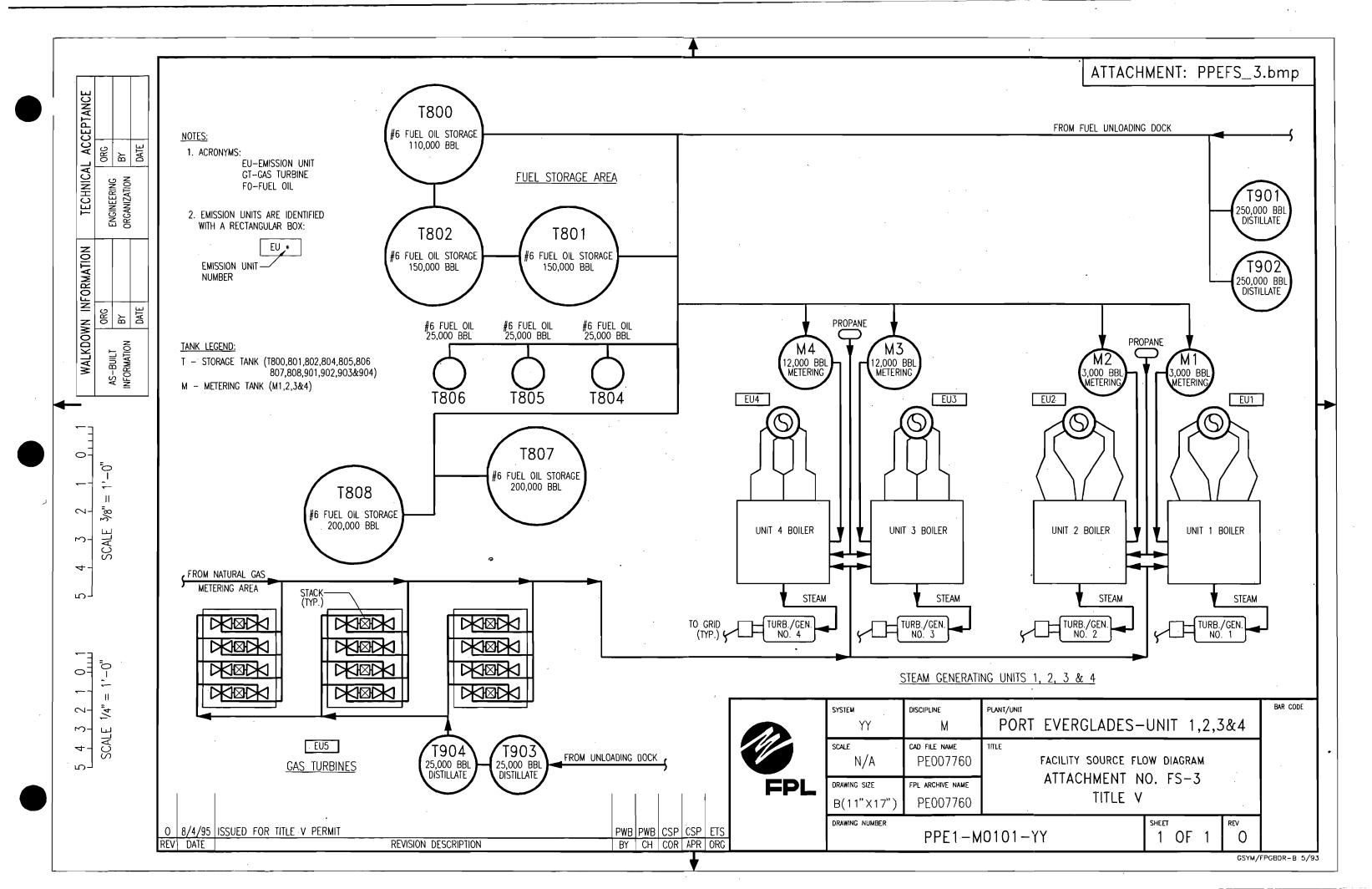
Water

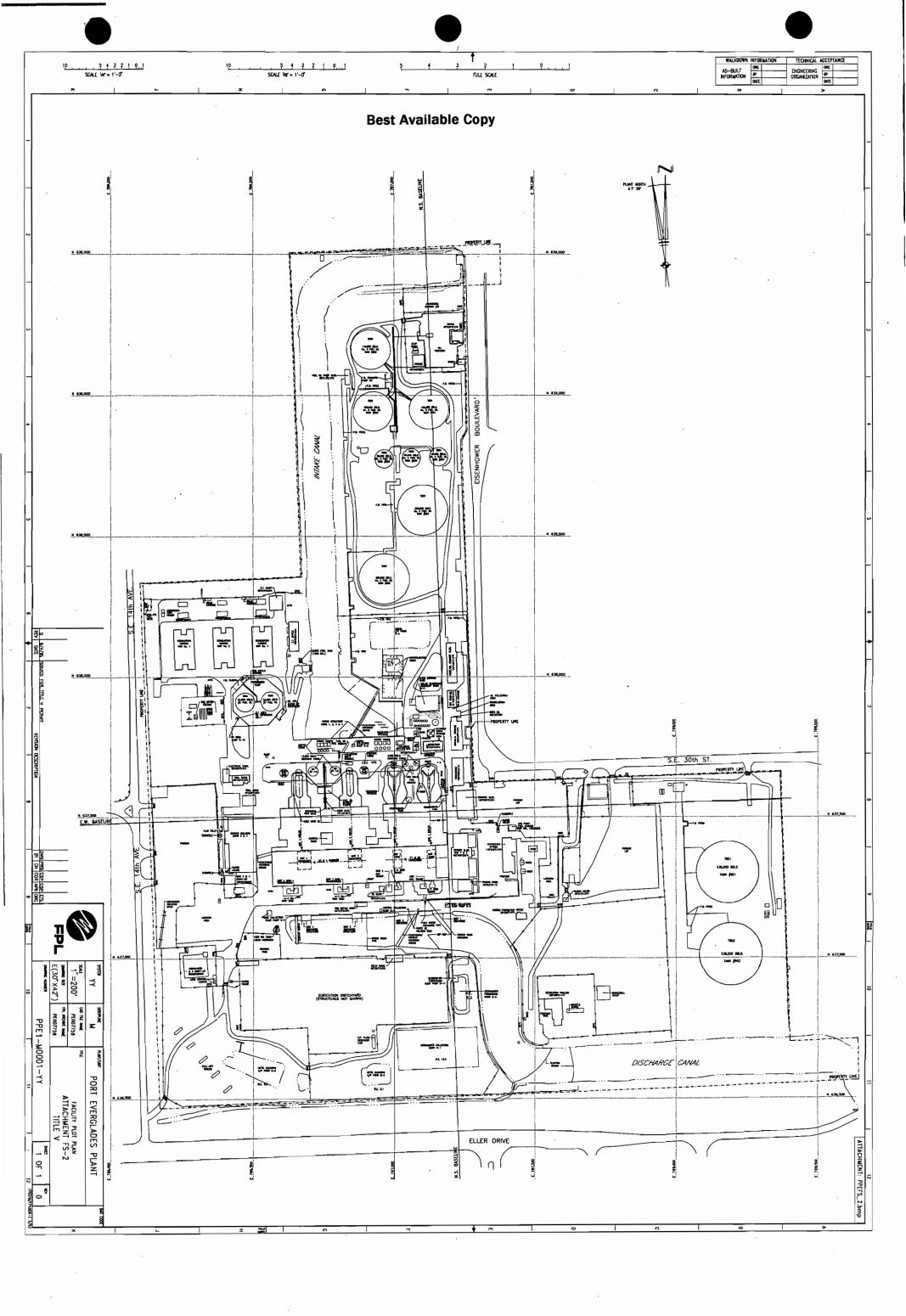
Major Roads

Railroads

Residential Areas

/export/home/ron/ppe-site.map (5-95)





Attachment PPEFS_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.:

- The facility 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 chemical products are cleaned up as soon as practicable.
- Vehicles are restricted to slow speeds on the plant site

Attachment PPEFS_5.txt Fugitive Emission Identification

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PPEFS_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 PPEFS_8.txt

EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

The Port Everglades facility currently has only one piece of equipment containing more than 50 pounds of CFC's (see below). However, there are many refrigerators and air conditioners at the plant site that contain smaller quantities of CFC's.

Service Building Air Conditioner (A & B)

120 lbs CFC's

Attachment PPEFS_9.txt Alternative Methods of Operation

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

Attachment PPEFS_13.txt Port Everglades 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 Protection as required in Rule 62-213.420(1)(a) F.A.C..

Attachment PPEFS_14.txt Port Everglades 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

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

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

Emission	Unit	Information	Section	of
CHI12210H	Omit	miormation	Section	01

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.	Re	egu	lated 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.

Emission Unit Information S	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 U	Jnit Addressed in	This Sect	ion (limit to 6	0 characters):
	Port Everglades Boiler Unit 1			•	
		•			

- 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 reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

Emissions Unit Control Equipment

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

B. Control Equipment #: 2

1. Description (limit to 200 characters):
 Low NOx Burners

2. Control Device or Method Code: Modified Furnace or Burner Design

C. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

Emission	Unit	Informa	tion	Section	of

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units)

Emissions Unit Details

- 1. Initial Startup Date (DD-MON-YYYY): 05/01/60
- 2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
- 3. Package Unit:

Manufacturer: Westinghouse/Combustion Eng.

Model

Number:

- 4. Generator Nameplate Rating: 225 MW
- 5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity

- 1. Maximum Heat Input Rate: 2400 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 given above reflects natural gas firing. Maximum heat input rate for residual oil is 2300 mmBtu/hour. Compliance method for heat input is fuel sampling & analysis.

Emissions Unit Operating Schedule

Emission	Unit In	formation	Section	of

Requested Maximum Opera	ating Schedule:	
hours/day	days/week	
weeks/yr	8760 hours/yr	

Emission Unit Information Section of	Emission	Unit In	formation	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)

