MEMO

TO: Howard L. Rhodes

FROM: Clair H. Fancy ISSUED

DATE: August 25, 1998

SUBJECT: FINAL Permit No.: 1290001-003-AV
City of Tallahassee
Sam O. Purdom Generating Station

This permit is a revised Title V air operation permit for the subject facility. The existing facility consists of three (3) boilers subject to 62-296.405, F.A.C., which were not issued construction permits; two (2) peaking unit turbines subject only to the general permitting requirements, which were not issued construction permits; and, one (1) auxiliary boiler subject to 62-296.406, F.A.C., which was issued a construction permit with a small boiler BACT determination (issued by Northwest District). There are also three (3) unregulated emissions units consisting of emergency generators, engines and painting operations. The largest of the three boilers (Unit 7) is an Acid Rain, Phase II unit.

This revised permit is being issued to incorporate the terms and conditions of construction permit number PSD-FL-239/PA97-35. The construction permit was processed through the power plant siting procedures and was signed by the Governor on April 28, 1998. The PROPOSED Title V permit was sent to EPA on May 28. No comments were received from EPA by day 55 (July 23). A phone call on July 25 to Gracy Danois confirmed that EPA had no comments. Therefore, the FINAL permit is being issued unchanged from the PROPOSED.

I recommend this permit for your signature.

Attachment

CHF/ss/h

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

NOTICE OF FINAL REVISED TITLE V PERMIT

In the Matter of an
Application for Permit:

Mr. Robert E. McGarrah
Production Superintendent
City of Tallahassee, Electric Utilities
2602 Jackson Bluff Road
Tallahassee, Florida 32304

DEP File No. 1290001-003-AV
Sam O. Purdom Generating Station
Wakulla County

Enclosed is the FINAL Revised Title V Permit Number 1290001-003-AV for the Sam O. Purdom Generating Station located at 667 Port Leon Drive, St. Marks, Wakulla County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.), to include the terms and conditions of the PSD/NSR construction permit (permit number PSD-FL-239/PA97-35) that was issued authorizing the construction of a new 250 megawatt combustion turbine, designated as Unit 8. There were no comments received from Region 4, U.S. EPA, during the PROPOSED permit review period, however, a permitting note has been added prior to specific condition E.9. to address EPA's concern regarding the Florida State Implementation Plan's excess emissions rule as it applies to a source subject to Standards of Performance for New Stationary Sources (NSPS). Also, the references to the Power Plant Siting number PA97-36 have been corrected to PA97-35. Otherwise, the contents of the FINAL permit are unchanged from those presented in the PROPOSED permit.

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

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/11/98 to the person(s) listed, or as otherwise noted:

Mr. Robert E. McGarrah, City of Tallahassee, Electric Utilities*
Ms. Jennette Curtis, City of Tallahassee
Mr. Karl Baur, P.E., City of Tallahassee, Electric Utilities (Internet E-mail Memorandum)
Mr. Doug Fulle, Foster-Wheeler Environmental Corporation (Internet E-mail Memorandum)
Mr. Ed Middleswart, DEP, Northwest District Office
Mr. Gerry Neubauer, DEP, Northwest District Branch Office
Ms. Carla E. Pierce, U.S. EPA, Region 4 (Internet E-mail Memorandum)
Ms. Gracy R. Danois, U.S. EPA, Region 4 (Internet E-mail Memorandum)

Clerk Stamp

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

Barbara J. Powell 9/11/98
(Clerk) (Date)

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Robert E. McGarrah
Production Superintendent
City of Tallahassee
Electric Utilities
2602 Jackson Bluff Road
Tallahassee, Florida 32304

4a. Article Number
Z 333 638 489

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
9.14.98

5. Received By: *(Print Name)*
Sonnee Thompson

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
Sonnee Thompson

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 333 638 489

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Mr. Robert E. McGarrah	
Street & Number 2602 Jackson Bluff Road	
Post Office, State, & ZIP Code Tallahassee, Florida 32304	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 9/11/98 City of Tallahassee-Purdom Facility ID#1290001-003-AV	

PS Form **3800**, April 1995

City of Tallahassee
Sam O. Purdom Generating Station
Facility ID No.: 1290001
Leon County

Title V Air Operation Permit
FINAL Permit No.: 1290001-003-AV

Project Description:
Permit Revision to Include
New Combustion Turbine - Unit #8

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

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

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

Title V Air Operation Permit

Table of Contents

Table of Contents (con't.)

Section **Page Number**

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

Permittee:
City of Tallahassee, Electric Utilities
300 South Adams Street
Tallahassee, Florida 32301

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001
SIC Nos.: **49**, 4911
Project: Amended Title V Air Operation Permit to Include New Combustion Turbine - Unit 8

This permit is for the operation of the Sam O. Purdom Generating Station. This facility is located at 667 Port Leon Drive, St. Marks, Wakulla County; UTM Coordinates: Zone 16, 769.5 km East and 3339.97 km North; Latitude: 30° 09' 47" North and Longitude: 84° 12' 10" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Phase II Acid Rain Permit Application/Compliance Plan received December 20, 1995
Permit Number 1290001-002-AC
BACT Determination Dated October 8, 1996
Permit Number PSD-FL-239/PA97-35, Including BACT Determination
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)
Appendix TV-1, Title V Conditions (version dated 12/2/97)
ASP Number 97-B-01
Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)
Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996)

Effective Date: January 1, 1998
Revised Date: August 7, 1998.
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources Management

HLR/sms/jh

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of three fossil fuel-fired steam generators, two simple cycle combustion turbines and one auxiliary boiler. One of the steam generators, Boiler Number 7, is an Acid Rain Phase II Unit. The total combined electrical generating capacity from the facility is a nominal 112.6 megawatts (MW), of which a nominal 88 megawatts are provided by the steam generators and a nominal 24.6 megawatts are provided by the combustion turbines. The fuels used at this facility are natural gas and fuel oil. The auxiliary boiler is only used as a source of steam for plant operations when none of the other steam generating units are operating. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

In addition to the above described emissions units, a new combined cycle combustion turbine is being added. It is expected to begin operation during the spring/summer of 2000 and will be subject to Acid Rain, Phase II. This new unit will be designated as Unit 8. It will provide an additional 250 megawatts (nominal rating) of electrical output by burning natural gas and/or No. 2 fuel oil. After the initial compliance testing is completed on Unit 8, Units 5 and 6 will permanently cease operations, leaving the facility with a combined electrical output of 318.6 megawatts (nominal rating). With the operation of this new unit, the facility-wide emissions of nitrogen oxides and sulfur dioxide will be capped at 467 and 80 tons per year, respectively.