	'		
40 C.F.R. 279.72	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.55(c)	F.A.C. 62-210.700 (6)
40 C.F.R. 72.20(a)		40 C.F.R. 75.55(e)	1
` '	40 C.F.R. 75 Appendix G-4		F.A.C. 62-214.300
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.56	F.A.C. 62-214.330
40 C.F.R. 72.20(c)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.60(a)	F.A.C. 62-214.350 (2)
40 C.F.R. 72.21(a)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.60(b)	1
40 C.F.R. 72.21(b)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-214.350 (3)
	40 C.F.R. 75.10(a)(3)(i)	1,71,	F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(d)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.22(a)	40 C.F.R. 75.10(b)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(c)		40 C.F.R. 75.61(b)	1
40 C.F.R. 72.23	40 C.F.R. 75.10(c)	40 C.F.R. 75.62	F.A.C. 62-214.370 (3)
	40 C.F.R. 75.10(d)		F.A.C. 62-214.370 (4)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(f)	40 C.F.R. 75.63	F.A.C. 62-214.370 (7)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(g)	40 C.F.R. 75.64(a)	F.A.C. 62-214.430
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.64(b)	
40 C.F.R. 72.30(c)		40 C.F.R. 75.64(c)	F.A.C. 62-296.405(1)(a)
```	40 C.F.R. 75.11(c)(3)	1	paragraph 2
40 C.F.R. 72.30(d)	40 C.F.R. 75.11(d)	40 C.F.R. 75.64(d)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.32	40 C.F.R. 75.12(a)	40 C.F.R. 75.65	
40 C.F.R. 72.33(b)		40 C.F.R. 75.66(a)	F.A.C. 62-296.405(1)(c)1.j.
1	40 C.F.R. 75.12(b)		F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(c)	40 C.F.R. 75.13(a)	40 C.F.R. 75.66(b)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(d)	40 C.F.R. 75.13(b)	40 C.F.R. 75.66(c)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.40(a)	40 C.F.R. 75.14(a)	40 C.F.R. 75.66(d)	* * * * * * *
40 C.F.R. 72.40(b)		40 C.F.R. 75.66(g)	F.A.C.
	40 C.F.R. 75.20(a)(5)		62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(c)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(h)	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(d)	40 C.F.R. 75.20(c)	40 C.F.R. 76.13	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.51	40 C.F.R. 75.20(d)	40 C.F.R. 77.3	
40 C.F.R. 72.90		40 C.F.R. 77.5(b)	F.A.C. 62-296.500(2)(c)
	40 C.F.R. 75.20(f)	` '	F.A.C. 62-296.570(4)(a)3.
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(g)	40 C.F.R. 77.6	F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.21(a)	Broward DNRP Ch	F.A.C. 62-296.570(4)(b)1.
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.21(b)	27-173(a) (state only)	
40 C.F.R. 72.9(b)		Broward DNRP Ch	F.A.C. 62-296.570(4)(c)
	40 C.F.R. 75.21(c)		F.A.C. 62-297.310(1)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.21(d)	27-173(c) (state only)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.21(e)	Broward DNRP Ch	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(f)	27-173(d) (state only)	
40 C.F.R. 72.9(c)(5)	. ,	Broward DNRP Ch	F.A.C. 62-297.310(4)(a)1.
1 ' ' '	40 C.F.R. 75.22	1	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(d)	40 C.F.R. 75.24	27-173(e) (state only)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(e)	40 C.F.R. 75.30(a)(1)	Broward DNRP Ch	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(f)	40 C.F.R. 75.30(a)(2)	27-173(f) (state only)	
40 C.F.R. 72.9(g)(4)		Broward DNRP Ch	F.A.C. 62-297.310(4)(d)
	40 C.F.R. 75.30(a)(3)	-	F.A.C. 62-297.310(4)(e)
40 C.F.R. 73.33	40 C.F.R. 75.31	27-173(g) (state only)	F.A.C. 62-297.310(5)
40 C.F.R. 73.35	40 C.F.R. 75.32	Broward DNRP Ch	F.A.C. 62-297.310(6)(a)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.33	27-173(h) (state only)	
40 C.F.R. 75 Appendix A-2		Broward DNRP Ch 27-174	F.A.C. 62-297.310(6)(c)
	40 C.F.R. 75.35		F.A.C. 62-297.310(6)(d)
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.36	(state only)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.4(a)(4)(ii)	Broward DNRP Ch 27-176	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.5	(state only)	
40 C.F.R. 75 Appendix A-6		Broward DNRP Ch 27-177	F.A.C. 62-297.310(6)(g)
	40 C.F.R. 75.51(c)		F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix B	40 C.F.R. 75.53(a)	(state only)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.53(b)	Broward DNRP Ch 27-179	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.53(c)	(state only)	
40 C.F.R. 75 Appendix D		Broward DNRP Ch 27-180	F.A.C. 62-297.310(7)(a)4.
	40 C.F.R. 75.53(d)(1)		F.A.C. 62-297.310(7)(a)5.
40 C.F.R. 75 Appendix F	40 C.F.R. 75.54	(state only)	F.A.C. 62-297.310(7)(a)9.
		Broward DNRP Ch 27-181	F.A.C. 62-297.310(7)(c)
		(state only)	
		Broward DNRP Ch 27-184	F.A.C. 62-297.310(8)
		1	Table 62-297.310-1
		(state only)	1 4010 02-297.310-1
		Broward DNRP Ch 27-188	
		(state only)	
		Broward DNRP Ch 27-189	
		(state only)	
		F.A.C. 62-204.800(12)	
		(state only)	
		F.A.C. 62-204.800(13)	
		(state only)	
		F.A.C. 62-204.800(14)	
		(state only)	
		F.A.C. 62-210.650	
		F.A.C. 62-210.700 (1)	
		F.A.C. 62-210.700 (2)	
		F.A.C. 62-210.700 (3)	
		F.A.C. 62-210.700 (4)	
		F.A.C. 62-210.700 (4)	

# 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, Port Everglades Unit 1 boiler.			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 343 ft			
7. Exit Diameter: 14 ft			
8. Exit Temperature: 289 °F			
9. Actual Volumetric Flow Rate: 813928.9 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: 587.4 North: 2885.2			
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above is reflective of the highest measured flow rate during the particulate test performed on this unit in February 1995. Flow rates measured at other times may vary.			

<b>Emission U</b>	Jnit In	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: *I* Emission Unit #: 1 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 Number 6 oil burned in Unit 1 boiler
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 15.24
5. Maximum Annual Rate: 133472.56
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
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, natural gas, No. 2 fuel oil, propane gas, or on-specification used oil from FPL operations.

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

Segment	Description	and Rate:

Information for Facility_ID:1 Emission Unit #: 1 Segment #: 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 Boiler chemical cleaning waste evaporated in Unit 1. This process may be undertaken while firing natural gas or residual 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).

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Emission Unit Information Section of	Emission U	Unit Information	Section	of
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Segment	Description	and Rate:
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Information for Facility_ID :1 Emission Unit #: 1 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 On-specification used oil burned in Unit 1 boiler
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 22.43
5. Maximum Annual Rate: 30
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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

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Segment Descrip	tion a	nd R	ate:
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Information for Facility_ID :1 Emission Unit #: 1 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 Natural gas burned in Unit 1 Boiler
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 2.29
5. Maximum Annual Rate: 20022.86
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.0031
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

Emission Unit Information Section of	<b>Emission</b>	Unit !	Informa	ation	Section	of
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Segment	Descrip	otion	and	Rate:

Information for Facility_ID :1 Emission Unit #: 1 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 Propane burned in Unit 1
2. Source Classification Code (SCC): -1-01-006-01 10101002
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 2.4
5. Maximum Annual Rate: 21024
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 1
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 a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas, or on-specification used oil from FPL operations.

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Segment Description and Rate:
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Information for Facility_ID:1 Emission Unit #: 1 Segment #: 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 1 Unit 1 Boiler burning Number 2 fuel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 16.9
5. Maximum Annual Rate: 148147.1
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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

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

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): EU 1 co-firing all possible combinations of natural gas, 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:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  Air Operation Permit # AO-06-223345 allows Unit 1 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.

	Emission	Unit In	nformation	Section	of	
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# 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
SO2	NA	NA	EL
NOX	024	NA .	EL
СО	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	NS
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS ·

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

Information for Facility_ID: 1 Emission Unit #: 1 Pollutant #: 1

## **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide					
2. Total Percent Efficiency of Control: %					
3. Potential Emissions: 6325 lbs/hr 27703.5 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: DEP 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 * 2300 mmBtu/hr = 6325 lb/hr					
(6325 lb/hr * 8760 hr/yr) / 2000 lb/ton = 27703.5 tons/yr					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):					

1

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: / Pollutant #: /
Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

Equivalent allowable emissions are given for liquid fuel firing.

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: 6325 lbs/hr 27703.5 tons/yr
5. Method of Compliance: Fuel sampling & analysis
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  167 2.75 lb/mmBtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.].

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<b>Emission</b>	Unit 1	Information	Section	of

## 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**

1. Pollutant Emitted: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 828 lbs/hr 3626.64 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.36 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)1.
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): 0.36 lb/mmBtu * 2300 mmBtu/hr = 828.0 lb/hr
(828.0 lb/hr * 8760 hr/yr) / 2000 lb/ton = 3626.64 tons/yr
<ol> <li>Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):         Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.20 on natural gas fuel.     </li> </ol>

Emission Unit Information Section of	_
Information for Facility_ID: 1 Emission	Unit #: 1 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: 0.36 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 828 lbs/hr 3626.64 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  154
•
0.36 lb/mmBtu is the current regulatory limit on NOx emissions [Rule 62-296.570(4)(b)1.]. Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section of	
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: 0.2 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 480 lbs/hr 2102.4 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  194
0.20 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)1] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

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

Information for Facility_ID: / Emission Unit #: / Pollutant #: 4

### **Pollutant Detail Information**

1. Pollutant Emitted: Particulate Matter - Total
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 287.5 lbs/hr 1259.25 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: DEP Rule 62-296.405(1)(b) and 62-210.700(3)
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0
[]1 []2 []3 []4 []5
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmBtu x 2300 mmBtu/hr = 287.5 lb/hr 287.5 lb/hr x 8760 hr/yr x ton/2000lb = 1259.25 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  The particulate matter emission limit for 3hrs/24hrs at 0.3 lb/mmBtu and 21hrs/24hrs at 0.1lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu.

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: / Pollutant #: 4
Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

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: 230 lbs/hr 881.45 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):  140

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

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Emission Unit Information Section of
Information for Facility_ID: 1 Emission Unit #: 1 Pollutant #: 4
Basis For Allowable Emission #: 2

Allowable Emissions (Pollutant identified on front page)

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: 690 lbs/hr 377.8 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):  149
Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.

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

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

# 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					
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 < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	p to 3 hrs/24 hrs, with				

	<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 #: 3

1. Visible Emissions Subtype: VE100					
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other					
3. Allowable Opacity: Normal Conditions:  Maximum Period of Excess Opacity Allowed: 60 min/hr  **The condition of the conditi					
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</b>	Unit	Information	Section	of
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Information for Facility-ID: 1 Emission Unit #: 1

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: 1403

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/04/95

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

Required by 40 CFR 75.

<b>Emission</b>	Unit	Informat	ion Section	of
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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-47157-278

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

Emission Unit Information Section of	of
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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: N3L2496T

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

Emission Cart amorametica Section	Emission	Unit !	Informa	tion	Section	0	ſ
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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: 6263D

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

<b>Emission Unit Information</b>	Section	of
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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: 42-47133-277

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

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

## 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.

Emission Unit Information 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.
- [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 U

U

SO2

NO2

4. Baseline Emissions:

PM lbs/hr

tons/yr

SO2 lbs/hr

tons/yr

NO2 tons/yr

5. PSD Comment (limit to 200 characters):

This unit was constructed in 1960 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this emissions unit.

## 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: PPEU1_1.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- 2. Fuel Analysis or Specification: PPEU1_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: PPEU1_4.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- Compliance Test Report : Previously submitted date:
   Attached Document ID / Previously submitted, Date / Not Applicable
- 6. Procedures for Startup and Shutdown: PPEU1_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: PPEU1_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: PPEU1_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

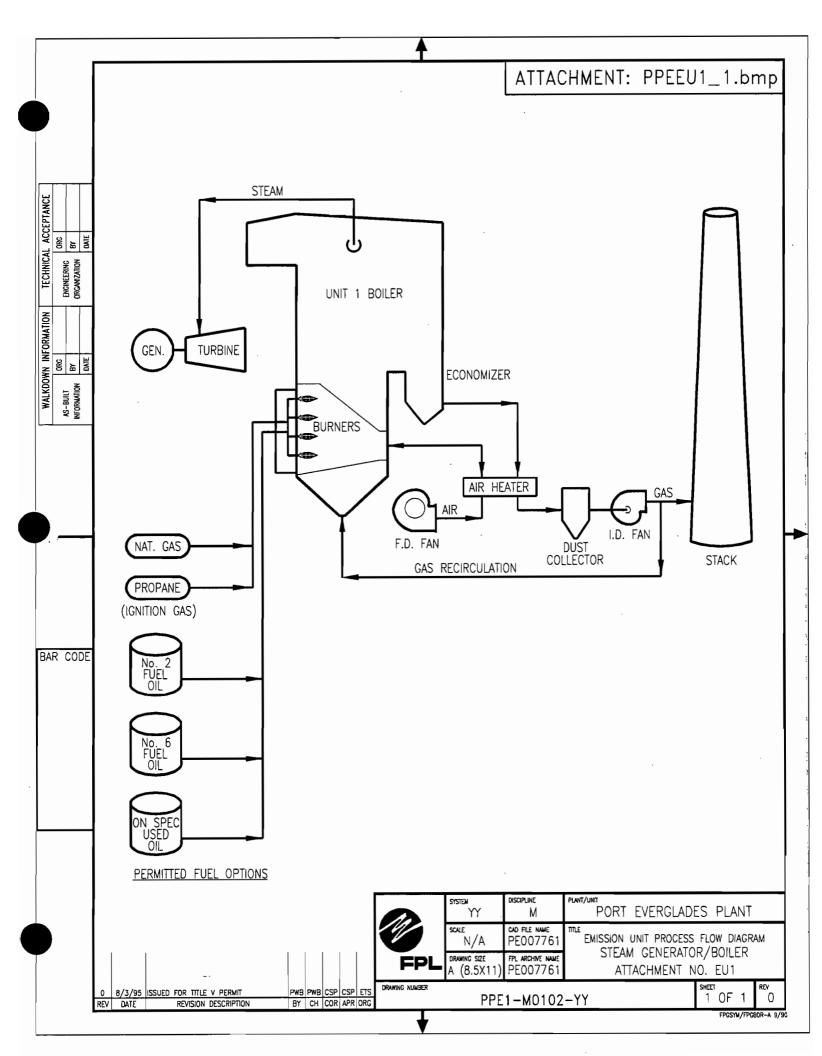
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



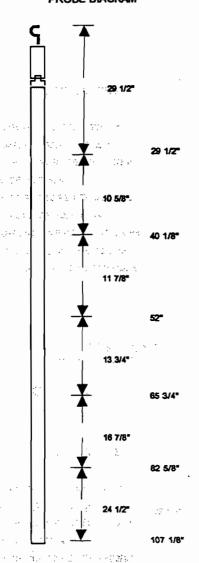
#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES PORT EVERGLADES

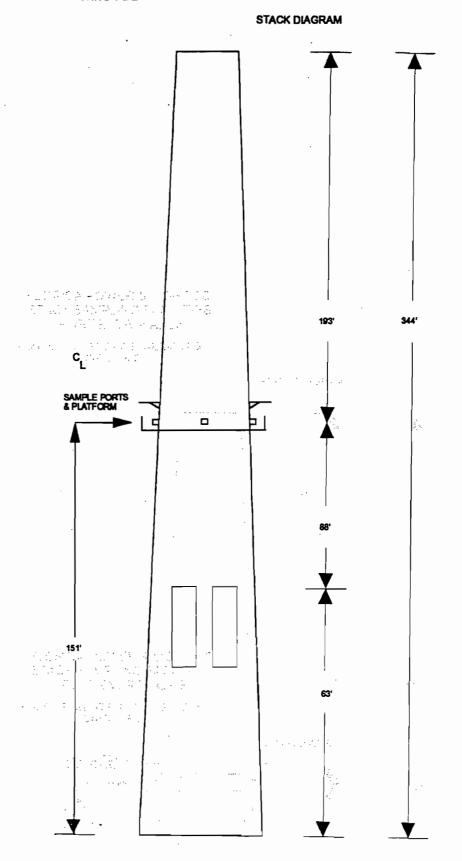
#### FOSSIL FUEL STEAM GENERATORS UNITS 1 & 2

#### STACK SPECIFICATIONS

SAMPLING DIAMETER: 228.1 in.
SAMPLING AREA: 283.8 eq. ft.
SAMPLING PORT DEPTH: 24 5/8 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





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.

### Attachment PPEU1 2.txt

## Fuel Analysis Natural Gas Analysis (typical)²

Parameter	Typical value	Max value
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124	none
% sulfur (grains/CCF)	0.43 ¹	1 grain / ccf
% riitrogen (by volume)	0.8	none
% ash	negligible	none

*Note: The values listed are "typical" values based upon information supplied to FPL by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

- (1) Data from laboratory analysis
- (2) 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 PPEU1_2.txt

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

Parameter	Typical value	<u>Specifications</u>	
API gravity (@ 60° F)	6 - 12	none	
Heat content(MBtu/bbl)	6,310 - 6420	6,340 ¹	
% Sulfur	1.0	2.5 max ³	
% Nitrogen	$0.2 - 0.5^2$	none	
% Ash	$0.06 - 0.09^2$	0.10 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, 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 PPEU1_2.txt

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

<u>Parameter</u>	Typical value	<u>Specifications</u>
API gravity (@ 60 F)	35.0 ²	30 - 40¹
Heat content (MBtu/bbl)	5,700 - 5,800 ²	none
% sulfur	0.3 - 0.5 ¹	0.5 maximum¹
% nitrogen	no specification	none
% ash	<0.01 ²	0.01 ¹

- (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 PPEU1_2.txt

## Fuel Analysis <a href="Propane">Propane (typical)¹</a>

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

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

- (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 PPEU1 2.txt

## 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 for used oil follows:

Parameter	Typical value	<u>Specifications</u>	
API gravity (@ 60 F)	30.0 ¹	none	
Heat content (MBtu/bbl)	6,000 ¹	none	
% sulfur	0.3 ¹	none	
% riitrogen	negligible	none	
% ash	0.01 ¹	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 PPEU1_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

**B. Low Nox Burners** - Due to ozone nonattainment in the southern Florida airshed, the Port Everglades facility installed "Low Nox burners" which have as their primary purpose the reduction of NOx produced during combustion. The installed burners have reduced NOx production by 9.09% on natural gas fuel, and by 10% on residual oil fuel (in lb / mmBtu, comparing baseline emission rates with permitted NOx RACT emission rates).

### Attachment PPEU1_6.txt

#### 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 PPEU1_10.txt Alternative Methods of Operation

### Operation at Various Capacities and Heat Input Rates

The Port Everglades Unit 1 and 2 boilers may each be operated up to 8760 hours per year at heat input rates from zero to 2,300 MMBtu per hour on No.#6 oil, and from zero to 2,400 MMBtu per hour on natural gas. When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

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

The units may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. The units may occasionally utilize propane fuel to light off (start up) the boiler, then switch 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. The quantity of on-specification used oil shall not exceed 2,442,972 gallons per year for Units 1 and 2.

Current emissions limitations are as follows:

Pollutant
Particulate matter-steady state
Particulate matter-soot blowing
Sulfur dioxide
Emission Limit
0.1 lb/MMBtu
0.3 lb/MMBtu
2.75 lb/MMBtu

Nitrogen oxides 0.2 lb/mmBtu (natural gas, 30-day rolling average) 0.36 lb/mmBtu (residual oil, 30-day rolling average)

### Oil and Gas Co-firing

These emission units may co-fire natural gas with residual oil. When combusting both fuels simultaneously, the percentage of natural gas will be adjusted to ensure that the applicable SO2 emission limit and visible emission limits are complied with.

### Soot blowing

The units 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 not 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)₂ 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 Port Everglades, 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 PPEU1_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 Port Everglades 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.

After the second stage treatment, two or more rinses are performed, in order to wash the cleaning solution from the inside of the boiler tubes. 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 for metals. 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 disposed of 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).

### **BEST AVAILABLE COPY**

### Attachment PPEU1 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).

### A0 06-223345 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 2,300 mmBtu/hr during fuel oil firing or 2,400 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis and by measuring fuel flow to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSIO	N LIMITS		
Pollutant	Fuel	lb/mmBtu	Test Method
Particulate Matter ⁽¹⁾ Steady state	Oil .	0.1	EPA Method 5 or 17
sootblowing	Oil	0.3	EPA Method 5 or 17
SO2 ⁽¹⁾	Oil	2.75	Monthly fuel analysis
NOx-RACT NOx (2)	Oil	0.36 or 823 lbs/hr	CEM
NOx (2)	Gas	0.20 or 480 lbs/hr	CEM
			•

(1)For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis specified. Records are maintained to demonstrate compliance.

These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.

### **BEST AVAILABLE COPY**

To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel onsumption for each boiler and monthly records of heating value for such fuel. All records shall be maintained a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

5. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Air Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the department as specified.

Emission	Unit	Informa	tion	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