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

The use of 'Permitting Notes' throughout this permit are for informational purposes, only, and are not permit conditions.

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

Regulated Emissions Units:

E.U. ID No.	Brief Description
-005	Boiler Number 5 - 300 MMBtu/hour
-006	Boiler Number 6 - 300 MMBtu/hour
-007	Boiler Number 7 - 621 MMBtu/hour (Acid Rain, Phase II Unit)
-008	Combustion Turbine Number 1 - 228 MMBtu/hour
-009	Combustion Turbine Number 2 - 228 MMBtu/hour
-011	Auxiliary Boiler - 16.74 MMBtu/hour
-012	Combustion Turbine Number 8 - 1,659.5 MMBtu/hour (Acid Rain, Phase II Unit)

Unregulated emissions Units and/or Activities (See Appendix U-1):

E.U. ID No.	Brief Description
-010	Fugitive VOC Sources - Painting Operations
-xxx	General Purpose Engines
-yyy	Emergency Generators

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

Subsection C. Relevant Documents.

The following documents are part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Phase II Acid Rain Permit Application/Compliance Plan received December 20, 1995
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)
Appendix TV-1, Title V Conditions (version dated 12/2/97)
Permit Number 1290001-002-AC
BACT Determination Dated October 8, 1996
Permit Number PSD-FL-239/PA97-35, including BACT Determination, Dated May 28, 1998
ASP Number 97-B-01
Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)
Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996)

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

These documents are provided to the permittee for information purposes only:
Appendix H-1, Permit History / ID Number Changes
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:
Initial Title V Permit Application Received June 14, 1996
Additional Information Request Dated September 26, 1996
Additional Information Response Received December 24, 1996
Site Certification Application/Application to Amend Initial Title V Permit Dated March 7, 1997
City of Tallahassee Letter Dated March 7, 1997
City of Tallahassee Letter Dated March 21, 1997
City of Tallahassee Letter Dated April 16, 1997
City of Tallahassee Letter Dated April 25, 1997
Jonathan Holtom Memo to file dated May 9, 1997
City of Tallahassee Letter Dated June 24, 1997
City of Tallahassee Letter Dated October 29, 1997
Application to Amend Initial Title V Permit (as revised July 16, 1997)
Initial Title V permit - 1290001-001-AV
(Final on August 27, 1997, Issued October 9, 1997, Effective January 1, 1998)
City of Tallahassee Letter Dated December 12, 1997
City of Tallahassee Letter Dated December 15, 1997
Administrative Correction (Permit/Project Number 1290001-004-AV) dated January 2, 1998

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Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-1, Title V Conditions (version dated 12/2/97), is a part of this permit.

{Permitting note: Appendix TV-1, Title V Conditions, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and
b. certification forms and/or RMPs according to the promulgated rule schedule.
[40 CFR 68]

4. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}
[Rule 62-296.320(1)(a), F.A.C.]

7. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. The portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity where practical.

b. Abrasive blasting activities that are associated with normal maintenance and corrosion control activities shall be enclosed where practical.

c. Unconfined emissions associated with the limited on-site traffic shall be controlled by limiting vehicle speeds and unnecessary traffic within the plant grounds.

d. During construction of unit 8, a combination of the following techniques will be implemented:
   1. Contractors will be instructed to comply with any applicable state and local regulations governing open-bodied trucks hauling sand, gravel, or soil between on-site and off-site areas.
   2. Areas disturbed during construction will be stabilized by mulching or seeding as soon as practicable.
   3. When construction occurs on bare ground, water (possibly together with non-hazardous wetting agents) will be used as necessary to help suppress dust.
   4. Temporary vehicular surfaces of crushed rock may be used in high traffic areas. Areas not subject to heavy traffic or continual disturbance will be wetted down as needed using non-toxic substances to help suppress dust.
   5. Sandblasting operations will be localized to minimize effects on adjacent work areas. Protective covers will also be utilized where practicable.
   6. Surface coating activities will include the initial painting of the combined cycle unit 8 and the associated facilities. Activities will be enclosed whenever practicable.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in initial Title V permit application received June 14, 1996, and amended by comments received April 25, 1997; and by Site Certification Application received March 7, 1997, and amended July 16, 1997.]

{Permitting Note: Condition No. 8 presents the reasonable precautions to be implemented in accordance with Rule 62-296.320(4)(c)2, F.A.C., in lieu of the requirements of Condition No. 58 of Appendix TV-1.}

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. The Department's Northwest District Branch Office (Tallahassee) telephone number for reporting problems, malfunctions or exceedances under this permit is 850/488-3704, day or night, and for emergencies involving a significant threat to human health or the environment is 850/413-9911. The Department's Northwest District Office (Pensacola) telephone number for routine business, including compliance test notifications, is 850/444-8364 during normal working hours.

11. The permittee shall submit all compliance related notifications and reports required of this permit (other than Acid Rain Program Information) to the Department's Northwest District office:

Department of Environmental Protection
Northwest District Office
160 Governmental Center
Pensacola, Florida 32501-5794
Telephone: 850/444-8364
Fax: 850/444-8417

Acid Rain Program Information shall be submitted, as necessary, to:

Department of Environmental Protection
2600 Blair Stone Road
Mail Station #5510
Tallahassee, Florida 32399-2400
Telephone: 850/488-6140
Fax: 850/922-6979

12. Any reports, data, notifications, certifications, and requests (other than Acid Rain Program Information) required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

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

Acid Rain Program Information should be sent to:

United States Environmental Protection Agency, Region 4
Air, Pesticides & Toxics Management Division
Acid Rain Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9102
Fax: 404/562-9095

Emission Limitations and Standards

13. Sulfur Dioxide. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of SO_2 shall not exceed 80 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods.
[PSD-FL-239/PA97-35; and, Applicant request.]