1.	. Re	egu	lated 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.

Emission Chit initi mation occion	<b>Emission</b>	Unit In	formation	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): Port Everglades Boiler Unit 2
- 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 reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

### **Emissions Unit Control Equipment**

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

B. Control Equipment #: 2

1. Description (limit to 200 characters):
 Low NOx Burners

2. Control Device or Method Code: Modified Furnace or Burner Design

C. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

#### **Emissions Unit Details**

- 1. Initial Startup Date (DD-MON-YYYY): 04/01/61
- 2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
- 3. Package Unit:

Manufacturer: Westinghouse/Combustion Eng.

Model

Number:

- 4. Generator Nameplate Rating: 225 MW
- 5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

- 1. Maximum Heat Input Rate: 2400 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 given above reflects natural gas firing. Maximum heat input rate for residual oil is 2,300 mmBtu/hour. Method of compliance for heat input is fuel sampling & analysis.

### **Emissions Unit Operating Schedule**

Requested Maximum Operating S	Schedule:	

Emission Unit Information Section ____ of ____

hours/day days/week

weeks/yr 8760 hours/yr

Emission Unit Information Section — Of	Emission	t 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)

40 O D D 200 00		40.000.000	
40 C.F.R. 279.72	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.55(c)	F.A.C. 62-210.700 (6)
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.55(e)	F.A.C. 62-214.300
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.56	F.A.C. 62-214.330
40 C.F.R. 72.20(c)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.60(a)	
40 C.F.R. 72.21(a)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.60(b)	F.A.C. 62-214.350 (2)
40 C.F.R. 72.21(b)		40 C.F.R. 75.60(c)(3)	F.A.C. 62-214.350 (3)
40 C.F.R. 72.21(d)	40 C.F.R. 75.10(a)(3)(i)		F.A.C. 62-214.350 (5)
1	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.22(a)	40 C.F.R. 75.10(b)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(c)	40 C.F.R. 75.10(c)	40 C.F.R. 75.61(b)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.23	40 C.F.R. 75.10(d)	40 C.F.R. 75.62	F.A.C. 62-214.370 (4)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(f)	40 C.F.R. 75.63	F.A.C. 62-214.370 (7)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(g)	40 C.F.R. 75.64(a)	F.A.C. 62-214.430
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.64(b)	
40 C.F.R. 72.30(c)	40 C.F.R. 75.11(c)(1)	40 C.F.R. 75.64(c)	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(d)		40 C.F.R. 75.64(d)	paragraph 2
40 C.F.R. 72.32	40 C.F.R. 75.11(d)	40 C.F.R. 75.65	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.33(b)	40 C.F.R. 75.12(a)		F.A.C. 62-296.405(1)(c)1.j.
` '	40 C.F.R. 75.12(b)	40 C.F.R. 75.66(a)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(c)	40 C.F.R. 75.13(a)	40 C.F.R. 75.66(b)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(d)	40 C.F.R. 75.13(b)	40 C.F.R. 75.66(c)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.40(a)	40 C.F.R. 75.14(a)	40 C.F.R. 75.66(d)	F.A.C.
40 C.F.R. 72.40(b)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.66(g)	62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(c)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(h)	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(d)	40 C.F.R. 75.20(c)	40 C.F.R. 76.13	
40 C.F.R. 72.51	40 C.F.R. 75.20(d)	40 C.F.R. 77.3	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.90	40 C.F.R. 75.20(f)	40 C.F.R. 77.5(b)	F.A.C. 62-296.500(2)(c)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(g)	40 C.F.R. 77.6	F.A.C. 62-296.570(4)(a)3.
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.21(a)	Broward DNRP Ch	F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.9(a)(2)		27-173(a) (state only)	F.A.C. 62-296.570(4)(b)1.
40 C.F.R. 72.9(b)	40 C.F.R. 75.21(b)	Broward DNRP Ch	F.A.C. 62-296.570(4)(c)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.21(c)	27-173(c) (state only)	F.A.C. 62-297.310(1)
	40 C.F.R. 75.21(d)		F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.21(e)	Broward DNRP Ch	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(f)	27-173(d) (state only)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.22	Broward DNRP Ch	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(d)	40 C.F.R. 75.24	27-173(e) (state only)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(e)	40 C.F.R. 75.30(a)(1)	Broward DNRP Ch	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(f)	40 C.F.R. 75.30(a)(2)	27-173(f) (state only)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.30(a)(3)	Broward DNRP Ch	F.A.C. 62-297.310(4)(e)
40 C.F.R. 73.33	40 C.F.R. 75.31	27-173(g) (state only)	F.A.C. 62-297.310(5)
40 C.F.R. 73.35	40 C.F.R. 75.32	Broward DNRP Ch	F.A.C. 62-297.310(6)(a)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.33	27-173(h) (state only)	F.A.C. 62-297.310(6)(a)
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.35	Broward DNRP Ch 27-174	F.A.C. 62-297.310(6)(d)
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.36	(state only)	
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.4(a)(4)(ii)	Broward DNRP Ch 27-176	F.A.C. 62-297.310(6)(e)
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.5	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.51(c)	Broward DNRP Ch 27-177	F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix B	40 C.F.R. 75.51(c)	(state only)	F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.53(a)	Broward DNRP Ch 27-179	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.53(b)	(state only)	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.53(c)		F.A.C. 62-297.310(7)(a)4.
	40 C.F.R. 75.53(d)(1)	Broward DNRP Ch 27-180	F.A.C. 62-297.310(7)(a)5.
40 C.F.R. 75 Appendix F	40 C.F.R. 75.54	(state only)	F.A.C. 62-297.310(7)(a)9.
		Broward DNRP Ch 27-181	F.A.C. 62-297.310(7)(c)
		(state only)	F.A.C. 62-297.310(8)
		Broward DNRP Ch 27-184	. ''
		(state only)	Table 62-297.310-1
		Broward DNRP Ch 27-188	
		(state only)	
		Broward DNRP Ch 27-189	
		(state only)	
		F.A.C. 62-204.800(12)	
		(state only)	
		F.A.C. 62-204.800(13)	
		(state only)	
		F.A.C. 62-204.800(14)	
		(state only)	
		F.A.C. 62-210.650	
		F.A.C. 62-210.700 (1)	
		F.A.C. 62-210.700 (2)	
		F.A.C. 62-210.700 (2)	
	•	F.A.C. 62-210.700 (4)	
		2.3.10. 02-210.700 (4)	
		1	†

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

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

Information for Facility-ID 1 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 characters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 2, Port Everglades Unit 2 boiler
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 343 ft
7. Exit Diameter: 14 ft
8. Exit Temperature: 289 °F
9. Actual Volumetric Flow Rate: 805741.5 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: 587.4 North: 2885.2
14. Emission Point Comment (limit to 200 characters):  Information provided in item #9 above is reflective of the highest measured flow rate during the particulate test performed on this unit in March 1995. Flow rates measured at other times may vary.

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

Information for Facility_ID:1 Emission Unit #: 2 Segment #: 1

oil, propane gas or on-specification used oil from FPL operations.

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
EU 2 Natural gas burned in Unit 2 Boiler

2. Source Classification Code (SCC): 1-01-006-01

3. SCC Units: Million cubic feet burned

4. Maximum Hourly Rate: 2.19

5. Maximum Annual Rate: 19188.6

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 0.0031

8. Maximum Percent Ash:

9. Million Btu per SCC Unit: 1050

10. Segment Comment (limit to 200 characters):
The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel

Emission Unit Information Section of	Emission	Unit Ir	formation	Section	of
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	Segment	Description	and Rate:
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Information for Facility_ID :1 Emission Unit #: 2 Segment #: 2

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
 EU 2 Number 6 oil burned in Unit 2 boiler
 Source Classification Code (SCC): 1-01-004-01
 SCC Units: thousand gallons burned
 Maximum Hourly Rate: 15.24
 Maximum Annual Rate: 133472.56
 Estimated Annual Activity Factor:
 Maximum Percent Sulfur: 2.5
 Maximum Percent Ash:
 Million Btu per SCC Unit: 152

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

10. Segment Comment (limit to 200 characters):

1

	<b>Emission</b>	Unit	Information	Section	of
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	Segment	Description	n and Rate:
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Information for Facility_ID:1 Emission Unit #: 2 Segment #: 3

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
 EU 2 Unit 2 Boiler burning Number 2 fuel oil

 Source Classification Code (SCC): 1-01-005-01

 SCC Units: thousand gallons burned

 Maximum Hourly Rate: 16.9
 Maximum Annual Rate: 148147
 Estimated Annual Activity Factor:

 Maximum Percent Sulfur: 0.5
 Maximum Percent Ash:
 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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information S</b>	Section	of
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Segment Description and Rate
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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): EU 2 Propane burned in Unit 2
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 2.4
5. Maximum Annual Rate: 21024
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.0031
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 a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas, or on-specification used oil from FPL operations.

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

Information for Facility_ID:1 Emission Unit #: 2 Segment #: 5

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     EU 2 On-specification used oil burned in Unit 2 boiler
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 16.9
5. Maximum Annual Rate: 30
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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

Emission	Unit I	nformation	Section	of
	CALL A			O1

<u>Segment Description and Rate:</u> 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): EU 2 co-firing all possible combinations of natural gas, 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:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):  Air Operation Permit # AO-06-223350 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.

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

Segment Descri	ption and	Rate:
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Information for Facility_ID:1 Emission Unit #: 2 Segment #: 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 2 Boiler chemical cleaning waste evaporated in Unit 2. This process may be undertaken while firing natural gas or residual 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).

Emission	Unit	Information	Section	of

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

### Information for Facility_ID: 1 Emission Unit #: 2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	024	NA	EL
CO	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	NS
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS

Emission Unit Information Section of	<b>Emission</b>	Unit I	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: 1 Emission Unit #: 2 Pollutant #: 1

### **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 6325 lbs/hr 27703.5 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: DEP 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 * 2300 mmBtu/hr = 6325 lb/hr	
(6325 lb/hr * 8760 hr/yr) / 2000 lb/ton = 27703.5 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200	characters):

Emission Unit Information Section of
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: 6325 lbs/hr 27703.5 tons/yr
5. Method of Compliance: Fuel sampling & analysis
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
167
2.75 lb/mmBtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.].
Equivalent allowable emissions are given for liquid fuel firing.

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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: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 828 lbs/hr 3626.64 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.36 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)1.
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): 0.36 lb/mmBtu * 2300 mmBtu/hr = 828.0 lb/hr
(828.0 lb/hr * 8760 hr/yr) / 2000 lb/ton = 3626.64 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.20 on natural gas fuel

Emission Unit Information Section _	of
Information for Facility_ID: 1	Emission Unit #: 2 Pollutant #: 2
<b>Basis For Allowable Emission</b>	#: 1

Allowable Emissions (Pollutant identified on front page)

Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.36 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 828 lbs/hr 3626.64 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
0.36 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)1] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 2 Pollutant #: /
Basis For Allowable Emission #: 2

Allowable Emissions (Pollutant identified on front page)

Basis for Allowable Emissions Code: Emissions limit required by rule
 Future Effective Date of Allowable Emissions:
 Requested Allowable Emissions and Units: 0.2 Units: lb/mmBtu
 Equivalent Allowable Emissions: 480 lbs/hr 2102.4 tons/yr
 Method of Compliance: Continuous Emissions Monitor
 Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

0.20 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)1] on NOx emissions [30-day rolling avg - Rule

62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

1

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

Information for Facility_ID: / Emission Unit #: 2 Pollutant #: 4

### **Pollutant Detail Information**

1. Pollutant Emitted: Particulate Matter - Total	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 287.5 lbs/hr 1259.25 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: DEP 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 2300 mmBtu/hr = 287.5 lb/hr 287.5 lb/hr x 8760 hr/yr x ton/2000lb = 1259.25 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 The particulate matter emisssion limit for 3hrs/24hrs at 0.3 lb/mmBtu and equivalent to an average of 0.125 lb/mmBtu.	

Emission Unit Information Section _	of
Information for Facility_ID: 1	Emission Unit #: 2 Pollutant #: 4
Basis For Allowable Emission	<b>¥:</b> 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: 230 lbs/hr 881.45 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
<ul> <li>6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):</li> <li>140</li> <li>0.1 lb/mmBtu is the current regulatory limit on PM [Rule 62-296.405(1)(b)]. Equivalent allowable emissions</li> </ul>
are given for liquid fuel firing.

Emission Unit Information Section	of			
Information for Facility_ID:	Emission	Unit #:	2 Pollutant	<b>#:</b> 4
<b>Basis For Allowable Emission</b>	<b>#:</b> 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: 690 lbs/hr 377.8 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):  149  Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.

1

	<b>Emission</b>	Unit In	formation	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 #: 1

1. Visible Emissions Subtype: VE40
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
Allowable Opacity:     Normal Conditions: 40
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 Informa	tion 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, with < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.

Emission Unit Information 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 #: 2

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 d shutdown, and up to 2 hrs/24 hrs for malfunctions.	luring startup and

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

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: N3K4404T

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

Emission	Unit	Informatio	n Section	of

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: 6264D

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

<b>Emission Unit Information Section</b>	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: 42-47167-278

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

Required by 40 CFR 75.

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

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

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

Continuous Monitor #: 1

### **Continuous Monitoring System**

Required by 40 CFR 75.

Parameter Code:
 Pollutant(s): Sulfur Dioxide
 CMS Requirement Code(R/O): RULE Rule / Other
 Monitor Information:
 Manufacturer: TECO
 Model Number: 43B
 Serial Number: 43B-47139-278
 Installation Date (DD-MON-YYYY): 07/09/94
 Performance Specification Test Date (DD-MON-YYYY): 09/08/94

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

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: 1457

5. Installation Date (DD-MON-YYYY): 07/09/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/04/95

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

Required by 40 CFR 75.

Emission Unit Information Section of	it 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.

Emission	Unit 1	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.
- [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 U

U

SO2

NO2

4. Baseline Emissions:

PM

lbs/hr

tons/yr

SO2 lbs/hr

tons/yr

NO2 tons/yr

PSD Comment (limit to 200 characters):

This unit was constructed in 1961 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this unit.

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

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

#### Supplemental Requirements for All Applications

9. Other Information Required by Rule or Statute: NA

Attached Document ID / Not Applicable

1. Process Flow Diagram: PPEU2 1.bmp Attached Document ID / Not Applicable / Waiver Requested 2. Fuel Analysis or Specification: PPEU1_2.txt Attached Document ID / Not Applicable / Waiver Requested 3. Detailed Description of Control Equipment: PPEU1 3.txt Attached Document ID / Not Applicable / Waiver Requested 4. Description of Stack Sampling Facilities: PPEU1 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: PPEU1_6.txt Attached Document ID / Not Applicable 7. Operation and Maintenance Plan: NA Attached Document ID / Not Applicable 8. Supplemental Information for Construction Permit Application: NA Attached Document ID / Not Applicable

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

- 10. Alternative Methods of Operation: PPEU1_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 : NA Attached Document ID / Not Applicable
- Enhanced Monitoring Plan: NA Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

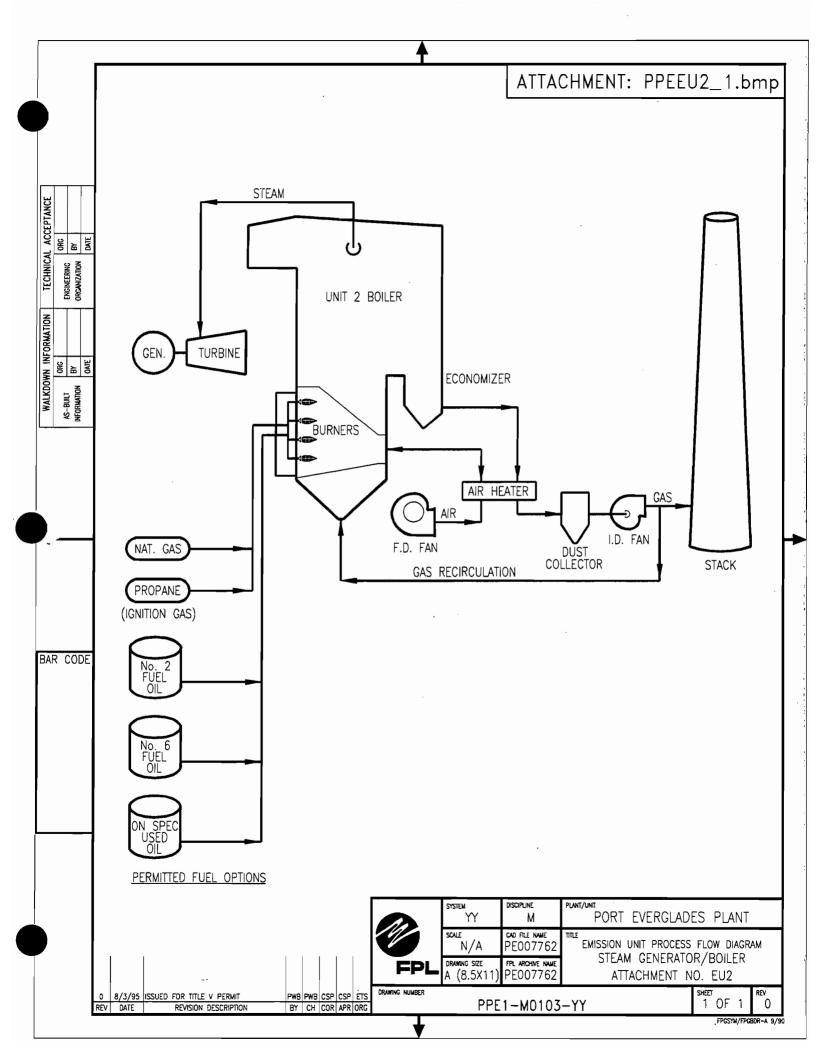
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES PORT EVERGLADES

#### FOSSIL FUEL STEAM GENERATORS UNITS 1 & 2

### STACK SPECIFICATIONS STACK DIAGRAM SAMPLING DIAMETER: 228.1 in. SAMPLING AREA: 283.8 eq. ft. SAMPLING PORT DEPTH: 24 5/8 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 40.000 The Ministry 344' 29 1/2" SAMPLE PORTS & PLATFORM 10.5/8* 40 1/8" 11 7/8" 151 13 3/4" 65 3/4" 16 7/8" 82 5/8" 24 1/2" 107 1/8*

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.

#### Attachment PPEU2_13.txt

#### Identification of Additional Applicable Requirements

A0 06-223350 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 2,300 mmBtu/hr during fuel oil firing or 2,400 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis and by measuring fuel flow to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSION LIMITS			
Pollutant	Fuel	lb/mmBtu	Test Method
Particulate Matter ⁽¹⁾ Steady state	Oil	0.1	EPA Method 5 or 17
sootblowing	Oil	0.3	EPA Method 5 or 17
SO2 ⁽¹⁾	Oil	2.75	Monthly fuel analysis
NOx-RACT NOx ⁽²⁾	Oil	0.36 or 823 lbs/hr	CEM
NOx ⁽²⁾	Gas	0.20 or 480 lbs/hr	CEM

⁽¹⁾ For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis as specified. Records are maintained to demonstrate compliance.

4. To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for each boiler and monthly records of heating value for such fuel All records shall be maintained or a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

⁽²⁾ These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.

5. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the Lapartment as specified.

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Petition for Reduction in Quarterly Particulate Emissions Compliance Testing; PLORIDA POWER AND LIGHT COMPANY,

Petitioner.

OGC Case Nos.: 83-0578 83-0577, 83-0576, 83-0585, 83-0586, 83-0587, 83-0588 83-0581, 83-058A, ED

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### ORDER GRANTING PETITION FOR REDUCED . FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, FLORIDA POWER AND
LIGHT COMPANY, filed a Petition for Reduction in Quarterly
Particulate Emissions Compliance Testing pursuant to Florida
Administrative Code Rule 17-2.600(5)(b)1 for the following foesil
fuel steam generating units:

Port Everglades Plant Unit No. 2 Port Everglades Plant Unit No. 3 Port Everglades Plant Unit No. 4 Turkey Point Plant Unit No. 1 Turkey Point Plant Unit No. 2 Riveria Plant Unit No. 3 Riveria Plant Unit No. 4 Hanatee Plant Unit No. 1 Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btu per hour.

The petition and supporting documentation submitted by the Petitioner indicate that between August 1979 and July 21, 1983, these units were afforded relief from the particulate standard contained in Florida Administrative Code Rule 17-2.600(5)(b)2 under the terms of a Department-issued variance. During the same period of time the Company elected to test quarterly as permitted under Rule 17-2.600(5)(b)1. Despite the existence of the variance, the tests results submitted during the last two years reveal that each of the above-listed units met the particulate emissions limitations contained in Rule 17-2.600(5)(b)2 of 0.1 pounds per million Btu heat input.

florida Administrative Code Rule 17-2.600(5)(b)1 specifically provides that I may reduce the frequency of particulate testing