14. Compliance with the annual facility-wide SO_2 cap shall be reported as required in Condition G.6. (Appendix GC) and shall be determined by adding the annual SO_2 emissions (in tons per year) determined by the methods required by 40 CFR 75 for Unit 8 along with existing Unit 7 to the annual SO_2 emissions calculated for existing units GT1, GT2 and the auxiliary boiler, as determined by the following formulas:

GT 1 & GT 2 SO_2 Emissions (natural gas) =
(Fuel Usage) **x** (Heating Value of Natural Gas) **x** (0.0006 lb/MMBtu) **x** (units conversion factors)

-Fuel usage shall be measured by a fuel meter, recorded daily, when the units are operated
-Heating Value of Natural Gas shall be determined from fuel supplier data
-Sulfur Content default of NADB = 0.0006 lb-SO_2/mmBtu

GT 1 & GT 2 SO_2 Emissions (fuel oil) = (Fuel Usage) **x** (Fraction Sulfur in the fuel oil) **x** (Molecular weight SO_2 / Molecular weight of S) **x** (Conversion factor) **x** (units conversion factors)

-Fuel usage shall be measured by a fuel meter, recorded daily when units are operated
-% Sulfur will be determined from fuel oil analysis each time fuel is delivered
(i.e., 0.05% S = 0.0005 in above formula)
-Molecular weight of SO_2 = 64
-Molecular weight of S = 32
-Conversion factor of 95% = 0.95

Aux. Boiler SO_2 Emissions (natural gas) =
(Fuel Usage) **x** (Heating Value of Natural Gas) **x** (0.0006 lb/MMBtu) **x** (units conversion factors)

-Fuel usage shall be measured by a fuel meter, recorded daily, when the unit is operated
-Heating Value of Natural Gas shall be determined from fuel supplier data
-Sulfur Content default of NADB = 0.0006 lb/MMBtu
[PSD-FL-239/PA97-35; and, Applicant request.]

15. Nitrogen Oxides. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of NO_X shall not exceed 467 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods.
[PSD-FL-239/PA97-35; and, Applicant request.]

16. Compliance with the annual facility-wide NO_X cap shall be reported as required in Condition G.6. (Appendix GC) and shall be determined by adding the annual NO_X emissions (in tons per year) determined by the CEMS required by 40 CFR 75 for Unit 8 along with existing Unit 7 to the annual NO_X emissions calculated for existing units GT1, GT2 and the auxiliary boiler, as determined by the following formulas:

GT 1 & GT 2 NO_X (natural gas) =
(Fuel Usage) **x** (Heating Value of Natural Gas) **x** (0.44 lb/MMBtu) **x** (units conversion factors)

-Fuel usage shall be measured by a fuel meter, recorded daily, when the units are operated
-Heating Value of Natural Gas will be determined from fuel supplier data
0.44 lb/MMBtu = AP-42 emission factor

GT.1 & GT 2 NO_X (fuel oil) =
(Fuel Usage) **x** (Heating Value of Fuel Oil) **x** (0.698 lb/MMBtu) **x** (units conversion factors)

-Fuel usage shall be measured by a fuel meter, recorded daily, when the units are operated
-Heating Value of Fuel Oil will be determined from fuel supplier data
-0.698 lb/MMBtu = AP-42 emission factor

Aux. Boiler NO_X (natural gas) = (Fuel Usage) **x** (140 lb/MMCF) **x** (units conversion factors)

-Fuel usage shall be measured by a flow meter, recorded daily, when the unit is operated
-140 lb/MMCF = AP-42 emission factor
[PSD-FL-239/PA97-35; and, Applicant request.]

Reporting Requirements

17. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.
{See condition No. 52., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

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Section III. Emissions Unit(s).

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

E.U. ID No.	Brief Description
-005	Boiler Number 5
-006	Boiler Number 6

These emissions units are Combustion Engineering and Riley Stoker Corporation steam generators designated as "Boiler Number 5" and "Boiler Number 6", respectively. Boiler Number 5 is tangentially fired. Each boiler is rated at a maximum heat input of 300 million Btu per hour (MMBtu/hour) while being fueled with natural gas and/or No. 2 thru No. 6 fuel oil. Each boiler nominally produces 220,000 pounds of steam per hour to run a nominal 22 megawatt (electric) turbine-generator (one each).

{Permitting notes: These units pre-date PSD regulations, but are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators With More Than 250 Million BTU per Hour Heat Input. Boiler Number 5 began commercial operation in 1958. Boiler Number 6 began commercial operation in 1961. Stack height = 125 feet, exit diameter = 13.0 feet, exit temperature = 344 °F, actual volumetric flow rate = 94,400 acfm. The exhaust from Boiler Number 5 and Boiler Number 6 share the same physical stack. Emissions from the boilers are uncontrolled.}

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

A.0. Upon successful completion of the initial performance test for combustion turbine unit 8 (emissions unit -012), boilers 5 and 6 (units -005 and -006) shall permanently cease operations. [PSD-FL-239/PA97-35; and, Applicant request.]

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
-005	300	Natural Gas
	300	No. 2 thru No. 6 Fuel Oil
-006	300	Natural Gas
	300	No. 2 thru No. 6 Fuel Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.11.**
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation - Fuels. The only fuels allowed to be burned in these boilers are natural gas and/or new No. 2 thru No. 6 fuel oil.
[Rule 62-213.410, F.A.C.; and, Applicant Request dated June 24, 1997.]

A.4. Hours of Operation. These emissions units may operate continuously, i.e. 8760 hours/year. The permittee shall maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.
[Rule 62-210.200(PTE), F.A.C.; and, AO65-242831, Specific Condition #3.]

Emission Limitations and Standards

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

A.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(a), F.A.C.]