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upon a demonstration that the particulate standard has been regularly met. The particulate standard referred to is the general standard found in the rule--0.1 parts per million Btu heat input--not a relaxed emission limit established by a variance.

The intent of Rule 17-2.600(5)(b)1 is to ensure that before the frequency of particulate testing is reduced, the source has established a record of complying with the requirements of Florida Administrative Code Chapter 17-2 relating to particulate matter emissions. Petitioner has documented that each of these units has a history of regulary complying with the particulate matter standard applicable to them.

IT IS ORDERED that the present petition is GRANTED. Under the terms of Rule 17-2.600(5)(b)1, Petitioner may reduce the frequency of particulate testing to an annual basis for each of the units named in this Order. If, however, any of the units fails to comply with the applicable particulate or visible emission standard, this Order will terminate upon written notice by the Department.

The Petitioner may request a hearing in accordance with Section 120.57, Florida Statutes, and Florida Administrative Code Chapters 17-1 and 28-5. The request for hearing must be filed (received) in the Office of General Counsel of the Department, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of receipt of this Order. Pailure to file a request for hearing within this time shall constitute a waiver of Petitioner's right to request a hearing under Section 120.57, Florida Statutes.

DONE and ORDERED this  $\frac{24}{}$  day of April, 1984.

If S.J. we this wide pursuant to \$120.52 (9), Further S.J. with the designated Department Clark, receipt of which is nereby acknowledged.

Clerk

Date

VICTORIA J. TSCHINKEL Secretary

STATE OF PLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301 (904)488-4805

### 00037

#### CERTIFICATE OF SERVICE

> Mance E. Whickst-NANCY E. WRIGHT Assistant General Comment

State of Florida Department of Environmental Regulation 2600 Blair Stone Road Tallabassee, Florida 32301 904/488-9730

### DEPARTMENT OF ENVIRONMENTAL REGULATION BEST AVAILABLE COPY

In the matter of: Florida Power and Light Co., Inc.

Petitioner

ASP-86-E01



### ORDER APPROVING REQUEST FOR ALTERNATIVE PROCEDURES AND REQUIREMENTS

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Florida Power and Light Company ("Petitioner") submitted to the Department a request for approval of alternate source sampling procedures and requirements. Having considered the written request, a copy of which is attached hereto as Exhibit 1, and supporting documentation, the following Findings of Fact, Conclusions of Law and Order are entered:

#### FINDINGS OF FACT

- On May 30, 1986, Petitioner submitted a written request for approval of alternative procedures and requirements for Manatee Plant Units 1 and 2.
- 2. The petition requested that the Department grant Petitioner the authority to use EPA Reference Method 7E as an alternate procedure for measuring nitrogen oxides (NO $_{\rm X}$ ) emissions from the facility.
- 3. As grounds for the request, Petitioner has stated that using EPA Reference Method 7E in place of the existing EPA Reference Method 7, would allow the testing to be done quicker and would save Petitioner about \$4000 per test. The Petitioner also stated that Reference Method 7E would soon be certified by the Federal government as an adequate procedure for demonstrating compliance with NO_X emissions. EPA Reference Method 7E was subsequently promulgated in the Federal Register and approved method on June 11, 1986.
- 4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

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5. The relief requested is within the scope of relief which can be granted by the Department pursuant to Section 403.061, Florida Statutes, and Section 17-2.700 (3), Florida Administrative Code. Such relief does not relieve Petitioner of the responsibility to comply with all applicable emission limiting standards, ambient air quality standards, or other permit conditions.

#### ORDER

6. Having considered the petition and supporting documentation, it is hereby ORDERED that:

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of permit No. A041-51630 and specific condition 1 of permit No. A041-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

This order shall constitute final agency action by the Department pursuant to Section 120.52 (9), Florida Statutes. The Petitioner may file a petition for an administrative hearing on this order within twenty-one (21) days of receipt of the order. The petition shall be filed with the Department of Environmental Regulation, Office of General Counsel, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, and shall be in the form required by Chapters 17-103 and 28-5, Florida Administrative Code. Failure to file a petition within the time specified above shall constitute a waiver by the Petitioner to an administrative hearing under Chapter 120, Florida Statutes.

Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to \$120.52 (9), Storica Statutes, with the designated Department Clark, receipt of which is hereby acknowledged.

Cherk 9.5.PL

Victoria J. Tschinkel Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301

Telephone: (904) 488-4805

#### **BEST AVAILABLE COPY**

#### 17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE

#### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

#### REQUEST FOR EXCEPTION

UNIT: Oil Fired Steam

PERMIT NO: A041-51630 (Unit 1)

Electric

and A041-64792 (Unit 2)

Generating -

EMISSION LIMITING STANDARD:

850 megawatts

NO_x - 0.30 pounds per

million BTU heat input

PLANT: Manatee

DESCRIPTION: Compliance Testing for NO_x for Manatee Plants

Units No. 1 and No. 2.

PROVISION TO BE EXCEPTED:

Section 17-2.700(2)(a).,F.A.C. and

Specific Condition 1 of the Air

Permits A041-51630 and A041-64792

EXCEPTION REGJESTED: Use of EPA Reference Method 7E

in lieu of EPA Reference Method 7

BASIS OF REQUEST: EPA Reference Method 7E has been promulgated

in the Federal Register; will allow quicker testing; and will save the petitioner

approximately \$4000 per each test.

Emission Unit Information Section	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:
- [ 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>	Unit	Information	Section	of

### 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): Port Everglades Boiler Unit 3
- 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): Y
- 5. Emissions Unit Major Group SIC Code: 49
- 6. Emissions Unit Comment (limit to 500 characters):

The generator nameplate rating given reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

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

- A. Control Equipment #: 1
  - 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	#	:	2
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1. Description (limit to 200 characters): Low NOx Burners

2. Control Device or Method Code: Modified Furnace or Burner Design

#### **C.** Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

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

#### **Emissions Unit Details**

- 1. Initial Startup Date (DD-MON-YYYY): 04/01/65
- 2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
- 3. Package Unit:

Manufacturer: GE/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: 3850 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 reflects natural gas firing. Maximum heat input rate for residual oil is 3850 mmBtu/hour. Method of compliance for heat input is fuel sampling & analysis.

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

E	Emission Unit Information Section	n of	
	Requested Maximum Opera	ating Schedule:	
	hours/day	days/week	
	weeks/yr	8760 hours/yr	

Emission	Unit I	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 2	Applicable	_		
]				

DEP Form No. 62-210.900(1)

40 C.F.R. 279.72
40 C.F.R. 72.20(a)
40 C.F.R. 72.20(a) 40 C.F.R. 72.20(b) 40 C.F.R. 72.20(c) 40 C.F.R. 72.21(a)
40 C.F.R. 72.20(c)
40 C.F.R. 72.21(a)
40 C.F.R. 72.21(b)
40 C.F.R. 72.21(d)
40 C.F.R. 72.21(b) 40 C.F.R. 72.21(d) 40 C.F.R. 72.22(a)
40 C.F.R. 72.22(c)
40 C.F.R. 72.23
40 C.F.R. 72.24(a)
40 C F R 72 30(a)
40 C.F.R. 72.30(a) 40 C.F.R. 72.30(b)(2)
40 C F P 72 30(c)
40 C.F.R. 72.30(c) 40 C.F.R. 72.30(d)
40 C.F.R. 72.30(d)
40 C.F.R. 72.32
40 C.F.R. 72.33(b) 40 C.F.R. 72.33(c)
40 C.F.R. 72.33(c)
40 C.F.R. 72.33(d)
40 C.F.R. 72.40(a)
40 C.F.R. 72.40(b)
40 C.F.R. 72.40(c) 40 C.F.R. 72.40(d)
40 C.F.R. 72.40(d)
40 C.F.R. 72.51 40 C.F.R. 72.90
40 C.F.R. 72.90
40 C.F.R. 72.9(a)(1)(iii)
40 C.F.R. 72.9(a)(1)(iii) 40 C.F.R. 72.9(a)(1)(i) 40 C.F.R. 72.9(a)(2)
40 C.F.R. 72.9(a)(2)
40 C.F.R. 72.9(b)
40 C.F.R. 72.9(c)(1)(iii)
40 C.F.R. 72.9(c)(2)
40 C.F.R. 72.9(c)(4)
40 C.F.R. 72.9(c)(5)
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40 C.F.R. 72.9(d) 40 C.F.R. 72.9(e) 40 C.F.R. 72.9(f)
40 C.F.R. 72.9(e)
40 C.F.R. 72.9(1)
40 C.F.R. 72.9(g)(4) 40 C.F.R. 73.33
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40 C.F.R. 75 Appendix C-1
40 C.F.R. 75 Appendix C-1 40 C.F.R. 75 Appendix C-2 40 C.F.R. 75 Appendix D
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40 C.F.R. 75 Appendix G-2
40 C.F.R. 75 Appendix G-4 40 C.F.R. 75 Appendix H 40 C.F.R. 75.10(a)(1) 40 C.F.R. 75.10(a)(2) 40 C.F.R. 75.10(a)(3)(i) 40 C.F.R. 75.10(a)(4) 40 C.F.R. 75.10(b) 40 C.F.R. 75.10(c) 40 C.F.R. 75.10(d) 40 C.F.R. 75.10(f) 40 C.F.R. 75.10(g) 40 C.F.R. 75.10(g) 40 C.F.R. 75.11(b)(1) 40 C.F.R. 75.11(c)(3)
40 C.F.R. 75 Appendix H
40 C.F.R. 75.10(a)(1)
40 C F R 75 10(a)(2)
40 C F P. 75 10(a)(2)(1)
40 C.F.R. 75.10(a)(3)(1)
40 C.F.R. /5.10(a)(4)
40 C.F.R. 75.10(b)
40 C.F.R. 75.10(c)
40 C.F.R. 75.10(d)
40 C.F.R. 75.10(f)
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40 C F R 75 11(b)(1)
40 C.F.R. 75.11(c)(3)
40 C.F.R. 75.11(c)(5)
40 C.F.R. 75.11(d) 40 C.F.R. 75.12(a) 40 C.F.R. 75.12(b)
40 C.F.R. 75.12(a)
40 C.F.R. 75.12(b)
10 C F P 75 13(a)
40 C.F.R. 75.13(b)
40 C.F.R. 75.13(a) 40 C.F.R. 75.13(b) 40 C.F.R. 75.14(a) 40 C.F.R. 75.20(a) 40 C.F.R. 75.20(b) 40 C.F.R. 75.20(c)
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40 C F P. 75 21(a)
40 C.F.R. 75.21(c)
40 C.F.R. 75.21(d)
40 C.F.R. 75.21(e)
40 C.F.R. 75.21(f)
40 C.F.R. 75.22
40 C.F.R. 75.24
40 C F R 75 30(a)(1)
40 C F P. 75 30(a)(2)
40 C.F.R. 75.30(a)(2)
40 C.F.R. 75.30(a)(3)
40 C.F.R. 75.31
40 C.F.R. 75.32
40 C.F.R. 75.33
40 C.F.R. 75.35
40 C.F.R. 75.36
40 C F R 75 4(a)(4)(ii)
40 C F R 75.5
40 C.F.R. 75.36 40 C.F.R. 75.4(a)(4)(ii) 40 C.F.R. 75.5 40 C.F.R. 75.51(c)
40 C.F.R. /3.31(C)
40 C.F.R. 75.53(a)
40 C.F.R. 75.53(b)
40 C.F.R. 75.53(c)
40 C.F.R. 75.53(a) 40 C.F.R. 75.53(b) 40 C.F.R. 75.53(c) 40 C.F.R. 75.53(d)(1)
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40 C.F.R. 75.55(c)
40 C.F.R. 75.55(e)
40 C.F.R. 75.55(e) 40 C.F.R. 75.56
40 C.F.R. 75.60(a) 40 C.F.R. 75.60(b)
40 C.F.R. 75.60(b) 40 C.F.R. 75.60(c)(3)
40 C.F.R. 75.61(a)(1)
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40 C.F.R. 75.62 40 C.F.R. 75.63
40 C.F.R. 75.64(a)
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40 C.F.R. 75.64(d) 40 C.F.R. 75.65
40 C.F.R. 75.66(a)
40 C.F.R. 75.66(a) 40 C.F.R. 75.66(b) 40 C.F.R. 75.66(c) 40 C.F.R. 75.66(d)
40 C.F.R. 75.66(c)
40 C.F.R. 75.66(d) 40 C.F.R. 75.66(g)
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40 C.F.R. 76.13
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40 C.F.R. 77.5(b) 40 C.F.R. 77.6
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27-173(c) (state only) Broward DNRP Ch
27-173(d) (state only)
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27-173(e) (state only)
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F.A.C. 62-204.800(14)
(state only)
F.A.C. 62-210.650 F.A.C. 62-210.700 (1)
F.A.C. 62-210.700 (2)
F.A.C. 62-210.700 (3) F.A.C. 62-210.700 (4)
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F.A.	C. 62-2	210.7	00 (6	5)
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F.A.	C. 62-2	214.3	50 (3	"
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F.A.	o. 62-2	214.3	70 (1	)
F.A.0	C. 62-2	214.3	70 (3	)
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F.A.	C. 62-2	214.3	70 (7	')
F.A.	C. 62-2 C. 62-2	214.4	30	
F.A.	C. 62-2	296.4	05(1)	)(a)
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F.A.	C. 62-2	296.4	05(1)	)(b)
F.A.	C. <b>62-</b> 2	296.4	05(1)	)(c)1.j.
F.A.0	C. 62-2	296.4	05(1)	(e)(1)
F.A.(	C. 62-2 C. 62-2	296.4	05(1)	(e)(2)
F.A.	C. 62 <b>-</b> 2	296.4	05(1)	(e)(3)
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62-29	96.405	(1)(f	)1.a.(	i)
F.A.	C. 62-2	296.4	05(1)	(f)1.b. (a)1.
F.A.	C. 62-2	296.5	00(2	$(\hat{a})1$ .
F.A.	C. 62-2	296.5	00(2	)(c)
FAC	C. 62-2	96.5	70(4)	)(a)3
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F.A.	C. 62-2 C. 62-2	190.3 104.5	70(4)	)(0)2. \(a\
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r.A.	J. 62-4	197.3 107.3	10(2)	)( <b>D</b> )
F.A.(	C. 62-2	297.3	10(3)	)
F.A.C	C. 62-2	297.3	10(4)	)(a)1.
F.A.(	C. 62-2	297.3	10(4)	(a)2.c.
F.A.	C. 62-2 C. 62-2	297.3	10(4)	)(b)
F.A.G	C. 62 <b>-</b> 2	297.3	10(4)	)(c)
F.A.(	C. 62-2	297.3	10(4)	(d)
F.A.C	C. 62 <b>-</b> 2	297.3	10(4)	(e)
F.A.C	C. 62-2	297.3	10(5)	)
F.A.G	C. 62-2 C. 62-2	297.3	10(6)	(a)
F.A.	C. 62-2	297.3	10(6)	(c)
F.A.	C. 62-2 C. 62-2	297.3	10(6)	(d)
F.A.C	C. 62-2	297.3	10(6)	(e)
F.A.C	C. 62-2	297.3	10(6)	(f)
F.A.C	C. 62-2	297.3	10(6)	(g)
FAC	C. 62-2 C. 62-2	97.3	10(7)	(a)1
FAC	C. 62-2	97 3	10(7)	(a)?
FAC	c. 62-2	97.3	10(7)	(a)2.
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E 4 4	C. 62-2 C. 62-2	71.3	10(7)	(a)3.
r.A.C	J. 02-2	27.5	10(7)	(a)9.
r.A.C	C. 62-2	27.5	10(/)	(c)
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## E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

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

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

Identification of Point on Plot Plan or Flow Diagram:     Unit 3 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 3, Port Everglades Unit 3 boiler.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 343 ft
7. Exit Diameter: 18.1 ft
8. Exit Temperature: 287 °F
9. Actual Volumetric Flow Rate: 1263180.6 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: 587.4 North: 2885.2
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above is reflective of the highest measured flow rate during the particulate test performed on this unit in February 1995. Flow rates measured at other times may vary.

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

Information for Facility_ID:1 Emission Unit #: 3 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 3,on-specification used oil burned in Unit 3
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: 247985.29
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.007
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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission</b>	Unit !	Information	Section	of
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Segment Description and Rate:
Information for Facility_ID: 1 Emission Unit #: 3 Segment #: 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 3 Boiler chemical cleaning waste evaporated in Unit 3. This process may be undertaken while firing natural gas or residual 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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Segment	Description	and Rate:
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Information for Facility_ID:1 Emission Unit #: 3 Segment #: 3

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
EU 3, Number 2 fuel oil burned in Unit 3
 Source Classification Code (SCC): 1-01-005-01
 SCC Units: Thousand gallons burned
 Maximum Hourly Rate: 28.31
 Maximum Annual Rate: 247985.29
 Estimated Annual Activity Factor:
 Maximum Percent Sulfur: 0.5
 Maximum Percent Ash:
 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, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

	<b>Emission</b>	Unit	Information	Section	of
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Segment Description and Rat
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Information for Facility_ID:1 Emission Unit #: 3 Segment #: 1

- Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
   EU 3,natural gas fuel burned in Unit 3
   Source Classification Code (SCC): 1-01-006-01
   SCC Units: Million cubic feet burned
   Maximum Hourly Rate: 3.83
   Maximum Annual Rate: 33580
   Estimated Annual Activity Factor:
   Maximum Percent Sulfur: 0.0031
   Maximum Percent Ash:
   Million Btu per SCC Unit: 1050
- 10. Segment Comment (limit to 200 characters):

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

Emission Unit Information Section of	Emission	Unit	Information	Section	of
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Information for Facility_ID:1 Emission Unit #: 3 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 3, residual oil burned in Unit 3
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: Thousand gallons
4. Maximum Hourly Rate: 25.5
5. Maximum Annual Rate: 223421.45
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
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, natural gas, No. 2 fuel oil, propane gas and on-specification used oil from FPL operations.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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<u>Segment Description and Rate:</u> Information for Facility_ID :1 Emission Unit #: 3 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 3, propane burned in Unit 3
2. Source Classification Code (SCC): -1-01-006-01- 1010100 2
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 4.03
5. Maximum Annual Rate: 35259
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 a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

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

Information for Facility_ID:1 Emission Unit #: 3 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 3 co-firing all possible combinations of natural gas, 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:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Air Operation Permit # AO-06-223351 allows Unit 3 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.

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Emission Unit Information Section _____ of ____

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

Information for Facility_ID: 1 Emission Unit #: 3 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: DEP 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):

Emission Unit Information Section of
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: 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):  167
2.75 lb/mmBtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.].
Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section of	Emission	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: 1 Emission Unit #: 3 Pollutant #: 2

#### **Pollutant Detail Information**

1. Pollutant Emitted: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 2120 lbs/hr 9285.6 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.53 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)2.
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): 0.53 lb/mmBtu * 4000 mmBtu/hr = 2120 lb/hr
(2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.40 on natural gas fuel

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Emission Unit Information Section	of
Information for Facility_ID: /	Emission Unit #: 3 Pollutant #: 2
<b>Basis For Allowable Emission</b>	<b>#:</b> 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: 0.53 Units: 1b/mmBtu
4.	Equivalent Allowable Emissions: 2120 lbs/hr 9285.6 tons/yr
5.	Method of Compliance: Continuous Emissions Monitor
	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) mit to 200 characters):

0.53 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section of
Information for Facility_ID: 1 Emission Unit #: 3 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: 0.4 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 1610 lbs/hr 7051.8 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  194  0.40 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule
62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

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

Information for Facility_ID: 1 Emission Unit #: 3 Pollutant #: 4

### **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: DEP 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/lb x ton/2000lb = 2190 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): The particulate matter emission factor for 3hrs/24hrs at 0.3lb/mmBtu and 21hrs/24hrs at 0.1lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu.

1

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 3 Pollutant #: 4
Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 3 Pollutant #: 4
Basis For Allowable Emission #: 2

<u>Allowable Emissions</u> (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: 1155 lbs/hr 632.4 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):  167  Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are based on 3 hrs of sootblowing per 24 hr period.
<u> </u>

1

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

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

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

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

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

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

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

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 #: 3

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-47735-279

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/23/94

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

Required by 40 CFR 75.

<b>Emission Unit Information</b>	Section	of
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Information for Facility-ID: 1 Emission Unit #: 3

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: 1576

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/04/95

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

Required by 40 CFR 75.

Emission Chiefmation Section Of	<b>Emission</b>	Unit	<b>Information Section</b>	of	
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Information for Facility-ID: 1 Emission Unit #: 3

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: 6086D

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/23/94

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

Required by 40 CFR 75.

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

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

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: N3L2498T

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/23/94

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

Required by 40 CFR 75.

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

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: 42-47132-277

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/23/94

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

Required by 40 CFR 75.

<b>Emission</b>	Unit l	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 #: 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.

<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. Increment Consuming/Expanding Code: (C, E, U- unkown)	3.	Increment	Consuming/I	Expanding (	Code: (C,	E, U- unkown)
----------------------------------------------------------	----	-----------	-------------	-------------	-----------	---------------

PM

U

U

SO2 U

NO2

4. Baseline Emissions:

PM lbs/hr

tons/yr

SO2 lbs/hr

tons/yr

NO2 tons/yr

5. PSD Comment (limit to 200 characters):

This unit was constructed in 1964 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this emissions unit.

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

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

#### Supplemental Requirements for All Applications

9. Other Information Required by Rule or Statute: NA

Attached Document ID / Not Applicable

1. Process Flow Diagram: PPEU3 1.bmp Attached Document ID / Not Applicable / Waiver Requested 2. Fuel Analysis or Specification: PPEU3 2.txt Attached Document ID / Not Applicable / Waiver Requested 3. Detailed Description of Control Equipment: PPEU3_3.txt Attached Document ID / Not Applicable / Waiver Requested 4. Description of Stack Sampling Facilities: PPEU3 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: PPEU3_6.txt Attached Document ID / Not Applicable 7. Operation and Maintenance Plan: NA Attached Document ID / Not Applicable 8. Supplemental Information for Construction Permit Application: NA Attached Document ID / Not Applicable

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

- 10. Alternative Methods of Operation: PPEU3_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: PPEU3_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA
  Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

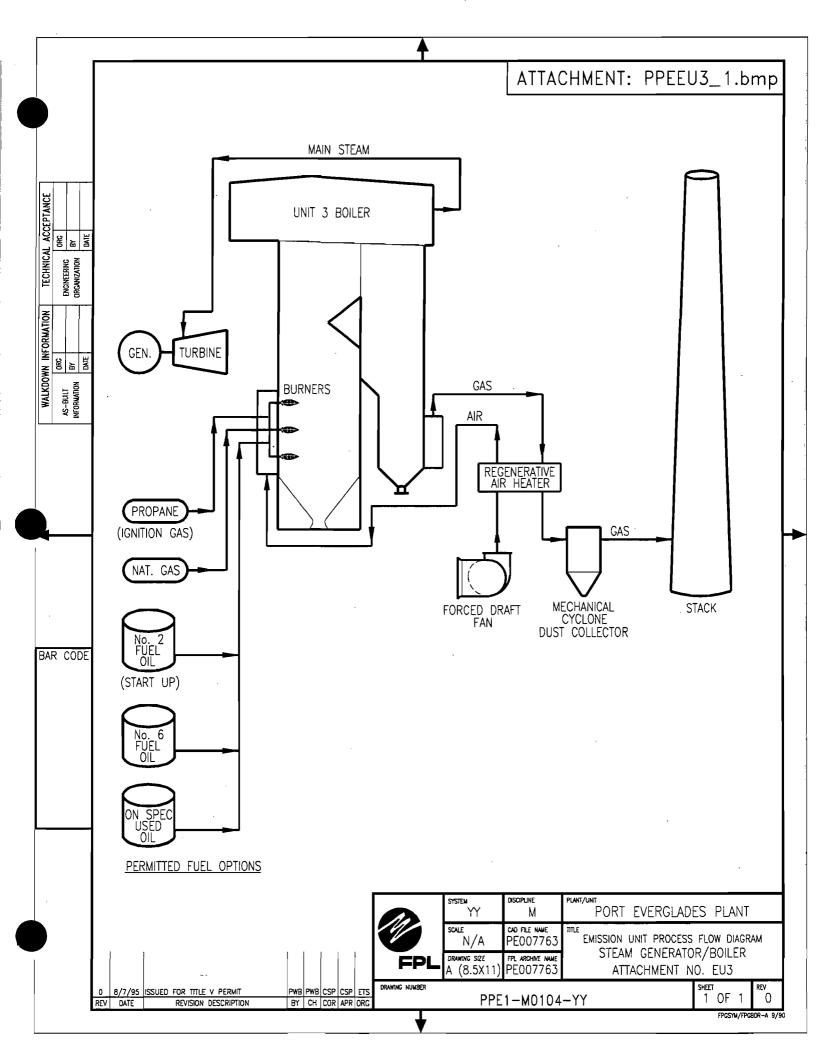
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES PORT EVERGLADES

#### FOSSIL FUEL STEAM GENERATORS UNITS 3 & 4

#### STACK SPECIFICATIONS

SAMPLING DIAMETER: 251.4 in.

SAMPLING AREA: 344.6 eq. ft.

SAMPLING PORT DEPTH: 71.9 in.

No. OF PORTS: 4

No. OF POINTS PER TRAVERSE: 6

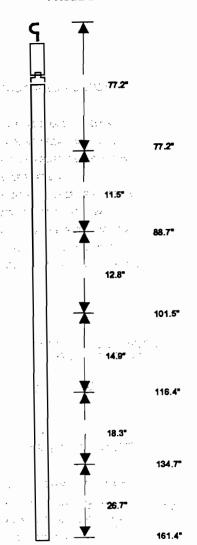
TOTAL No. OF POINTS: 24

SAMPLING TIME PER POINT: 2.5 min.

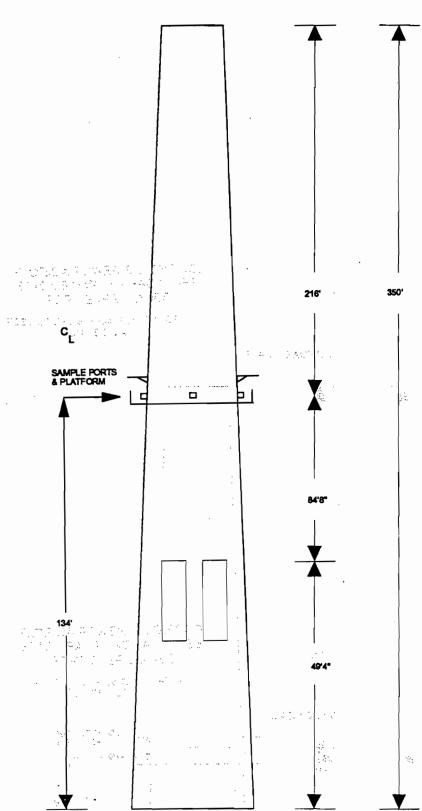
TOTAL SAMPLING TIME: 60.0 min.

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.

### Attachment PPEU3_2.txt

## Fuel Analysis Natural Gas Analysis (typical)²

<u>Parameter</u>	Typical value	<u>Max value</u>
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124	none
% sulfur (grains/CCF)	0.43 ¹	1 grain / ccf
% nitrogen (by volume)	0.8	none
% ash	negligible	none

*Note: The values listed are "typical" values based upon information supplied to FPL by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

- (1) Data from laboratory analysis
- (2) 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 PPEU3 2.txt

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

Parameter	Typical value	<u>Specifications</u>
API gravity (@ 60° F)	6 - 12	none
Heat content(MBtu/bbl)	6,310 - 6420	6,340 ¹
% Sulfur	1.0	2.5 max ³
% Nitrogen	$0.2 - 0.5^2$	none
% Ash	$0.06 - 0.09^2$	0.10 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, 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 PPEU3 2.txt

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

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

- (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 PPEU3_2.txt

## Fuel Analysis <a href="Propane">Propane (typical)¹</a>

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  $C_3H_8$ 

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

- (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 PPEU3 2.txt

## 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 for used oil follows:

<u>Parameter</u>	Typical value	Specifications Specifications	
API gravity (@ 60 F)	30.0 ¹	none	
Heat content (MBtu/bbl)	6,000 ¹	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 PPEU3_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 (micron)	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

B. Low Nox Burners - Due to ozone nonattairment in the southern Florida airshed, the Port Everglades facility installed "Low Nox burners" which have as their primary purpose the reduction of NOx produced during combustion. The installed burners have reduced NOx production by 23% on natural gas fuel, and by 28% on residual oil fuel (in lb / mmBtu, comparing baseline emission rates with permitted NOx RACT emission rates).

#### Attachment PPEU3_6.txt

#### 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 PPEU3_10.txt Alternative Methods of Operation

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

The Port Everglades Units 3 and 4 boilers may each be operated up to 8760 hours per year at heat input rates from zero to 3,850 MMBtu per hour on No.#6 oil, and from zero to 4,025 MMBtu per hour on natural gas. When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

#### Different Fuel Types

The units may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. The unit may occasionally utilize propane fuel to light off (start up) the boiler, then switch to another fuel, such as No.6 residual oil. The units may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11. The quantity of on-specification used oil shall not exceed 2,442,972 gallons per year for Units 3 and 4.

#### Current emissions limitations are as follows:

<u>Pollutant</u>	<u>Emission Limit</u>
Particulate matter-steady state	0.1 lb/MMBtu
Particulate matter-soot blowing	0.3 lb/MMBtu
Sulfur dioxide	2.75 lb/MMBtu
Nitrogen oxides	0.4 lb/mmBtu (natural gas, 30-day rolling average)
_	0.53 lb/mmBtu (residual oil, 30-day rolling average)

#### Oil and Gas Co-firing

These emission units may co-fire natural gas with residual oil. When combusting both fuels simultaneously, the percentage of natural gas will be adjusted to ensure that the applicable SO2 emission limit and visible emission limits are complied with.

#### Soot blowing

The units 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

Additives such as Magnesium hydroxide Mg(OH)₂ are added to the boiler periodically at various loads. When magnesium hydroxide 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 Port Everglades, 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 PPEU3_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 Port Everglades Unit 3 and 4 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

After the second stage treatment, three or more rinses are performed, in order to wash the cleaning solution from the inside of the boiler tubes. 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 offsite 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 PPEU3_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).

#### A0 06-223351 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 3,850 mmBtu/hr during fuel oil firing or 4,025 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis and measures the fuel flow rate to monitor the heat input rate to the boiler. Note: FPL has provided heat input values of 4,000 mmBtu/hour on residual oil fuel, and 4,180 mmBtu/hour on natural gas fuel in this application for both the Port Everglades 3 and 4 units, and the Turkey Point 1 and 2 units. The previous heat input limits for these units, (which were not federally enforceable), are inconsistent with the heat input limits at the Cape Canaveral units 1 and 2, which are identical "sister" units. FPL proposes that the Department adjust the heat input limits to the 4,000 and 4,180 values for consistency, and to eliminate an unnecessary restriction on the operation of the Port Everglades and Turkey Point units.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

ON LIMITS	•	
	II ( B)	T 155 (I )
Fuel	Ib/mmBtu	Test Method
Oil	0.1	EPA Method 5 or 17
Oil	0.3	EPA Method 5 or 17
Oil	2.75	Monthly fuel analysis
Oil	0.53 or 2,041lbs/hr	CEM
Gas	0.40 or 1,610 lbs/hr	CEM
	Oil Oil	Oil 0.1 Oil 0.3 Oil 2.75 Oil 0.53 or 2,041lbs/hr Gas 0.40

⁽¹⁾ For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis as specified. Records are maintained to demonstrate compliance.

⁽²⁾ These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.

## **BEST AVAILABLE COPY**

To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel onsumption for each boiler and monthly records of heating value for such fuel. All records shall be maintained to, a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

5. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Air Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the department as specified.

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1.

Petition for Reduction in Quarterly Particulate Emissions Compliance Testing; FLORIDA POWER AND LIGHT COMPANY,

Petitioner.

OGC Case Nos.: \$3-0578 83-0577, 83-0576, 83-0585, 83-0586, 83-0587, 83-0588 83-0581, 83-0580, ED

بي .

## ORDER GRANTING PETITION FOR REDUCED . FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, FLORIDA POWER AND
LIGHT COMPANY, filed a Petition for Reduction in Quarterly
Particulate Emissions Compliance Testing pursuant to Florida
Administrative Code Rule 17-2.600(5)(b)1 for the following fossil
fuel steam generating units:

Port Everglades Plant Unit No. 2 Port Everglades Plant Unit No. 3 Port Everglades Plant Unit No. 4 Turkey Point Plant Unit No. 1 Turkey Point Plant Unit No. 2 Riveria Plant Unit No. 3 Riveria Plant Unit No. 4 Hanatee Plant Unit No. 1 Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btu per hour.

The petition and supporting documentation submitted by the Petitioner indicate that between August 1979 and July 21, 1983, these units were afforded relief from the particulate standard contained in Florida Administrative Code Rule 17-2.600(5)(b)2 under the terms of a Department-issued variance. During the same period of time the Company elected to test quarterly as permitted under Rule 17-2.600(5)(b)1. Despite the existence of the variance, the tests results submitted during the last two years reveal that each of the above-listed units met the particulate emissions limitations contained in Rule 17-2.600(5)(b)2 of 0.1 pounds per million Btu heat input.

florida Administrative Code Rule 17-2.600(5)(b)1 specifically provides that I may reduce the frequency of particulate testing

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upon a demonstration that the particulate standard has been regularly met. The particulate standard referred to is the general standard found in the rule--0.1 parts per million Stu heat input--not a relaxed emission limit established by a variance.

The intent of Rule 17-2.600(5)(b)1 is to ensure that before the frequency of particulate testing is reduced, the source has established a record of complying with the requirements of Florida Administrative Code Chapter 17-2 relating to particulate matter emissions. Petitioner has documented that each of these units has a history of regulary complying with the particulate matter standard applicable to them.

IT IS ORDERED that the present petition is GRANTED. Under the terms of Rule 17-2.600(5)(b)1, Petitioner may reduce the frequency of particulate testing to an annual basis for each of the units named in this Order. If, however, any of the units fails to comply with the applicable particulate or visible emission standard, this Order will terminate upon written notice by the Department.

The Petitioner may request a hearing in accordance with Section 120.57, Florida Statutes, and Florida Administrative Code Chapters 17-1 and 28-5. The request for hearing must be filed (received) in the Office of General Counsel of the Department, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of receipt of this Order. Pailure to file a request for hearing within this time shall constitute a waiver of Petitioner's right to request a hearing under Section 120.57, Florida Statutes.

DONE and ORDERED this  $\frac{2}{3}$  day of April, 1984.

IP SD, within the present to \$120.52 (9). Finally Subject to which its designated Department Clark, receipt of which is hereby acknowledged.

Clerk Date

VICTORIA J. TSCHINKEL Secretary

STATE OF PLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301 (904)488-4805

## 00037

# BEST AVAILABLE COPY CERTIFICATE OF SERVICE

MANCY & WRIGHT
Assistant General Coursel

State of Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301 904/488-9730

# DEPARTMENT OF ENVIRONMENTAL REGULATION BEST AVAILABLE COPY

In the matter of:
Plorida Power and Light
Co., Inc.
Petitioner

ASP-86-E01



## ORDER APPROVING REQUEST FOR ALTERNATIVE PROCEDURES AND REQUIREMENTS

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Florida Power and Light Company ("Petitioner") submitted to the Department a request for approval of alternate source sampling procedures and requirements. Having considered the written request, a copy of which is attached hereto as Exhibit 1, and supporting documentation, the following Findings of Fact, Conclusions of Law and Order are entered:

#### FINDINGS OF PACT

- On May 30, 1986, Petitioner submitted a written request for approval of alternative procedures and requirements for Manatee Plant Units 1 and 2.
- 2. The petition requested that the Department grant Petitioner the authority to use EPA Reference Method 7E as an alternate procedure for measuring nitrogen oxides (NO $_{\rm X}$ ) emissions from the facility.
- 3. As grounds for the request, Petitioner has stated that using EPA Reference Method 7E in place of the existing EPA Reference Method 7, would allow the testing to be done quicker and would save Petitioner about \$4000 per test. The Petitioner also stated that Reference Method 7E would soon be certified by the Federal government as an adequate procedure for demonstrating compliance with NO_X emissions. EPA Reference Method 7E was subsequently promulgated in the Federal Register and approved method on June 11, 1986.
- 4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

#### CONCLUSIONS OF LAW

5. The relief requested is within the scope of relief which can be granted by the Department pursuant to Section 403.061, Florida Statutes, and Section 17-2.700 (3), Florida administrative Code. Such relief does not relieve Petitioner of the responsibility to comply with all applicable emission limiting standards, ambient air quality standards, or other permit conditions.

#### ORDER

6. Having considered the petition and supporting documentation, it is hereby ORDERED that:

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of persit No. A041-51630 and specific condition 1 of permit No. AU41-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

This order shall constitute final agency action by the Department pursuant to Section 120.52 (9), Florida Statutes. The Petitioner may file a petition for an administrative hearing on this order within twenty-one (21) days of receipt of the order. The petition shall be filed with the Department of Environmental Regulation, Office of General Counsel, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, and shall be in the fors required by Chapters 17-103 and 28-5. Plorida Administrative Code. Failure to file a petition within the time specified above shall constitute a waiver by the Petitioner to an administrative hearing under Chapter 120, Florida Statutes.

harmand ordered this 5 day of Scotember, 1986 int Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to \$120.52 (9). Fiorica Statutes, with the designated Departnunt Clark, receipt of which is hereby acknow-KCZ4G.

C.A HILL 9.5.16 Cless Usie

Victoria J. Tschink

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301

Telephone: (904) 488-4805

Secretary

#### **BEST AVAILABLE COPY**

#### 17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE

#### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

#### REQUEST FOR EXCEPTION

UNIT: Oil Fired Steam PERMIT NO: A041-51630 (Unit 1) Electric and A041-64792 (Unit 2)

Generating - EMISSION LIMITING STANDARD:

850 megawatts NO_x - 0.30 pounds per million BTU heat input

PLANT: Manatee

DESCRIPTION: Compliance Testing for NOx for Manatee Plants

Units No. 1 and No. 2.

PROVISION TO BE EXCEPTED: Section 17-2.700(2)(a)., F.A.C. and

Specific Condition 1 of the Air Permits A041-51630 and A041-64792

EXCEPTION REQUESTED: Use of EPA Reference Method 7E

in lieu of EPA Reference Method 7

BASIS OF REQUEST: EPA Reference Method 7E has been promulgated

in the Federal Register; will allow quicker

testing; and will save the petitioner approximately \$4000 per each test.

<b>Emission Unit Information Section</b>	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. 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>	<b>Unit Information</b>	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): Port Everglades Boiler Unit 4
- 2. Emissions Unit Identification Number: 004 (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 reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

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

- A. Control Equipment #: 1
  - 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 ____

D. Common Equipment //	В.	Control	Equi	pment	#	:	2
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1. Description (limit to 200 characters): Low NOx Burners

2. Control Device or Method Code: Modified Furnace or Burner Design

### **C.** Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

Emission	Unit I	nformation	Section	of
	OHILL I		Occurr.	OI.

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

#### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY): 06/01/64

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

3. Package Unit:

Manufacturer: GE / Foster Wheeler

Model

Number: NA

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: 4025 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 reflects natural gas firing. Maximum heat input rate for residual oil is 3850 mmBtu/hour. Method of compliance for heat input is fuel sampling & analysis.

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

Emission	Unit	Information	Section	of	

Requested Maximum	Operating	Schedule:
<u>1</u>	- F	

hours/day weeks/yr

days/week 8760 hours/yr

Emission	Unit In	formation	Section	of
Thispan	CHIE IN	TOI MIRCION	Dection	V1

# 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			
	s.		
		,	
			·

40 C.F.R. 279.72	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.55(c)	F.A.C. 62-210.700 (6)
40 C.F.R. 72.20(a)		40 C.F.R. 75.55(e)	
	40 C.F.R. 75 Appendix G-4		F.A.C. 62-214.300
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.56	F.A.C. 62-214.330
40 C.F.R. 72.20(c)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.60(a)	F.A.C. 62-214.350 (2)
40 C.F.R. 72.21(a)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.60(b)	
40 C.F.R. 72.21(b)		40 C.F.R. 75.60(c)(3)	F.A.C. 62-214.350 (3)
1	40 C.F.R. 75.10(a)(3)(i)		F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(d)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.22(a)	40 C.F.R. 75.10(b)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(c)		40 C.F.R. 75.61(b)	
40 C.F.R. 72.23	40 C.F.R. 75.10(c)		F.A.C. 62-214.370 (3)
1	40 C.F.R. 75.10(d)	40 C.F.R. 75.62	F.A.C. 62-214.370 (4)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(f)	40 C.F.R. 75.63	F.A.C. 62-214.370 (7)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(g)	40 C.F.R. 75.64(a)	
40 C.F.R. 72.30(b)(2)	(0)	40 C.F.R. 75.64(b)	F.A.C. 62-214.430
	40 C.F.R. 75.11(b)(1)		F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(c)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.64(c)	paragraph 2
40 C.F.R. 72.30(d)	40 C.F.R. 75.11(d)	40 C.F.R. 75.64(d)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.32	40 C.F.R. 75.12(a)	40 C.F.R. 75.65	
40 C.F.R. 72.33(b)		40 C.F.R. 75.66(a)	F.A.C. 62-296.405(1)(c)1.j.
	40 C.F.R. 75.12(b)	1.1	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(c)	40 C.F.R. 75.13(a)	40 C.F.R. 75.66(b)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(d)	40 C.F.R. 75.13(b)	40 C.F.R. 75.66(c)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.40(a)	40 C.F.R. 75.14(a)	40 C.F.R. 75.66(d)	
40 C.F.R. 72.40(b)		40 C.F.R. 75.66(g)	F.A.C.
	40 C.F.R. 75.20(a)(5)		62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(c)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(h)	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(d)	40 C.F.R. 75.20(c)	40 C.F.R. 76.13	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.51	40 C.F.R. 75.20(d)	40 C.F.R. 77.3	
40 C.F.R. 72.90	1.7	40 C.F.R. 77.5(b)	F.A.C. 62-296.500(2)(c)
	40 C.F.R. 75.20(f)		F.A.C. 62-296.570(4)(a)3.
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(g)	40 C.F.R. 77.6	F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.21(a)	Broward DNRP Ch	F.A.C. 62-296.570(4)(b)2.
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.21(b)	27-173(a) (state only)	
40 C.F.R. 72.9(b)		Broward DNRP Ch	F.A.C. 62-296.570(4)(c)
1	40 C.F.R. 75.21(c)	I	F.A.C. 62-297.310(1)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.21(d)	27-173(c) (state only)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.21(e)	Broward DNRP Ch	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(f)	27-173(d) (state only)	
40 C.F.R. 72.9(c)(5)		Broward DNRP Ch	F.A.C. 62-297.310(4)(a)1.
1	40 C.F.R. 75.22	1	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(d)	40 C.F.R. 75.24	27-173(e) (state only)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(e)	40 C.F.R. 75.30(a)(1)	Broward DNRP Ch	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(f)	1 1 1 1	27-173(f) (state only)	
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.30(a)(2)		F.A.C. 62-297.310(4)(d)
	40 C.F.R. 75.30(a)(3)	Broward DNRP Ch	F.A.C. 62-297.310(4)(e)
40 C.F.R. 73.33	40 C.F.R. 75.31	27-173(g) (state only)	F.A.C. 62-297.310(5)
40 C.F.R. 73.35	40 C.F.R. 75.32	Broward DNRP Ch	
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.33	27-173(h) (state only)	F.A.C. 62-297.310(6)(a)
40 C.F.R. 75 Appendix A-2		Broward DNRP Ch 27-174	F.A.C. 62-297.310(6)(c)
	40 C.F.R. 75.35		F.A.C. 62-297.310(6)(d)
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.36	(state only)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.4(a)(4)(ii)	Broward DNRP Ch 27-176	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.5	(state only)	