A.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3 hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
[Rule 62-210.700(3), F.A.C.]

A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(b), F.A.C.]

A.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3 hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

A.9. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 1.87 pounds per million Btu heat input , as measured by applicable compliance methods. However, the permittee has requested a lower limit of 1.3 pounds per million Btu heat input, as measured by applicable compliance methods.
[Rules 62-296.405(1)(c)1.h. & 62-204.240(1)(a), F.A.C.; and, requested by applicant in initial Title V permit application received June 14, 1996.]

A.10. Sulfur Dioxide - Sulfur Content. The No. 2 thru No. 6 fuel oil sulfur content shall not exceed 1.20 percent, by weight. See specific condition **A.17.** and common condition **C.9.**
[Rule 62-296.405(1)(e)3., F.A.C.; and, requested in a letter by applicant dated March 21, 1997.]

A.11. These emissions units are also subject to the conditions contained in **Subsection C. Common Conditions**, as specified below.

Excess Emissions

A.12. See common conditions **C.1. - C.3.**

Monitoring of Operations

A.13. Sulfur Dioxide. **The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery.** This protocol is allowed because the emissions units do not have an operating flue gas desulfurization device. See specific conditions **A.10., C.8. and C.9.**
[Rule 62-296.405(1)(f)1.b., F.A.C.]

A.14. Determination of Process Variables. See common condition **C.4.**

Test Methods and Procedures

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

A.15. Visible Emissions. See common conditions **C.5., C.6.** and **C.16.**

A.16. Particulate Matter. See common conditions **C.7., C.17.** and **C.21.**

A.17. Sulfur Dioxide. See specific condition **A.13.** and common conditions **C.8.** and **C.9.**

A.18. Operating Rate During Testing. See common condition **C.11.**

A.19. Calculation of Emission Rate. See common condition **C.12.**

A.20. Applicable Test Procedures. See common condition **C.13.**

A.21. Required Stack Sampling Facilities. See common condition **C.14.**

A.22. Frequency of Compliance Tests. See common condition **C.15.**

Recordkeeping and Reporting Requirements

A.23. See common conditions **C.18. - C.20.**

Reasonable Assurances

A.24. Fuel Oil Storage Tank and Piping Restrictions. No fuel oil shall be placed into the fuel oil storage tanks, which are connected by a single pipe-line at this time and used to supply fuel oil to Boilers Number 5, Number 6 and Number 7, that exceeds the sulfur limitation specified in specific condition **A.10.**, until Boilers Number 5 and Number 6 are permanently shutdown or separate piping is installed between the fuel oil storage tanks and Boilers 5 and 6 and Boiler 7.
[Rule 62-4.070(3), F.A.C.]

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-007	Boiler Number 7, (Phase II Acid Rain Unit)

This is a Riley Stoker Corporation model RX-33 steam generator designated as "Boiler Number 7". It is rated at a maximum heat input of 621 MMBtu/hour while being fueled with natural gas and/or No. 2 thru No. 6 fuel oil. It nominally produces 500,000 pounds of steam per hour to run a nominal 44 MW turbine-generator.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II. This unit pre-dates PSD regulations, but is regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators With More Than 250 Million BTU per Hour Heat Input. Boiler Number 7 began commercial operation in 1966. Stack height = 180 feet, exit diameter = 9.0 feet, exit temperature = 300 °F, actual volumetric flow rate = 180,798 acfm. Emissions from this boiler are uncontrolled.}

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
7	621	Natural Gas
	621	No. 2 thru No. 6 Fuel Oil; On-Specification Used Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; and, Applicant's request.]

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.11.**
[Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation - Fuels. The fuels that are allowed to be burned in this boiler are natural gas and/or new No. 2 thru No. 6 fuel oil and/or on-specification used oil. See specific condition **B.24.**
[Rule 62-213.410, F.A.C.; and, Applicant Request dated June 24, 1997.]

B.4. Hours of Operation. This emissions unit may operate continuously, i.e. 8760 hours/year. The permittee shall maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.
[Rule 62-210.200(PTE), F.A.C.; and, AO65-242831, Specific Condition #3.]

Emission Limitations and Standards

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

B.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(a), F.A.C.]

B.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3 hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
[Rule 62-210.700(3), F.A.C.]

B.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(b), F.A.C.]

B.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3 hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 1.87 pounds per million Btu heat input , as measured by applicable compliance methods.
[Rule 62-296.405(1)(c)1.h., F.A.C.]

B.10. Sulfur Dioxide - Sulfur Content. The No. 2 thru No. 6 fuel oil sulfur content shall not exceed 1.70 percent, by weight. See specific condition **B.17.** and common condition **C.9.**
[Rule 62-296.405(1)(e)3., F.A.C.; and, requested by applicant in a letter dated April 16, 1997.]

B.11. This emissions unit is also subject to the conditions contained in **Subsection C. Common Conditions**, as specified below.

Excess Emissions

B.12. See common conditions **C.1. - C.3.**

Monitoring of Operations

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on this unit: Gas Fuel Flow, Oil Fuel Flow, NO_x and CO_2.}

B.13. Sulfur Dioxide. **The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery.** This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **B.10., C.8. and C.9.**
[Rule 62-296.405(1)(f)1.b., F.A.C.; and, requested by applicant in a letter dated April 16, 1997.]

B.14. Determination of Process Variables. See common condition **C.4.**

Test Methods and Procedures

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

B.15. Visible Emissions. See common conditions **C.5., C.6.** and **C.16.**

B.16. Particulate Matter. See common conditions **C.7., C.17.** and **C.21.**

B.17. Sulfur Dioxide. See specific condition **B.13** and common conditions **C.8.** and **C.9.**

B.18. Operating Rate During Testing. See common condition **C.11.**

B.19. Calculation of Emission Rate. See common condition **C.12.**

B.20. Applicable Test Procedures. See common condition **C.13.**

B.21. Required Stack Sampling Facilities. See common condition **C.14.**

B.22. Frequency of Compliance Tests. See common condition **C.15.**

Recordkeeping and Reporting Requirements

B.23. See common conditions **C.18. - C.20.**

Miscellaneous Conditions.

B.24. Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by the City of Tallahassee in the production and distribution of electricity, not to exceed 10,000 gallons during any calendar year.

c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. Operational Requirements: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. Testing Requirements: For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.
[40 CFR 279.72(a)]

Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

In addition to the above requirements, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with approved test methods.

f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:

(1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.

(2) Results of the analyses of each deposit of used oil, as required by the above conditions.

(3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.

[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. Reporting Requirements: The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

B.25. Sufficient records shall be maintained to ensure that the total facility-wide SO_2 emissions do not exceed 80 tons per year (see facility-wide conditions **13. & 14.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

B.26. Sufficient records shall be maintained to ensure that the total facility-wide NO_X emissions do not exceed 467 tons per year (see facility-wide conditions **15. & 16.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

Subsection C. Common Conditions.

{Permitting Note: The following conditions are common to Boilers No. 5, No. 6 and No. 7, as specified in Subsections A and B, and to the auxiliary boiler as specified in Subsection E. They are placed here as a convenience and to avoid duplication.}

Excess Emissions

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

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

C.3. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

C.4. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

C.5. Visible Emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition **C.6.**
[Rule 62-296.405(1)(e)1., F.A.C.]

C.6. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
   a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
   b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rule 62-297.401, F.A.C.]

C.7. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

C.8. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a**

liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery. See specific conditions **A.10., B.10. and C.9.**
[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO65-242831.]

C.9. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest editions.
[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

Compliance Test Requirements

C.10. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

C.11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)b., F.A.C.]

C.12. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

C.13. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
    c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

C.14. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

C.15. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

[Rule 62-297.310(7), F.A.C.; AO65-242831, Specific Condition #5 (frequency); and, SIP approved.]

C.16. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuels; or
b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
c. only liquid fuels for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

C.17. Particulate Matter testing - Annual and Permit Renewal. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

a. only gaseous fuels; or
b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
c. only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Recordkeeping and Reporting Requirements

{Permitting Note: The reports that are required by the following conditions are to be sent to the Department of Environmental Protection's Northwest District Office, 160 Governmental Center, Pensacola, Florida 322501-5794}

C.18. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

C.19. The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

C.20. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Miscellaneous Conditions

C.21. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil/natural gas ratio that can be fired while meeting the standards.
[Rule 62-4.070(3), F.A.C.; and, Applicant request dated April 25, 1997.]

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Subsection D. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-008	Combustion Turbine Number 1
-009	Combustion Turbine Number 2

These emissions units are simple cycle combustion turbines manufactured by Westinghouse (model number W171G) and are designated as "Combustion Turbine Number 1" and "Combustion Turbine Number 2". They are each rated at a maximum heat input of 228 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil. Each of these combustion turbines run a nominal 12.3 MW generator. Emissions from the combustion turbines are uncontrolled.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Combustion Turbine Number 1 began commercial operation in 1963. Combustion Turbine Number 2 began commercial operation in 1963. Each combustion turbine has its own stack. Stack height = 38 feet, exit diameter = 10 feet, exit temperature = 880 °F, actual volumetric flow rate = 395,080 acfm.}

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

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
8	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil
9	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil

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

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.13.**
[Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - Fuels. Only natural gas and/or new No. 2 fuel oil shall be fired in these turbines.
[Rule 62-213.410, F.A.C.]

D.4. Hours of Operation. Until the initial performance test on Unit 8 has been completed, each combustion turbine may operate 6993 hours per year. After that time, the hours of operation are not limited, but the units are subject to the NO_x and SO_2 facility wide emissions caps. The permittee shall maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO65-242827, Specific Condition #3.]

Emission Limitations and Standards

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

D.5. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.; and, AO65-242827.]

D.6. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.4 percent, by weight. After the initial performance test for Unit 8 is completed, the sulfur content of the No. 2 fuel oil shall not exceed 0.05%, by weight. See specific condition **D.12.**
[AO65-242827; applicant request on initial Title V application received June 14, 1996; PSD-FL-239/PA97-35; and, BACT.]

Excess Emissions

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

D.8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

D.9. Sulfur Dioxide. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See specific conditions **D.6. and D.12.**
[Rule 62-213.440, F.A.C.]

D.10. Determination of Process Variables.

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

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

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

Test Methods and Procedures

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

D.11. Visible emissions. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

D.12. Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest editions.
[Rules 62-213.440 and 62-297.440, F.A.C.]

D.13. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.
[AO65-242827 Specific Condition No. 2; and, Applicant Request dated June 24, 1997.]

D.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

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

D.15. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    a. Did not operate; or
    b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
    a. Visible emissions, if there is an applicable standard;
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
[Rule 62-297.310(7), F.A.C.; AO65-242827, Specific Condition #5 (frequency); and, SIP approved.]

D.16. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
a. only gaseous fuels; or
b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
c. only liquid fuels for less than 400 hours per year.
[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

Recordkeeping and Reporting Requirements

{Permitting Note: The reports that are required by the following conditions are to be sent to the Department of Environmental Protection's Northwest District Office, 160 Governmental Center, Pensacola, Florida 322501-5794}

D.17. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

D.18. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8), F.A.C.]

D.19. Sufficient records shall be maintained to ensure that the total facility-wide SO_2 emissions do not exceed 80 tons per year (see facility-wide conditions **13. & 14.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

D.20. Sufficient records shall be maintained to ensure that the total facility-wide NO_X emissions do not exceed 467 tons per year (see facility-wide conditions **15. & 16.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

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

E.U. ID No.	Brief Description
-011	Auxiliary Boiler

This is a Kewanee model H3S-400-G steam generator rated at a maximum heat input of 16.74 MMBtu/hour while being fueled with natural gas.