40 C.F.R. 75 Appendix A-6		Broward DNRP Ch 27-177	F.A.C. 62-297.310(6)(g)
	40 C.F.R. 75.51(c)		F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix B	40 C.F.R. 75.53(a)	(state only)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.53(b)	Broward DNRP Ch 27-179	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.53(c)	(state only)	
40 C.F.R. 75 Appendix D		Broward DNRP Ch 27-180	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix F	40 C.F.R. 75.53(d)(1)		F.A.C. 62-297.310(7)(a)5.
40 C.F.R. 13 Appendix F	40 C.F.R. 75.54	(state only)	F.A.C. 62-297.310(7)(a)9.
		Broward DNRP Ch 27-181	F.A.C. 62-297.310(7)(c)
		(state only)	F.A.C. 62-297.310(8)
		Broward DNRP Ch 27-184	F.A.C. 62-297.310(8)
		(state only)	Table 62-297.310-1
		1 . 2/	14010 02 257.510-1
		Broward DNRP Ch 27-188	
		(state only)	
		Broward DNRP Ch 27-189	
		(state only)	
		F.A.C. 62-204.800(12)	
		(state only)	
		F.A.C. 62-204.800(13)	
		(state only)	
		F.A.C. 62-204.800(14)	
		(state only)	
		F.A.C. 62-210.650	
		F.A.C. 62-210.700 (1)	
		F.A.C. 62-210.700 (2)	
		F.A.C. 62-210.700 (3)	
		F.A.C. 62-210.700 (4)	

# 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:     Unit 4 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 4, Port Everglades Unit 4
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 343 ft
7. Exit Diameter: 18.1 ft
8. Exit Temperature: 287 °F
9. Actual Volumetric Flow Rate: 1156197.3 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: 587.4 North: 2885.2
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above is reflective of the highest measured flow rate during the particulate

test performed on this unit in March 1995. Flow rates measured at other times may vary.

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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): EU 4, natural gas fuel burned in Unit 4
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.83
5. Maximum Annual Rate: 33580
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.0031
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel oil, propane gas and on-specification used oil from FPL operations.

Emission Unit Information Section of	
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<u>Segment Description and Rate:</u> Information for Facility_ID: 1 Emission Unit #: 4 Segment #: 2

<ol> <li>Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):</li> <li>EU 4, residual oil burned in Unit 4</li> </ol>
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: Thousand gallons .
4. Maximum Hourly Rate: 25.5
5. Maximum Annual Rate: 223421.45
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
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, natural gas, diesel fuel oil, propane gas and on-specification used oil from FPL operations.

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

Information for Facility_ID:1 Emission Unit #: 4 Segment #: 3

<ol> <li>SCC Units: Thousand gallons burned</li> <li>Maximum Hourly Rate: 28.31</li> <li>Maximum Annual Rate: 247985.29</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash:</li> <li>Million Btu per SCC Unit: 136</li> <li>Segment Comment (limit to 200 characters):         <ul> <li>The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel</li> </ul> </li> </ol>	
<ol> <li>SCC Units: Thousand gallons burned</li> <li>Maximum Hourly Rate: 28.31</li> <li>Maximum Annual Rate: 247985.29</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash:</li> <li>Million Btu per SCC Unit: 136</li> <li>Segment Comment (limit to 200 characters):         <ul> <li>The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel</li> </ul> </li> </ol>	500 characters):
<ol> <li>Maximum Hourly Rate: 28.31</li> <li>Maximum Annual Rate: 247985.29</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash:</li> <li>Million Btu per SCC Unit: 136</li> <li>Segment Comment (limit to 200 characters):         <ul> <li>The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel</li> </ul> </li> </ol>	2. Source Classification Code (SCC): 1-01-005-01 .
<ol> <li>Maximum Annual Rate: 247985.29</li> <li>Estimated Annual Activity Factor:</li> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash:</li> <li>Million Btu per SCC Unit: 136</li> <li>Segment Comment (limit to 200 characters):         The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel     </li> </ol>	3. SCC Units: Thousand gallons burned
<ul> <li>6. Estimated Annual Activity Factor:</li> <li>7. Maximum Percent Sulfur: 0.5</li> <li>8. Maximum Percent Ash:</li> <li>9. Million Btu per SCC Unit: 136</li> <li>10. Segment Comment (limit to 200 characters): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel</li> </ul>	4. Maximum Hourly Rate: 28.31
<ol> <li>Maximum Percent Sulfur: 0.5</li> <li>Maximum Percent Ash:</li> <li>Million Btu per SCC Unit: 136</li> <li>Segment Comment (limit to 200 characters):         The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel     </li> </ol>	5. Maximum Annual Rate: 247985.29
<ul> <li>8. Maximum Percent Ash:</li> <li>9. Million Btu per SCC Unit: 136</li> <li>10. Segment Comment (limit to 200 characters):</li></ul>	6. Estimated Annual Activity Factor:
<ul> <li>9. Million Btu per SCC Unit: 136</li> <li>10. Segment Comment (limit to 200 characters):     The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel</li> </ul>	7. Maximum Percent Sulfur: 0.5
10. Segment Comment (limit to 200 characters):  The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel	8. Maximum Percent Ash:
The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, diesel fuel	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, natural gas, diesel fuel oil, propane gas or on-specification used oil from FPL operations

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

Segment	Descri	ption :	and l	Rate:

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): EU 4, propane burned in Unit 4
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 4.03
5. Maximum Annual Rate: 35259
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 a variable combination of No. 6 residual oil, natural gas, diesel fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information Se</b>	ection of	
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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):

EU 4, on-specification used oil burned in Unit 4

2. Source Classification Code (SCC): 1-01-013-02

3. SCC Units: thousand gallons burned

4. Maximum Hourly Rate: 25.33

5. Maximum Annual Rate: 221881.6

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 2.5

8. Maximum Percent Ash: 0.007

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, natural gas, diesel fuel oil, propane gas or on-specification used oil from FPL operations.

Emission Unit Information Section of	Unit Information Section of
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Segment Description and Rate:
Information for Facility_ID: 1 Emission Unit #: 4 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 4 co-firing all possible combinations of natural gas, 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-06-223352 allows Unit 4 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.

<b>Emission Unit Information S</b>	Section of	
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Segment Description and Rates
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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): EU 4 Boiler chemical cleaning waste evaporated in Unit 4. This process may be undertaken while firing natural gas or residual 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).

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

### Information for Facility_ID: 1 Emission Unit #: 4

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	024	NA	EL
СО	NA	NA .	NS
PM	077	NA NA	EL
PM10	077	NA NA	NS
VOC	NA	NA	NS
H133	NA	NA NA	NS
H106	NA	NA NA	NS
H107	NA	NA NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS

Emission Unit Information Section ____ of ____

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

Information for Facility_ID: / Emission Unit #: 4 Pollutant #: /

### **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: DEP 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):

Emission Unit Information Section _	of
Information for Facility_ID: /	Emission Unit #: 4 Pollutant #: 1
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):  167  2.75 lb/mmBtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.

Emission 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: 1 Emission Unit #: 4 Pollutant #: 2

### Pollutant Detail Information

1. Pollutant Emitted: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 2120 lbs/hr 9285.6 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.53 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)2.
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): 0.53 lb/mmBtu * 4000 mmBtu/hr = 2120 lb/hr
(2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.40 on natural gas fuel

Emission Unit Information Section	of
Information for Facility_ID: 1	Emission Unit #: 4 Pollutant #: 2
<b>Basis For Allowable Emission</b>	#: 1

<u>Allowable Emissions</u> (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: 0.53 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 2120 lbs/hr 9285.6 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  194  0.53 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule
62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

1

Emission Unit Information Section _	of
Information for Facility_ID: 1	Emission Unit #: 4 Pollutant #: 2
Basis For Allowable Emission	<b>#:</b> 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: 0.4 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 1610 lbs/hr 7051.8 tons/yr
5. Method of Compliance: Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  194  0.40 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

Emission Unit Information Section ____ of ____

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

Information for Facility_ID: 1 Emission Unit #: 4 Pollutant #: 4

### **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: DEP 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/lb x ton/2000lb = 2190 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): The particulate matter emission factor for 3hrs/24hrs at 0.3lb/mmBtu and 21hrs/24hrs at 0.1lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu.

Emission Unit Information Section of	
Information for Facility_ID: / Emission Unit #: 4 Pollu	ıtant #: <i>4</i>
Basis For Allowable Emission #: 1	

Allowable Emissions (Pollutant identified on front page)

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: 385 lbs/hr 1475.5 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):  149
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
Information for Facility_ID: 1	Emission Unit #: 4 Pollutant #: 4
<b>Basis For Allowable Emission</b>	<b>#:</b> 2

Allowable Emissions (Pollutant identified on front page)

emissions are based on 3 hrs of sootblowing per 24 hr period.

Emission Unit Initi matton Section of	<b>Emission</b>	ormation 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

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 Information 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 #: 4

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 < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	up to 3 hrs/24 hrs, with

Emission Unit Information 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 #: 3

1. Visible Emissions Subtype: VE100
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions:  We 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 #: 4

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: N3L2495T

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/26/94

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

Required by 40 CFR 75.

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

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: 6085D

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/26/94

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

Required by 40 CFR 75.

<b>Emission Unit Information Section</b>	of
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Information for Facility-ID: 1 Emission Unit #: 4

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: 42-45529-274K

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/26/94

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

Required by 40 CFR 75.

	<b>Emission</b>	Unit In	formation	Section	of
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Information for Facility-ID: 1 Emission Unit #: 4

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-44665-272

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/26/94

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

Required by 40 CFR 75.

<b>Emission Unit Information</b>	Section	of
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Information for Facility-ID: 1 Emission Unit #: 4

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: 1528

5. Installation Date (DD-MON-YYYY): 07/08/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/04/95

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

Required by 40 CFR 75.

<b>Emission U</b>	nit I	nformation	Section	of

## 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	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. Increment Consuming/Expanding Code: (C, E, U- unkown):

PM

U U

U

SO2

NO2

4. Baseline Emissions:

PM lbs/hr

tons/yr

SO2 lbs/hr

tons/yr

NO2 tons/yr

5. PSD Comment (limit to 200 characters):

This unit was constructed in 1965 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this emissions unit.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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## L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

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

#### Supplemental Requirements for All Applications

Attached Document ID / Not Applicable

1. Process Flow Diagram: PPEU4_1.bmp Attached Document ID / Not Applicable / Waiver Requested 2. Fuel Analysis or Specification: PPEU3 2.txt Attached Document ID / Not Applicable / Waiver Requested 3. Detailed Description of Control Equipment: PPEU3_3.txt Attached Document ID / Not Applicable / Waiver Requested 4. Description of Stack Sampling Facilities: PPEU3_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: PPEU3 6.txt Attached Document ID / Not Applicable 7. Operation and Maintenance Plan: NA Attached Document ID / Not Applicable 8. Supplemental Information for Construction Permit Application: NA Attached Document ID / Not Applicable 9. Other Information Required by Rule or Statute: NA

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: PPEU3_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: PPEU3_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

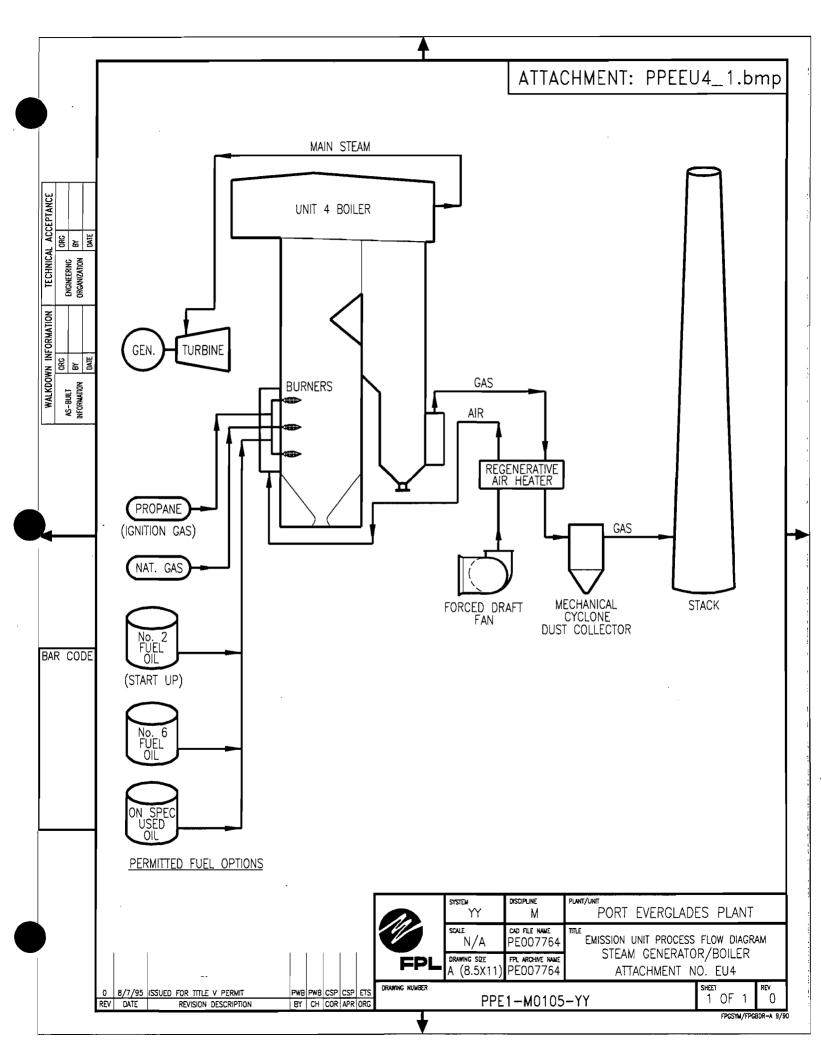
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



# FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES PORT EVERGLADES

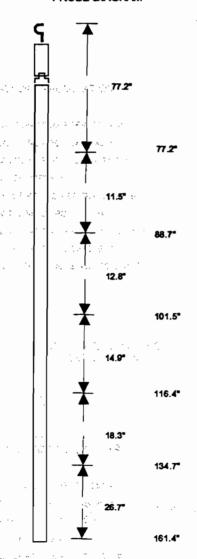
### FOSSIL FUEL STEAM GENERATORS UNITS 3 & 4

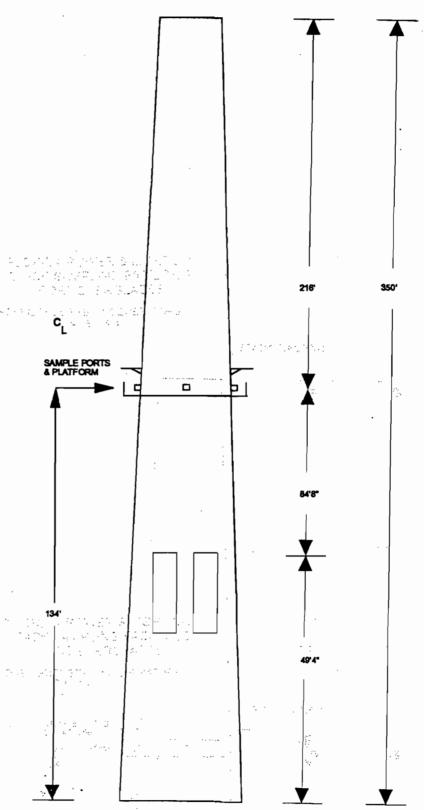
#### STACK SPECIFICATIONS

STACK DIAGRAM SAMPLING DIAMETER: 251.4 in.

SAMPLING AREA: 344.6 eq. ft. SAMPLING PORT DEPTH: 71.9 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





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.

### Attachment PPEU4_13.txt

### Identification of Additional Applicable Requirements

A0 06-223352 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 3,850 mmBtu/hr during fuel oil firing or 4,025 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis and by measuring fuel flow to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSIO	N LIMITS		
Pollutant	Fuel	lb/mmBtu	Test Method
Particulate Matter ⁽¹⁾ Steady state	Oil	0.1	EPA Method 5 or 17
	O.I.	<b>5.</b> <i>1</i>	Zi / t Modiod o oi . /
sootblowing	Oil	0.3	EPA Method 5 or 17
SO2 ⁽¹⁾	Oil	2.75	Monthly fuel analysis
NOx-RACT NOx ⁽²⁾	Oil	0.53 or 2,041lbs/hr	CEM
NOx ⁽²⁾	Gas	0.40 or 1,610 lbs/hr	CEM

⁽¹⁾ For compliance with each of these emission limits, FPL uses annual stack tests, and the monthly fuel analysis as specified. Records are maintained to demonstrate compliance.

FPL has the records required by the above permit condition and such records are available to the Department for review.

⁽²⁾ These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.

^{4.} To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for each boiler and monthly records of heating value for such fuel. All records shall be maintained or a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

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5. Any change in the Regulation. FPL Lapartment as specifi	has not undertaken	fuels or equipment any such changes,	shall be submitted f but if changes are	or approval to DEI e contemplated, v	R's bureau of vill notify the

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Petition for Reduction in Quarterly Particulate Emissions Compliance Testing; PLORIDA POWER AND LIGHT COMPANY,

Petitioner.

OGC Case Nos.: 83-0578 83-0577, 83-0576, 83-0585, 83-0586, 83-0587, 83-0588 83-0581, 83-0580, ED

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### ORDER GRANTING PETITION FOR REDUCED . FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, PLORIDA POWER AND
LIGHT COMPANY, filed a Petition for Reduction in Quarterly
Particulate Emissions Compliance Testing pursuant to Florida
Administrative Code Rule 17-2.600(5)(b)1 for the following fossil
fuel steam generating units:

Port Everglades Plant Unit No. 2 Port Everglades Plant Unit No. 3 Port Everglades Plant Unit No. 4 Turkey Point Plant Unit No. 1 Turkey Point Plant Unit No. 2 Riveria Plant Unit No. 3 Riveria Plant Unit No. 4 Manatee Plant Unit No. 1 Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btu per hour.

The petition and supporting documentation submitted by the Petitioner indicate that between August 1979 and July 21, 1983, these units were afforded relief from the particulate standard contained in Florida Administrative Code Rule 17-2.600(5)(b)2 under the terms of a Department-issued variance. During the same period of time the Company elected to test quarterly as permitted under Rule 17-2.600(5)(b)1. Despite the existence of the variance, the tests results submitted during the last two years reveal that each of the above-listed units met the particulate emissions limitations contained in Rule 17-2.600(5)(b)2 of 0.1 pounds per million Btu heat input.

florida Administrative Code Rule 17-2.600(5)(b)1 specifically provides that I may reduce the frequency of particulate testing

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upon a demonstration that the particulate standard has been regularly met. The particulate standard referred to is the general standard found in the rule--0.1 parts per million Stu heat input--not a relaxed emission limit established by a variance.

The intent of Rule 17-2.600(5)(b)) is to ensure that before the frequency of particulate testing is reduced, the source has established a record of complying with the requirements of Florida Administrative Code Chapter 17-2 relating to particulate matter emissions. Petitioner has documented that each of these units has a history of regulary complying with the particulate matter standard applicable to them.

IT IS ORDERED that the present petition is GRANTED. Under the terms of Rule 17-2.600(5)(b)1, Petitioner may reduce the frequency of particulate testing to an annual basis for each of the units named in this Order. If, however, any of the units fails to comply with the applicable particulate or visible emission standard, this Order will terminate upon written notice by the Department.

The Petitioner may request a hearing in accordance with Section 120.57, Florida Statutes, and Florida Administrative Code Chapters 17-1 and 28-5. The request for hearing must be filed (received) in the Office of General Counsel of the Department, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of receipt of this Order. Pailure to file a request for hearing within this time shall constitute a waiver of Petitioner's right to request a hearing under Section 120.57, Florida Statutes.

DONE and ORDERED this 24 day of April, 1984.

FM SD, we this wire pursuant to \$120.52 (9). Further Summer, with the designated Department Clork, recept of which is hereby acknowledged.

Clark Date

VICTORIA J. TSCHINKEL Secretary

STATE OF PLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301 (904)488-4805

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### CERTIFICATE OF SERVICE

> Wangs E. Whichst-NANCY E. WRIGHT Assistant General Coursel

State of Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301 904/488-9730 DEPARTMENT OF ENVIRONMENTAL REGULATION

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In the matter of: Florida Power and Light Co., Inc.

Petitioner

ASP-86-E01



### ORDER APPROVING REQUEST FOR ALTERNATIVE PROCEDURES AND REQUIREMENTS

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Florida Power and Light Company ("Petitioner") submitted to the Department a request for approval of alternate source sampling procedures and requirements. Having considered the written request, a copy of which is attached hereto as Exhibit 1, and supporting documentation, the following Findings of Fact, Conclusions of Law and Order are entered:

#### FINDINGS OF PACT

- On May 30, 1986, Petitioner submitted a written request for approval of alternative procedures and requirements for Manatee Plant Units 1 and 2.
- 2. The petition requested that the Department grant Petitioner the authority to use EPA Reference Method 7E as an alternate procedure for measuring nitrogen oxides (NO $_{\rm X}$ ) emissions from the facility.
- 3. As grounds for the request, Petitioner has stated that using EPA Reference Method 7E in place of the existing EPA Reference Method 7, would allow the testing to be done quicker and would save Petitioner about \$4000 per test. The Petitioner also stated that Reference Method 7E would soon be certified by the Federal government as an adequate procedure for demonstrating compliance with NO_X emissions. EPA Reference Method 7E was subsequently promulgated in the Federal Register and approved method on June 11, 1986.
- 4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