{Permitting note(s): This emissions unit is regulated under 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. However, since it is only permitted to combust natural gas, the standards, the monitoring and the associated reporting requirements contained in Subpart Dc do not apply, with the exception that the reporting requirements pertaining to "start-up", as referenced in 40 CFR 60.7, do apply. Except for compliance testing, this boiler may only operate when Boilers Number 5, Number 6, Number 7, and Unit 8 are not operating; therefore, there will be no significant increase in emissions for PSD purposes. Stack height = 30 feet, exit diameter = 2.0 feet, exit temperature = 420 °F, actual volumetric flow rate = 4,000 acfm (exit temperature and flow rate estimated by manufacturer service representative). Emissions from this boiler are uncontrolled.}

The following specific conditions apply to the emissions unit listed above:

E.1. All of the terms and conditions of permit number 1290001-002-AC are a part of this permit (see attachment 1290001-002-AC), except for the following changes to Specific Condition Number 12:

Exception to Specific Condition Number 12. The Professional Engineer's certification that construction of the auxiliary boiler was completed according to the permit application and associated documents must be submitted to the Department within 105 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial start-up of the emission unit.

Operation of the auxiliary boiler beyond the time frames established by permit number 1290001-002-AC is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the auxiliary boiler was completed in accordance with permit number 1290001-002-AC (issued December 5, 1996) and 2) the unit has been tested and compliance with the terms and conditions contained within permit number 1290001-002-AC has properly been demonstrated.
[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C.]

Essential Potential to Emit (PTE) Parameters

E.2. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
11	16.74	Natural Gas

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.]

E.3. Emissions Unit Operating Rate Limitation After Testing. See common condition **C.11.**
[Rule 62-297.310(2), F.A.C.]

E.4. Methods of Operation - Fuels. Only natural gas shall be fired in this boiler.
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

E.5. Hours of Operation. This emissions unit may operate 2,000 hours/year as an auxiliary source of steam; however, except for compliance testing, it may only operate when the existing steam generating units (Boilers Number 5, Number 6 and Number 7 and Unit 8) are not operating. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation and fuel consumption annually.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; 1290001-002-AC; and, initial Title V permit application as amended December 24, 1996.]

Emission Limitations and Standards

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

E.6. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.
[Rule 62-296.406(1), F.A.C.]

E.7. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas.
[Rule 62-296.406(2), F.A.C.; and, BACT determination dated October 8, 1996.]

E.8. Sulfur Dioxide. Sulfur dioxide emissions shall be controlled by the firing of natural gas.
[Rule 62-296.406(3), F.A.C.; and, BACT determination dated October 8, 1996.]

Excess Emissions

{Permitting Note: The excess emissions rule at 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

E.9. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

E.10. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

E.11. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

E.12. This emissions unit is also subject to the conditions contained in **Subsection C. Common Conditions**, as specified below.

Test Methods and Procedures

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

E.13. Visible Emissions. See common conditions **C.5. and C.6.**

E.14. Operating Rate During Testing. See common condition **C.11.**

E.15. Applicable Test Procedures. See common condition **C.13.(a)2.**

E.16. Frequency of Compliance Tests. See common condition **C.15. except (a)5. & 8.**

E.17. Visible Emissions - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit.
[Rules 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

E.18. The permittee shall record and maintain records of the amount of natural gas combusted during each day the auxiliary boiler is operated.
[40 CFR 60.48c(g)]

E.19. See common conditions **C.18.** and **C.20.(a) & (b).**

E.20. Sufficient records shall be maintained to ensure that the total facility-wide SO_2 emissions do not exceed 80 tons per year (see facility-wide conditions **13. & 14.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

E.21. Sufficient records shall be maintained to ensure that the total facility-wide NO_X emissions do not exceed 467 tons per year (see facility-wide conditions **15. & 16.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

Subsection F. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-012	Combustion Turbine - Unit Number 8

This emissions unit is a combined cycle combustion turbine (CT) system designated as Unit 8. It consists of a 160 MW (nominal rating) GE Series 7FA combustion turbine with DLN-2.6 (or later version) dry low NO_x (gas) and water injection (diesel) burners and a non-fired heat recovery steam generator (HRSG) with a nominal 90 MW steam turbine. The turbine can be fired either by natural gas or No. 2 fuel oil. The compressor inlet air will be conditioned by an evaporative cooler when needed. The turbine will be started using the generator and a static start system. Unit 8 also includes a new cooling tower.

{Permitting notes: The emissions unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (1997 version), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; PSD-FL-239, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C. Stack height = 200 feet; exit diameter = 16.5 feet; exit temperature = 171°F - 205°F, depending upon fuel, ambient temperature and load; actual volumetric flow rate = 0.6×10^6 - 1.1×10^6 acfm depending upon fuel, ambient temperature and load (exit temperatures and flows based on manufacturer data).}

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

Essential Potential to Emit (PTE) Parameters

F.1. All of the terms and conditions of permit number PSD-FL-239/PA97-35 are a part of this permit (see attachment PSD-FL-239/PA97-35).

Operation of combustion turbine No. 8 beyond the time frames established by permit number PSD-FL-239/PA97-35 is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the combined cycle combustion turbine was completed in accordance with permit number PSD-FL-239/PA97-35 and 2) the unit has been tested and compliance with the terms and conditions contained within permit number PSD-FL-239/PA97-35 has properly been demonstrated.
[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C.]

General

F.2. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

F.3. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12.]

F.4. Modifications. The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change.
[40 CFR 60.14; and, PSD-FL-239/PA97-35.]

Essential Potential to Emit (PTE) Parameters

F.5. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
8	1,467.7	Natural Gas
	(LHV @ 95 degrees Fahrenheit, 60% Relative Humidity, and 14.7 psi)	
	1,659.5	No. 2 Fuel Oil
	(LHV @ 95 degrees Fahrenheit, 60% Relative Humidity, and 14.7 psi)	

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves or equations for correction to other ambient conditions shall have been provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. These curves or equations shall be used to establish the maximum allowable heat inputs at other ambient conditions for compliance determinations.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; 40 CFR 60.332(b); and, PSD-FL-239/PA97-35.]

F.6. Emissions Unit Operating Rate Limitation After Testing. See specific condition **F.34.**
[Rule 62-297.310(2), F.A.C.]

F.7. Methods of Operation - Fuels. Only natural gas and/or new No. 2 distillate fuel oil shall be fired in this turbine. The burning of other fuels requires review, public notice, and approval through the preconstruction process (Chapters 62-210 and 62-212, F.A.C.).

a. Dry low NO_X combustors shall be used on Unit 8 when firing natural gas. The dry low NO_X burner system shall be maintained to minimize NO_X and CO emissions. While firing natural gas, operation of the unit when the dry low NO_X burner system is in the diffusion mode shall be minimized.

b. Water injection shall be used when firing No. 2 fuel oil for control of NO_X emissions.

[Rule 62-213.410, F.A.C.; PSD-FL-239 and BACT.]

F.8. Hours of Operation. This emissions unit may operate 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-239.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms (attached), summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. The following table is a summary of the BACT determination by the Department (also attached), it is only included here for reference. For NO_X and SO_2, meeting the BACT limits assures compliance with the NSPS limits.

Table 1. Emission Limits (from BACT)

Pollutant	Fuel	BACT Standard
NO_X	Gas	12 ppmvd @ 15 % O_2 (a) (d)
	Oil	42 ppmvd @ 15 % O_2 (a) (b) (d)
SO_2	Gas	Good combustion
	Oil	Good combustion of low sulfur fuel oil (0.05%, *by weight*)
PM/PM_{10}	Gas	Good combustion
	Oil	Good combustion of low sulfur fuel oil (0.05%, *by weight*)
Visible Emissions	Gas	10 percent opacity
	Oil	10 percent opacity
CO	Gas	25 ppmvd (c)
	Oil	90 ppmvd (c)

(a) 30-day rolling average excluding startup, shutdown, malfunction, and fuel switching.

(b) Plus an allowance for fuel bound nitrogen using the formula provided in Condition B.4. (of PSD-FL-239)

(c) By testing concurrent to RATA testing or by 3 one-hour runs of Method 10.

(d) Not corrected to ISO conditions.

(End of Permitting Note).}

F.9. Visible Emissions. Visible emissions shall not exceed 10 percent opacity when firing either natural gas or No. 2 fuel oil. Drift eliminators shall be installed on the cooling tower to reduce PM/PM_{10} emissions.
[PSD-FL-239/PA97-35; and, BACT.]

F.10. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. See specific condition **F.25.**
[PSD-FL-239/PA97-35; and, BACT.]

F.11. Nitrogen Oxides. Nitrogen Oxides emissions when firing natural gas shall not exceed 12 ppmvd at 15% O_2, not corrected to ISO conditions, on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by continuous emissions monitoring systems (CEMS). When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) for calculation of the 30-day rolling average.
[PSD-FL-239/PA97-35; and, BACT.]

F.12. Nitrogen Oxides. Nitrogen Oxides emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O_2, not corrected to ISO conditions, on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by CEMS, when fuel bound nitrogen values are less than or equal to 0.015 percent. For fuel bound nitrogen values up to 0.03 percent, the allowance (and the adjusted standard) shall be determined, recorded, and maintained upon each new fuel delivery by the following formula:

$$STD = 0.0042 + F$$

where:

STD = allowable NO_X emissions (percent by volume at 15 percent O_2 and on a dry basis).

F = NO_X emission allowance for fuel-bound nitrogen defined by the following table:

Fuel-Bound Nitrogen (% by Weight)	**F (NO_X % by Volume)**
$0 < N \leq 0.015$	0
$0.015 < N \leq 0.03$	0.04 (N-0.015)

where: N = the nitrogen content of the fuel (% by weight)

Note: 0.0042 percent = 42 ppm

[40 CFR 60.332(a)(1); PSD-FL-239/PA97-35; and, BACT.]

F.13. Carbon Monoxide. Carbon monoxide emissions when firing natural gas shall not exceed 25 ppmvd as measured by applicable compliance methods (see specific condition **F.26.**).
[PSD-FL-239/PA97-35; and, BACT.]

F.14. Carbon Monoxide. Carbon monoxide emissions when firing No. 2 fuel oil shall not exceed 90 ppmvd as measured by applicable compliance methods (see specific condition **F.31.**).
[PSD-FL-239/PA97-35; and, BACT.]

Excess Emissions

F.15. Excess emissions resulting from startup, shutdown, malfunction or fuel switching of this emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24 hour period for other reasons unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1) & (5), F.A.C.; and, PSD-FL-239/PA97-35.]

F.16. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

F.17. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

Monitoring of Operations

F.18. The permittee shall have installed and shall calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 8. Thirty day rolling average periods when NO_X emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported to the Department's Northwest District Office pursuant to Rule 62-4.160(8), F.A.C. The continuous emissions monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards in specific conditions **F.11 and F.12.** following the format of 40 CFR 60.7 (1997 version). The NO_X CEMS will be used in lieu of the water/fuel monitoring system and fuel bound nitrogen monitoring required for reporting excess emissions in accordance with 40 CFR 60.334, Subpart GG (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from DEP, the CEMS emission rates for NO_X on Unit 8 shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332.
[PSD-FL-239/PA97-35; and, BACT.]

F.19. The following monitoring schedule for No. 2 fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at the Purdom Station, an analysis which reports the sulfur content and fuel bound nitrogen content of the fuel shall be provided by the fuel vendor or other sources which follow the appropriate fuel test methods listed in specific condition **F.25.** The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
[PSD-FL-239/PA97-35; and, BACT.]

F.20. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2):

a. Monitoring of natural gas nitrogen content shall not be required.
b. Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. Monitoring of the sulfur content of the natural gas shall be conducted semi-annually.
c. Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the City shall notify the Department of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is being reexamined.
d. The City shall notify the Department of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.
e. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the City for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.
f. The City may obtain the sulfur content of the natural gas from the fuel supplier provided the test methods listed in specific condition **F.37.** are used.

[PSD-FL-239/PA97-35.]

F.21. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

Continuous Monitoring Requirements

F.22. Nitrogen Oxides. Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 may be used. Compliance with the NO_X emissions standards in specific conditions **F.11. and F.12.** shall be demonstrated with this CEMS system based on a 30-day rolling average. Based on CEMS data at the end of each operating day, a new 30-day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days.
Note: No other methods may be used for compliance testing unless prior DEP approval is received in writing. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.
[PSD-FL-239/PA97-35; and, BACT.]