#### CONCLUSIONS OF LAW

5. The relief requested is within the scope of relief which can be granted by the Department pursuant to Section 403.061, Florida Statutes, and Section 17-2.700 (3), Florida Administrative Code. Such relief does not relieve Petitioner of the responsibility to comply with all applicable emission limiting standards, ambient air quality standards, or other permit conditions.

#### ORDER

6. Having considered the petition and supporting documentation, it is hereby ORDERED that:

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of permit No. A041-51630 and specific condition 1 of permit No. A041-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

This order shall constitute final agency action by the Department pursuant to Section 120.52 (9), Florida Statutes. The Petitioner may file a petition for an administrative hearing on this order within twenty-one (21) days of receipt of the order. The petition shall be filed with the Department of Environmental Regulation, Office of General Counsel, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, and shall be in the form required by Chapters 17-103 and 28-5, Florida Administrative Code. Failure to file a petition within the time specified above shall constitute a waiver by the Petitioner to an administrative hearing under Chapter 120, Florida Statutes.

Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to \$120.52 (9), Storica Statutes, with the designated Department Clock, receipt of which is nerely acknowledged.

C. A. Hutching 9.5.96

Victoria J. Tschinkel Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road Tallahassee, Florida 32301

Telephone: (904) 488-4805

### **BEST AVAILABLE COPY**

### 17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE

#### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

#### REQUEST FOR EXCEPTION

UNIT: Oil Fired Steam

PERMIT NO: A041-51630 (Unit 1)

Electric

and A041-64792 (Unit 2)

Generating -

EMISSION LIMITING STANDARD:

850 Begawatts

 $NO_x - 0.30$  pounds per

million BTU heat input

PLANT: Manatee

DESCRIPTION: Compliance Testing for NOx for Manatee Plants

Units No. 1 and No. 2.

PROVISION TO BE EXCEPTED:

Section 17-2.700(2)(a).,F.A.C. and

Specific Condition 1 of the Air

Permits A041-51630 and A041-64792

EXCEPTION REQUESTED:

Use of EPA Reference Method 7E in lieu of EPA Reference Method 7

BASIS OF REQUEST: EPA Reference Method 7E has been promulgated in the Federal Register; will allow quicker

testing; and will save the petitioner

approximately \$4000 per each test.

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

Information for Facility - ID: 1 Emission Unit #: 5

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.	R	egul	ated 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.	S	ingl	e 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.

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): 12 gas turbines, firing either nat. gas or distillate oil. 2. Emissions Unit Identification Number: 005 (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 for the gas turbines is reflective of one gas turbine (out of 12) at a 40 degree F condition.. As with most gas turbines, ambient temperature is inversely related to heat input capability and is inversely related to megawatt output for these machines. Commercial Startup dates for each GT: GT 1 05/01/71 GT 7 06/21/71 GT 2 05/06/71 GT 8 06/30/71 GT 3 05/13/71 GT9 07/14/71 GT 4 05/21/71 GT 10 07/23/71 GT 5 06/04/71 GT 11 08/17/71 GT 6 06/11/71 GT 12 08/28/71

### **Emissions Unit Control Equipment**

**A.** Control Equipment #:

1. Description (limit to 200 characters):	
2. Control Device or Method Code:	

B. Control Equipment #:

1. Description (limit to 200 characters):

C. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

2. Control Device or Method Code:

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

### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY):

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

3. Package Unit:

Manufacturer: Pratt & Whitney

Model Number: GG4A

4. Generator Nameplate Rating: 42 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 8424 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 EU has a combined max.heat input rate of 8,424 mmBtu / hr. The current NOx RACT permit (AO 06 148762) has limited the annual heat input to the bank of 12 GTs to 7379 x 10^9 Btu/yr.

### **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)

<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 5

F.A.C. 62-210.700 (1)	F.A.C. 62-296.570(2)	F.A.C. 62-297.310(2)(a)	F.A.C. 62-297.310(7)(a)4.a.
F.A.C. 62-210.700 (4)	F.A.C. 62-296.570(3)	F.A.C. 62-297.310(4)(a)2.	F.A.C. 62-297.310(7)(a)8.
F.A.C. 62-210.700 (5)	F.A.C. 62-296.570(4)(a)	F.A.C. 62-297.310(5)	F.A.C. 62-297.310(7)(a)9.
F.A.C. 62-210.700 (6)	F.A.C. 62-296.570(4)(b)5.	F.A.C. 62-297.310(7)(a)1.	F.A.C. 62-297.310(8)
F.A.C. 62-296.320(4)(b)	F.A.C. 62-296.570(4)(c)	F.A.C. 62-297.310(7)(a)3.	F.A.C. 62 - 297.310

DEP Form No. 62-210.900(1)

Emission 1	Unit Info	rmation Secti	ion of
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### **Emission Point Description and Type**

1. 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 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: 50BRO06003605.			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 44 ft			
7. Exit Diameter: 15.6 ft			
8. Exit Temperature: 860 °F			
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5			
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**

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 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: 50BRO06003605.			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 44 ft			
7. Exit Diameter: 15.6 ft			
8. Exit Temperature: 860 °F			
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5			
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**

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: 50BRO06003605.			
5. Discharge Type Code (D, F, H, P, R, V, W): V			
6. Stack Height: 44 ft			
7. Exit Diameter: 15.6 ft			
8. Exit Temperature: 860 °F			
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5			
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.			

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

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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
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**

1. 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: 50BRO060036005.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
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**

1. Identification of Point on Plot Plan or Flow Diagram: Simple-cycle GT6
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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2882.5
14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 6. GT's 1-12 are regulated collectively as a bank of 12.

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

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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
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 <u>1</u> Emission Unit #:5

1. Identification of Point on Plot Plan or Flow Diagram: Simple-cycle GT8  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: 50BR006003605.  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 44 ft  7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 acfm  10. Percent Water Vapor: %  11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point UTM Coordinates: Zone: 17 East: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. 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: 50BRO06003605.  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 44 ft  7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	
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: 50BR006003605.  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 44 ft  7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission Point UTM coordinates are for simple cycle GT 8. GTs 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: 50BRO06003605.  5. Discharge Type Code (D, F, H, P, R, V, W): V  6. Stack Height: 44 ft  7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GTs 1-12 are regulated collectively as a bank	1 0
6. Stack Height: 44 ft  7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	<b>▲</b>
7. Exit Diameter: 15.6 ft  8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	i. Discharge Type Code (D, F, H, P, R, V, W): V
8. Exit Temperature: 860 °F  9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GTs 1-12 are regulated collectively as a bank	5. Stack Height: 44 ft
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	. Exit Diameter: 15.6 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: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GTs 1-12 are regulated collectively as a bank	8. Exit Temperature: 860 °F
11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: ft  13. Emission Point UTM Coordinates: Zone: 17 East: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	Actual Volumetric Flow Rate: 1069740 acfm
12. Nonstack Emission Point Height:  13. Emission Point UTM Coordinates:  Zone: 17 East: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters):  Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	0. Percent Water Vapor: %
<ul> <li>13. Emission Point UTM Coordinates: Zone: 17 East: 587.2 North: 2885.5</li> <li>14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank</li> </ul>	Maximum Dry Standard Flow Rate: dscfm
Zone: 17 East: 587.2 North: 2885.5  14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 8. GT's 1-12 are regulated collectively as a bank	2. Nonstack Emission Point Height: ft
Emission point UTM coordinates are for simple cycle GT 8. GTs 1-12 are regulated collectively as a bank	
	Emission point UTM coordinates are for simple cycle GT 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 #:5

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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
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 Point Description and Type**

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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 10. GT's 1-12 are regulated collectively as a bank of 12.

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

Identification of Point on Plot Plan or Flow Simple-cycle GT11	Diagram:
2. Emission Point Type Code (1,2,3,4): 3	
3. Descriptions of Emissions Points Comprisin This EU is comprised of 12 identical simple-cycle ga	•
4. ID Numbers or Descriptions of Emission Un The 12 simple-cycle gas turbines share a common A	
5. Discharge Type Code (D, F, H, P, R, V, W)	: v
6. Stack Height: 44 ft	
7. Exit Diameter: 15.6 ft	
8. Exit Temperature: 860 °F	
9. Actual Volumetric Flow Rate: 1069740	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: 587.2	North: 2885.5
14. Emission Point Comment (limit to 200 charact Emission point UTM coordinates are for simple cy bank of 12.	ers): cle GT 11. GT's 1-12 are regulated collectively as a

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

1. 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: 50BRO06003605.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 44 ft
7. Exit Diameter: 15.6 ft
8. Exit Temperature: 860 °F
9. Actual Volumetric Flow Rate: 1069740 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: 587.2 North: 2885.5
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 Chit information Section of	<b>Emission</b>	Unit	Information	Section	of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Nati	Segment Description and	d Rate
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Information for Facility_ID:1 Emission Unit #: 5 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 5 Gas turbine bank (1-12) burning distillate oil.
2. Source Classification Code (SCC): 2-01-001-01
3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 61.94
5. Maximum Annual Rate: 54260.5
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash: 0.05
9. Million Btu per SCC Unit: 136

Max. Annual Rate information provided in #5 above, is based on heat input limitation which is = to a 10% capacity factor limit for the 12 GTs required by air operation permit A006-230618.

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

Segment	Descri	ption	and	Rate:
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Information for Facility_ID:1 Emission Unit #: 5 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): EU 5 Gas turbine bank (1-12) burning natural gas.
2. Source Classification Code (SCC): 2-01-002-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 8.023
5. Maximum Annual Rate: 7028.02
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.000031
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters):  Max. Annual Rate information given in #5 above, is based on heat input limitation which is = to a 10% capacity factor limit for the 12 GTs required by air operating permit A006-230618.

Emission Unit Information Section of	<b>Emission</b>	Unit	Informa	ition	Section	of
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# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

### Information for Facility_ID: 1 Emission Unit #: 5

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	NS
NOX	NA	NA	EL
co	NA	NA	NS
PM	NA	NA	NS
PM10	NA	NA	NS
H133	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS .

Emission 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: 1 Emission Unit #: 5 Pollutant #: 2

### **Pollutant Detail Information**

1. Pollutant Emitted: NOx					
2. Total Percent Efficiency of Control: %					
3. Potential Emissions: 7572 lbs/hr 3316.5 tons/yr					
4. Synthetically Limited? (Yes/No): Y					
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr					
6. Emission Factor: 0.9 Units lb/mmBtu Reference: Rule 62-296.570(4)(b)5.					
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0					
8. Calculation of Emissions (limit to 600 characters): (0.9 lb/mmBtu)*(702mmBtu) = 631.8 lb/hr (631 lb/hr/GT)*(12GTs) = 7,572 lb/hr (7,572 lb/hr)*(876 hr/yr)/(2000 lb//ton) = 3,316.5 TPY					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Emissions calculated at 40 degrees Fahrenheit for a maximum of 876 hours of operation.					

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 5 Pollutant #: 2
Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

operating on liquid fuel.

Basis for Allowable Emissions Code: Emissions limit required by rule
 Future Effective Date of Allowable Emissions:
 Requested Allowable Emissions and Units: 0.9 Units: lbs/mmBtu
 Equivalent Allowable Emissions: 631 lbs/hr 2763.78 tons/yr
 Method of Compliance: EPA Method 20 or modified EPA Method 20 - 1 GT per bank of 12
 Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

 128

Emission limits are from rule 62-296.570(4)(b)5.,F.A.C. Emissions given above are for each gas turbine

Emission Unit Information Section of	
Information for Facility_ID: / Emission Unit #: 5 Pollutant #:	2
Basis For Allowable Emission #: 2	

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

operating on natural gas fuel.

Basis for Allowable Emissions Code: Emissions limit required by rule
 Future Effective Date of Allowable Emissions:
 Requested Allowable Emissions and Units: 0.5 Units: lbs/mmBtu
 Equivalent Allowable Emissions: 351 lbs/hr 1537.38 tons/yr
 Method of Compliance: EPA Method 20 or modified EPA Method 20 - 1 GT per bank of 12
 Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Emission limits are from rule 62-296.570(4)(b)5., F.A.C. Emissions given above are for each gas turbine

Emission U	nit In	formation	Section	of
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## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 5

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: VE20				
2. Basis for Allowable Opacity Code(R/O): Rule [ ] Rule [	] Other			
3. Allowable Opacity: Normal Conditions: 20 % 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):  The Maximum Period of Excess Opacity Allowed is 2 hours in 24 hours as stated in rul F.A.C	le 62-210.700(1)			

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

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

Information for Facility-ID: 1 Emission Unit #: 5

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	per:
5. Installation Date (DD-MON-YYYY):		
6. Performance Specification Test Date (DD-Mo	ON-YYYY):	
7. Continuous Monitor Comment (limit to 200 cha This emission unit is not required to install continuous 72.6(b)(1).	,	s exempted per 40 CFR

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

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

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #:5

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	Unit 1	Informatio	n 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 Consur	ning/Expanding Code: (C, E, U- unkown):
PM	U	
SO2	U	
NO2	U	
4. Base PM SO2 NO2	eline Emissior lbs/hr lbs/hr tons/yr	tons/yr tons/yr

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	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 #:5

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

- 1. Process Flow Diagram: PPEU5_1.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- 2. Fuel Analysis or Specification: PPEU5_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: PPEU5_4.bmp
  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: PPEU5_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: PPEU5_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 : PPEU5_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

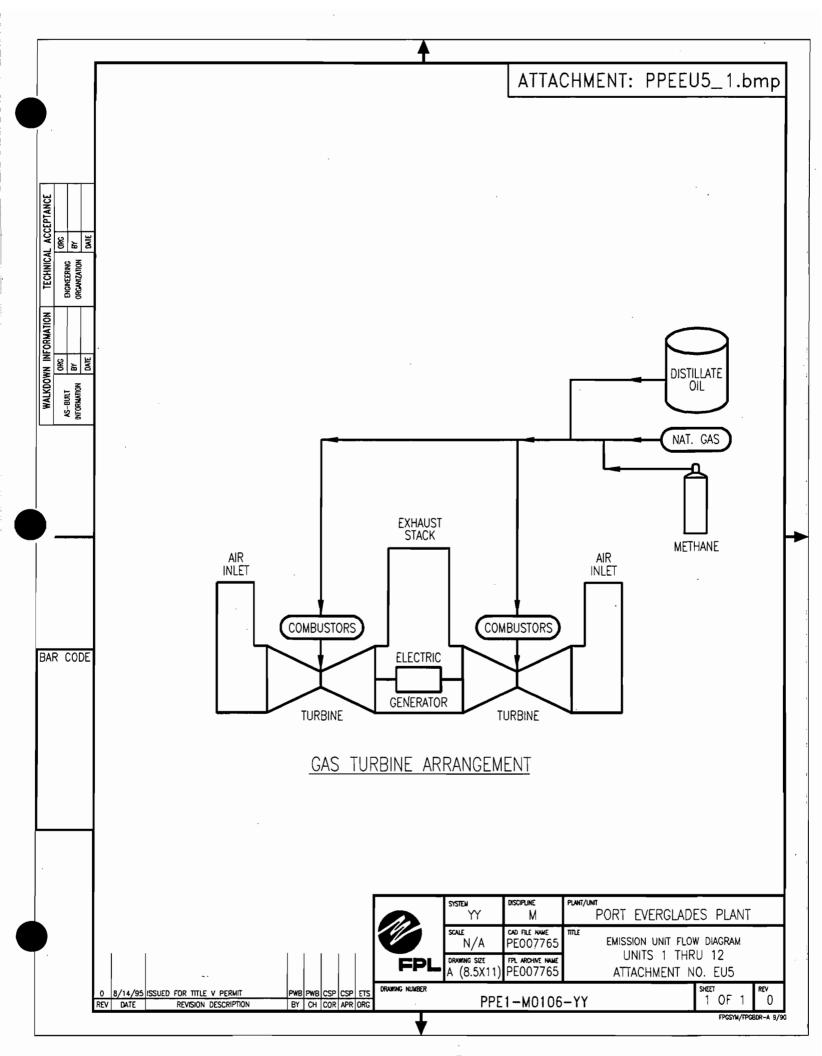
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

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



### Attachment PPEU5_2.txt

## Fuel Analysis Natural Gas Analysis (typical)²

<u>Parameter</u>	Typical value	Max value
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124	none
% sulfur (grains/CCF)	0.43 ¹	1 grain / ccf
% nitrogen (by volume)	0.8	none
% ash	negligible	none

*Note: The values listed are "typical" values based upon information supplied to FPL by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

- (1) Data from laboratory analysis
- (2) 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 PPEU5_2.txt

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

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

#### 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.

### FLORIDA POWER & LIGHT CO, STACK SAMPLING FACILITIES SIMPLE-CYCLE GAS TURBINES

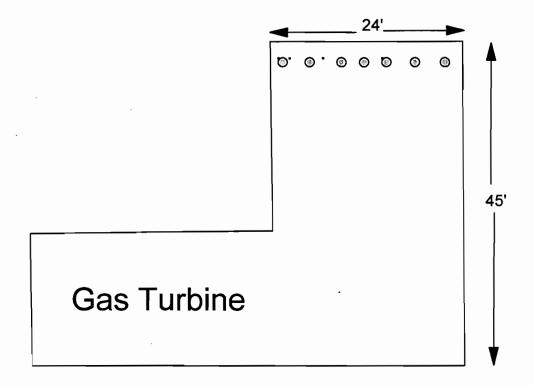
Natural Gas & Distillate Oil Stationary Gas Turbines

Stack Specifications

Sampling Dimensions: 16' x 24'

Sampling Area: 384 sq ft.

sampling port depth: 6.0 inches No. of ports: 7, 4" diameter



Note that Unit 6 is the only stack with sampling ports.

Access to sampling ports is provided by temporary scaffolding erected prior to testing. There are no external probe supports. Internal support is provided by angle iron installed inside the stack. AC power is available at the stack base.

#### Attachment PPEU5_6.txt

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

The aircraft 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 fuel switching, changing from automatic to manual operational control or shutting down the unit to investigate the cause of the opacity problem.

#### Attachment PPEU5_10.txt

#### Alternative Methods of Operation

Each of the 12 gas turbines will be operated independently from any other and on either natural gas fuel or light distillate oil. FPL may operate from one to twelve gas turbine units at any time, and in any combination. The gas turbines will typically operate at the base load setting.

Air operating permit #AO 06-148762 (NOx RACT) has limited the annual heat input to the bank of twelve gas turbines to 7379 x 10^12 Btu, which is approximately equivalent to a 10% capacity factor. Note that the 10 percent capacity factor limit is not an applicable requirement as defined in Rule 62-213.100(7), F.A.C, since it is found in an Air Operating permit, and is not federally-enforceable.

Each gas turbine may operate from zero to 702 mmBtu per hour, which is equivalent to 8,424 mmBtu/hour for the bank of twelve.

The NOx RACT permit (AO-06-148762) limits the emissions of NOx in terms of both lb/hr and lb/MMBtu and imposes an annual heat input limitation of 7379 x 10^12 Btu (10% capacity factor) for all 12 simple-cycle gas turbines. Note that any individual gas turbine may operate up to 8760 hours in any given year, so long as the aggregate heat input for all 12 GT's does not exceed the annual heat input limitation imposed by the NOx RACT permit, and the NOx and VOC emission rates are not exceeded.

### Attachment PPEU5 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).

NOx RACT ( A006-148762) - Three items were identified as action to be undertaken by FPL in order to satisfy RACT requirements:

- 1. The twelve GT's fuel firing rate shall not exceed 8,424 mmBtu/hr during fuel oil or natural gas firing. The annual heat input for all twelve gas turbines shall not exceed 7379000 mmBtu. FPL uses fuel sampling and analysis and by measuring fuel flow to monitor the heat input rate to the GT's.
- 2. NOx emissions from the each GT shall not exceed the following limits 0.50 lbs/mmBtu or 351 lbs/hr for natural gas and 0.90 lbs/mmBtu or 631 lbs/hr for fuel oil. These limit shall apply at all times expect during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700. FPL conducted testing to demonstrate compliance using EPA Method 20. FPL is pursuing approval for using a modified Method 20 for future compliance testing.
- 3. Before May 31, 1995, NOx emission compliance for each fuel shall be demonstrated by stack tests on one representative turbine unit using EPA Method 20 from 40 CFR Appendix A and conducted at no less than 90 % of the maximum hourly operating load. The Departments Southeast District Office and the Broward County Department of Natural Resource Protection shall be notified at least 15 days prior to each test. Results of the tests shall be reported to the Department within 45 days of test completion. Testing frequency for future test will be determined upon review of the performance test results. FPL conducted the initial compliance tests on the representative unit by the required date; therefore this specific condition is requested to be deleted.

A0 06-223351 Permit contains the following conditions:

- 1. The GT's shall be fired with no.2 fuel oil and/or natural gas. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 2. To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for each boiler and monthly records of heating value for such fuel All records shall be maintained for a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

3. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Air Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the department as specified.

Emission	Unit	Information	Section	of

#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 Emission Unit #:6

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:

- [ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- [ X ] 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): 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	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): Unregulated Emission Units</li> </ol>
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
<ul> <li>6. Emissions Unit Comment (limit to 500 characters):         This emission unit section covers all unregulated sources at the Port Everglades plant site. Attachment PPE     </li> <li>FW provides a list of sources included in this emission unit.</li> </ul>

### **Emissions Unit Control Equipment**

A. Control Equipment #:

1. Description (limit to 200 characters):	
2. Control Device or Method Code:	

En	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:

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

#### **Emissions Unit Details**

1.	Initial	Startup	Date	(DD-MON-YYYY):	

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

Manufacturer:

Model Number:

- 4. Generator Nameplate Rating: MW
- 5. Incinerator Information:

Dwell Temperature:

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

mmBtu/hr 1. Maximum Heat Input Rate:

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 various sources included in this emission unit section may operate up to 8760 hours per year.

#### **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)

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	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 6

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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# E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

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

Information for Facility-ID <u>1</u> Emission Unit #:6

Identification of Point on Plot Plan or Flow Diagram:     Unregulated Emission Units				
2. Emission Point Type Code (1,2,3,4): 3				
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): Vents, tanks, HVAC units, etc.				
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: See Attachment PPE - FW				
5. Discharge Type Code (D, F, H, P, R, V, W):				
6. Stack Height: ft				
7. Exit Diameter: ft				
8. Exit Temperature: °F				
9. Actual Volumetric Flow Rate: acfm				
10. Percent Water Vapor: %				
11. Maximum Dry Standard Flow Rate: dscfm				
12. Nonstack Emission Point Height: ft				
13. Emission Point UTM Coordinates: Zone: East: North:				
14. Emission Point Comment (limit to 200 characters):  Much of the information on this page is intentionally left blank, due to the large number of sources and the resultant variability in the data.				

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

Information for Facility_ID :1 Emission Unit #: 6 Segment #: 8

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #801 - 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: 713934632
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 37.25 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 154.82 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.1 TPY, using estimated activity factor given above.

Emission Unit Information Section	of	
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<u>Segment Description and Rate:</u> Information for Facility_ID: *1* Emission Unit #: 6 Segment #: 9

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #802 - 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: 713289704
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 37.25 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 154.77 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.1 TPY, using estimated activity factor given above.

<b>Emission</b>	Unit I	nformation	Section	of

Segment	Description	and Rate:

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #1M - 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: 713761048
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 0.79 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 60.97 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.03 TPY, using estimated activity factor given above.

<b>Emission</b>	Unit Ir	<b>iformation</b>	Section	of

Segment	Description	and	Rate:

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 3

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: 713761048
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 0.79 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 60.97 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.03 TPY, using estimated activity factor given above.

Emission Unit Information Section of	of
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<b>Segment Description and Rate:</b>
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Information for Facility_ID :1 Emission Unit #: 6 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #3M - 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: 713767216
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 2.66 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 65.90 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.03 TPY, using estimated activity factor given above.

<b>Emission Unit Info</b>	ormation Section	of
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Segment Description and Rate
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Information for Facility_ID :1 Emission Unit #: 6 Segment #: 6

1: Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #807 - 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: 714002473
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 53.56 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 193.47 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.12 TPY, using estimated activity factor given above.

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

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 5

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #4M - 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: 713767216
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 2.66 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 65.90 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.03 TPY, using estimated activity factor given above.

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

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 10

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #804 - 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: 713720471
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 6.33 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 74.81 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.04 TPY, using estimated activity factor given above.

Emission Unit Information Section of	of
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<b>Segment Description and</b>	Rate:
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Information for Facility_ID:1 Emission Unit #: 6 Segment #: 11

<ol> <li>Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):</li> <li>Above-ground tank #805 - 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: 713720471
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 6.33 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 74.81 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.04 TPY, using estimated activity factor given above.

Emission Unit Information Section of	
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Segment	Descr	iption	and	Rate:

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #800 - 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: 714026875
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 26.73 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 127.44 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.08 TPY, using estimated activity factor given above.

Emission Cult initi mation Section of	<b>Emission</b>	Unit	Information	Section	of
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### Segment Description and Rate:

Information for Facility_ID:1 Emission Unit #: 6 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #808 - 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: 714002473
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 53.56 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 193.47 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.12 TPY, using estimated activity factor given above.

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

Information for Facility_ID: 1 Emission Unit #: 6 Segment #: 12

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):  Above-ground tank #806 - 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: 713720471
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 6.33 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 74.81 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.04 TPY, using estimated activity factor given above.

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

Information for Facility-ID: 1 Emission Unit #: 6

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: Visible Emissions General Standard	
2. Basis for Allowable Opacity Code(R/O): Rule [ ] Rule	[ ] Other
3. Allowable Opacity: Normal Conditions: 20 % 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): The Maximum Period of Excess Opacity Allowed is 2 hours in 24 hours as stated in 1 F.A.C	rule 62-210.700(1)

Emission Unit Information Section of	sion Unit Information Section of	
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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission Unit #: 6

Continuous Monitor #: 1

### **Continuous Monitoring System**

<ol> <li>Parameter Code:</li> <li>Pollutant(s):</li> </ol>			
3. CMS Requirement Code(R/O):	Rule	/ Other	
Monitor Information:     Manufacturer:     Model Number:	Serial Numb	per:	
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.			

Emission	Unit	Information	Section	of

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

(Regulated and Unregulated Emissions Units)

Information for Facility-ID: 1 Emission Unit #:6

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. Bas PM SO2 NO2	eline Emission lbs/hr lbs/hr tons/yr	s: 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 #:6

#### Supplemental Requirements for All Applications

- 1. Process Flow Diagram: Not Applicable
  Attached Document ID / Not Applicable / Waiver Requested
- 2. Fuel Analysis or Specification: Not Applicable
  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: Not Applicable
  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 : Not Applicable 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: Not Applicable 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 : 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

#### ATTACHMENT PPE - FW

#### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Following are several pages of unregulated trivial and de minimis activities at the facility. Those items identified 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 (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 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.

#### ATTACHMENT PPE - FW

#### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### Steam and Condensate

Steam & CondensateCondensate Storage Tanks - 6" Vent

Gland Steam Condenser Maintenance Vents

Gland Steam Condenser Relief Valve

Gland Steam Condenser Vent Fans - 6"

Deaerator Vent Condenser - 2" Maintenance Vent

Deaerator Heater Relief Valve

Heaters Maintenance Vents

Heaters Relief Valves

Boiler Feed Pumps Inlet Relief Valves

Boiler Feed Pumps Outlet - Maintenance Vent

Feedwater At Heaters - Relief Valves

Feedwater At Heaters - Maintenance Vent

Condensate Pumps Relief Valves

Vacuum Pumps Tank - 6" Maintenance Vent

Gland Drain Tank Loop Seal Vent

Condensate Recovery Collection Tank Vents

Condensate Receiver Flash Tank - Relief Valve

Vent Condenser 3/4" Vent

Condensate Cooler - 3/4" Vent

Miscellaneous Aux. Steam Relief Valves

Service Building Hot Water Storage Tank - Relief Valve

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Service & Instrument Air Instrument Air Receivers - Relief Valve

Service Air Receivers - Relief Valve

Service Air Intercooler Relief Valve

Service Air Aftercooler Relief Valve

Instrument Air Aftercoolers Relief Valves

Instrument Air Filters A. B. C & D Relief Valves

Instrument Air Dryer System Absorbers A & B Relief Valves

Miscellaneous Air Relief Valves

Phosphate Feed Tanks - 50 Gal.

Steam Drum Maintenance Vents

Steam Drum Relief Valves with Silencers

Super Heater Outlet Header Relief Valves with Silencers

Misc. Steam Line 1" Maintenance Vents

Reheater Outlet Header Relief Valves with Silencer

Reheater Inlet Header Relief Valves with Silencers

Steam Air Heater Drain Tank Maintenance Vent - 1"

Steam Air Heater Piping Maintenance Vents

Ammonium Hydroxide Feed Tank - 350 Gal.

Hydrazine Feed Tank - 350 Gal.

Fuel Oil Metering Tanks - 10" Vent (3,000 BBL.)

Fuel Oil Blowback Tanks - Maintenance Vent

Fuel Oil Strainer Vents - 1/2"

Fuel Oil Burner Pumps - 1/2" Vent

Miscellaneous Fuel Oil Maintenance Vents - 3/4"

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Fuel Oil (Continued)

Fuel Oil Burner Heaters - 3/4" Maintenance Vent

Fuel Oil Burner Booster Pump - 3/4" Vents

Fuel Oil Blowback Tanks - Relief Valves

Fuel Additive Storage Tank Vent - (Magnesium Hydroxide)

Turbine & Lube Oil System

Lube Oil Pump Tank Breather Filter Vent

Lube Oil Filter Unit - Breather Filter

Lube Oil Reservoir Vapor Extractor - 6" with Exhaust Hood

Generator Loop Seal Tank - Oil Extractor with Exhaust Head

Seal Oil Reservoir Maintenance Vent

Seal Oil Cooler Maintenance Vent

Seal Oil Drain 3" Highpoint Vent

Gland Steam Controller - 6" Relief Valves

Lube Oil Coolers - 3/4" Vent

Cooling Water

Boiler Circulation Pumps - 3/4" Maintenance Vents

Closed Cooling Water Surge Tank - 8" Vent

Turbine Lube Oil Coolers - 3/4" Maintenance Vent

Instrument Air Compressor Aftercooler - 3/4" Maintenance Vent

Service Air Compressors - Inter & After Coolers - Maintenance Vents

Vacuum Pump Heat Exchangers 3" - Discharge Continuous Vent

Exciter Air Cooler -1/2" Maintenance Vents

Hydrogen Cooler 1A & 1B - 1/2" Maintenance Vents

# LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMIȘSION UNITS

Cooling Water (Continued)
Hydrogen Seal Oil Coolers 3/4" Vents

Closed Cooling Water Heat Exchangers Inlet Maintenance Vent - 3/4"

Closed Cooling Water Heat Exchangers Inlet Relief Valves

Closed Cooling Water Heat Exchanger 3/4" Maintenance Outlet Vent

Closed Cooling Water Heat Exchanger Outlet Relief Valve

Priming Ejector Separator Silencer with Exhaust Head

Separator - 1" High Point Vent

Misc. Water Maintenance Vents

Chlorine Dispenser 1/2" Vent

Chlorine Evaporator 1/2" Vent

Water Treatment

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

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

Multimedia Carbon / Sand Filters - 1/2" Vent

Cation Unit Vent

Acid Tank Vent

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Main Steam

Platen Inlet Header Maintenance Vent

Pendant Superheater Outlet Header Relief Valves

Reheat Outlet Header Relief Valves with Silencers

Reheat Inlet Header Relief Valves with Silencers

Main Steam Stop Valves Maintenance Vent

Gland Steam Condenser 6" Blower Vent

Miscellaneous Steam Maintenance Vent

**Condensate** 

Misc. Condensate Maintenance Vents

Intercondenser Maintenance Vent

Aftercondenser Maintenance Vent

Gland Steam Condenser Inlet Relief Valve

Gland Steam Condenser Outlet Maintenance Valve

Extraction System

Miscellaneous Maintenance Vents

Auxiliary Steam System 6" X 10" Relief Valves

Miscellaneous Maintenance Vents

Cooling & Circ. Water

Miscellaneous Maintenance - 1" Vents

Closed Cooling Water System

Miscellaneous Maintenance Vents

Closed Cooling Water Surge Tank - 6" Vent

Chemical Feed Tank - 1" Vent

Boiler Feed Pump Lube Oil Coolers - 1/2" Vent

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Condensate Make-Up & Recovery
Condensate Storage Tank - 3" Vent

Condensate Recovery Tank - 4" Vents

Condensate Recovery Flash Tank - 8" Relief Valve

Condensate Recovery Cooler 3/4" Maintenance Vent

Heater Vents & DrainsHeaters - 1" Maintenance Vents

Heaters - 5" X 4" Relief Valves

Service WaterMiscellaneous Maintenance Vents - 2"

Air Evacuation

After Condenser 4" Maintenance Vent

Hogging Ejector 10" Exhaust Head

Moisture Separator 10" Exhaust Head

After Condenser 1/2" Maintenance Vent

Inter Condenser 1/2" Maintenance Vent

Waterbox Priming Vacuum Pumps - 2" Exhausters & 1/2" High Point Vent

Lube Oil SystemLube Oil Storage Tank - 2" Vent

Lube Oil Reservoir Oil Mist Eliminator

Generator Loop Seal Tank - 4" Exhaust Head Vent

Lube Oil Coolers - 1/2" Vents Maintenance

Lube Oil Filter Tank - Filter Vent

Generator Cooling Oil Storage Tank Vent

Oil Filter - 1/2" Maintenance Vent

Stand-By Vacuum Pump - 1/2" Vent

Boiler Feed Pump Lube Oil Reservoir Vapor Extractor - 2"

# LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

<u>Caustic Wash System</u> Caustic Wash Storage Tank

Caustic Mixing Tank

<u>Chemical Feed System</u> Phosphate Doping Tank

Ammonium Hydroxide Doping Tank

Hydrazine Storage Tarık

Phosphate Feed Line Maintenance Vent - 1/2"

Hydrazine Feed Line - 1/2" Maintenance Vent

<u>Fire Protection System</u> Miscellaneous Maintenance Vents

<u>Fuel Oil System</u> Fuel Oil Metering Tanks - Vent (12,000 BBL.)

Fuel Oil Blowback Tanks - Maintenance Vent

Fuel Oil Blowback Tanks - Relief Valve

Miscellaneous Maintenance Vents

Fuel Oil Additive Storage Tank Vent - 4,500 Gal.

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

## STORAGE TANKS - FUEL OIL TERMINAL

Fuel OilF.O. Storage Tank #801 - Vents (150,000 BBL.)

- F.O. Storage Tank #802 Vents (150,000 BBL.)
- F.O. Storage Tank #804 Vents (25,000 BBL.)
- F.O. Storage Tank #805 Vents (25,000 BBL.)
- F.O. Storage Tank #806 Vents (25,000 BBL.)
- F.O. Storage Tank #807 Vents (200,000 BBL.)
- F.O. Storage Tank #808 Vents (200,000 BBL.)
- F.O. Storage Tank #901 Vents (238,000 BBL.)
- F.O. Storage Tank #902 Vents (238,000 BBL.)

Light oil Storage Tank #903 - Vents (25,000 BBL.)

Light oil Storage Tank #904 - Vents (25,000 BBL.)

#### **GENERAL SITE**

# Miscellaneous Building H.V.A.C. (Cooling/Heating)

G.T. Area Office

Stores Building

Control Building

Service Buildings

Fitness Building

Switchyard Building

C.E.M. Buildings

Switchgear Room

Water Treatment/Lab

**Elevators** 

System Protection Office

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Building H.V.A.C. (Cooling/Heating) (continued) F.O. Terminal Office

Relay Rooms

Unit 3 & 4 Tool Room

Gas Metering Office

Sanitary Vents/Stacks
Stores Building

Control Building

Recreation Pavilion

Service Buildings

G.T. Area Offices

Port-A-Johns

F.O. Terminal Office

Miscellaneous Buildings Vent/Exhaust Systems
Unit 3 & 4 Tool Room

Service Buildings

Chemical Lab

Chemical Storage Bldg.

**Switchyard Control** 

**Battery Rooms** 

Paint & Lube Oil Bldg.

Dry Storage Bldg.

Electrical Bldg.

Warehouses

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Buildings Vent/Exhaust Systems (continued) Boiler Feed Pump Bldg.

Control Bldg.

Chlorination Bldg.

Gas Metering Office

**Elevators** 

G.T. Buildings

<u>Kitchen Vent/Exhaust Systems</u> Control Room

Service Bldg.

Recreation Pavilion

C.E.M. Equipment Monitoring Gases

Hydrogen Storage Bulk Liquid

Hydrogen Tank 2" Vent - (1,500 Gal.)

Gas Bottle Storage Nitrogen, CO₂, Hydrogen, Oxygen, Acetylene, Argon, Methane

Oily Waste Water Sumps

Filling Station
2000 Gallon Unleaded Fuel Tank 2" Vent

<u>Hazardous Waste Storage Area</u> Sealed Drums & Containers

Natural Gas
Gas Metering Station

<u>Ignition Gas (Liquid Propane)</u> Propane Storage Tank

Water Treatment
Chemical Storage Area

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Activities (Continued)

Internal Combustion Engines which drive Compressors, Generators, Water Pumps or other auxiliary equipment

Transformers, Switches and Switchgear, Processing & Venting

Electrically Heated Equipment used for Heat Treating, Tracing, Drying, Soaking, Case Hardening or Surface Conditioning

Air Compressors and Centrifuges used for Compressing Air

Storage of Product in Sealed Containers

Painting of Plant Equipment

Solvent Cleaning Operations (Parts Washers)

Use of spray cans and solvents for routine maintenance activities

Portable fuel dispensing tank

Miscellaneous Mobile Vehicle Operation

Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.

Miscellaneous Mobile Equipment Operation

Compressors, Chain Saws, Small Generators, (<100KW) Welding Machines, Electric Saws & Drills, Etc.

Gas Turbine Area - Miscellaneous

Waste Fuel Tank - 10" & 2" Vent (1,200 Gal.)

Misc. Gas Maintenance and Relief Valves

Sonic Caustic Parts Washer

methane bottles

Cardox system

3, 4-ton tanks w/ 1" vents

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Waste Water Treatment
Storm Water Sumps

Oil/Water Separator Tank Vent

Storm Water Basin

Ash Disposal Basin

#### **GENERAL SITE**

### Miscellaneous Activities

Home Heating and Comfort Heating with a gross maximum heat output of less than one million BTU/hour

Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight

Vacuum Pumps used in laboratory operations

Equipment used for steam cleaning

Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more

Equipment used exclusively for space heating, other than boilers

Laboratory equipment used exclusively for chemical or physical analysis

Brazing, soldering or welding equipment

Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents

Fire & Safety Equipment

Surface coating facilities in ozone attainment area (provided that 6.0 gallons of coatings per day are applied)

Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant

Miscellaneous Activities
Plant Grounds Maintenance

Routine Maintenance / Repair Activities

Non-Halogenated Solvent Cleaning Operations

# LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

## **GENERAL SITE**

F.O. Terminal Miscellaneous 10,000 Gal. Oil Slop Tank

8,000 Gal. Oil Slop Tank

<u>Switchyard Miscellaneous</u> Mineral Oil Storage Tank 2" Vent (27,000 Gal.)

Propane Fueled Generator (12.5 kW) with 11/2" Exhaust

250 Lb. Propane Storage Tanks(2) for Generator