Required Tests, Test Methods and Procedures

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

F.23. Annual Tests Required. Unit -012 must be tested annually for visible emissions, and carbon monoxide in accordance with the requirements listed below.
[Rule 62-213.440, F.A.C.]

F.24. Visible emissions. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A, shall be used to determine compliance with the visible emissions standard in specific condition **F.9.**
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; 40 CFR 60, Appendix A; PSD-FL-239/PA97-35; and, BACT.]

F.25. Sulfur Dioxide and Particulate Matter. Notwithstanding the requirements of Rule 62-297.340, F.A.C., the exclusive use of fuel oil with a maximum sulfur content limit of 0.05% or less, by weight, is the method for determining compliance for SO_2 and PM_{10}. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or latest edition) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or latest edition) for sulfur content of gaseous fuel shall be utilized in accordance with the custom fuel monitoring schedule in specific condition **F.20.** However, the permittee is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335 (e) (1997 version). For the purposes of demonstrating compliance with the emissions caps, natural gas and fuel oil supplier data for sulfur content may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized.
[PSD-FL-239/PA97-35; and, BACT.]

F.26. Carbon Monoxide. The test method for carbon monoxide emissions shall be EPA Method 10, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. Testing may be conducted at less than capacity. Annual compliance testing may be conducted concurrent with the annual RATA testing required pursuant to 40 CFR 75 (gas only). See specific conditions **F.13. & F.14.**
[Rules 62-204.800 and 62-297.401, F.A.C.; PSD-FL-239/PA97-35; and, BACT.]

F.27. Nitrogen Oxides. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.
[40 CFR 60.335(a).]

F.28. Nitrogen and Sulfur Contents. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) of 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
[40 CFR 60.335(e).]

F.29. General. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
[40 CFR 60.11(a).]

F.30. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
[40 CFR 60.8(c).]

F.31. The owner or operator shall provide, or cause to be provided, stack sampling and performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facilities.
(2) Safe sampling platform(s).
(3) Safe access to sampling platform(s).
(4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)(1), (2), (3) & (4).]

F.32. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

F.33. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

F.34. Operating Rate During Testing. Except for carbon monoxide emissions testing, testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient conditions). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient conditions) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Compliance test results shall be submitted to the Department's Northwest District office no later than 45 days after completion of the last test run.
[Rules 62-297.310(2), F.A.C.; PSD-FL-239/PA97-35; and, BACT.]

F.35. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

F.36. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

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

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).

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

F.37. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or,
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and,
   c. Each NESHAP pollutant, if there is an applicable emission standard.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

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

F.38. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit while burning:

a. only gaseous fuel(s); or,
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or,
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

F.39. To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption and hourly usage for the turbine and the heating value for each fuel. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request.

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

F.40. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected

completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
[40 CFR 60.7(a)(4).]

F.41. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b).]

F.42. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4).]

F.43. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) and (2).]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

F.44. Notification.

(1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and,

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1).]

F.45. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

F.46. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

F.47. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.

14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

F.48. In each compliance test report, submit the maximum input/production rate at which each emissions unit was operated since the most recent compliance test.
[Rule 62-213.440, F.A.C.]

F.49. Sufficient records shall be maintained to ensure that the total facility-wide SO_2 emissions do not exceed 80 tons per year (see facility-wide conditions **13. & 14.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

F.50. Sufficient records shall be maintained to ensure that the total facility-wide NO_X emissions do not exceed 467 tons per year (see facility-wide conditions **15. & 16.**).
[Rule 62-213.440, F.A.C.; PSD-FL-239/PA97-35; and, Applicant request.]

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Section IV. Acid Rain Part.

Operated by: City of Tallahassee
ORIS Code: 689

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain Part, Phase II.

E.U. ID No.	Description
-007	Boiler Number 7 - 621 MMBtu/hour
-012	Combustion Turbine Number 8 - 1,659.5 MMBtu/hour

A.1. The Phase II permit application submitted for this facility, as approved by the Department, is a part of this permit (included as an Attachment). The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.
b. DEP Form No. 62-210.900(1)(a), dated 03/04/97.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-007	7	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	438*	438*	438*
-012	12	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	0*	0*	0*

* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

A.4. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.
{See condition No. 52., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

A.5. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.6. Comments, notes, and justifications: None.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

City of Tallahassee, Electric Utilities
Sam O. Purdom Generating Station

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities:

Exempt Emissions Related to Combustion Turbine No. 1

1. Oil Vapor Extractor
2. Fuel Oil Piping
3. Lube Oil Tank

Exempt Emissions Related to Combustion Turbine No. 2

4. Oil Vapor Extractor
5. Fuel Oil Piping
6. Lube Oil Tank

Exempt Emissions Related to Steam Generator No. 5[(1)]

7. Fuel Oil Piping
8. Hydrogen Gas Vents
9. Deareator Tank Vents
10. Oil Vapor Extractors
11. Lube Oil Tank (storage)
12. Lube/Fuel Oil Drip Pans
13. Noncondensable Gas Extractor
14. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Steam Generator No. 6[(1)]

15. Fuel Oil Piping
16. Hydrogen Gas Vents
17. Deareator Tank Vents
18. Oil Vapor Extractors
19. Lube Oil Tank (storage)
20. Lube/Fuel Oil Drip Pans
21. Noncondensable Gas Extractor
22. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

Appendix I-1, Continued.

Exempt Emissions Related to Steam Generator No. 7

23. Fuel Oil Piping
24. Hydrogen Gas Vents
25. Deareator Tank Vents
26. Oil Vapor Extractors
27. Lube Oil Tank (storage)
28. Lube/Fuel Oil Drip Pans
29. Noncondensable Gas Extractor
30. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

Fuel Farm

31. Fuel Oil Tank No. 1
32. Fuel Oil Tank No. 2[(2)]
33. Fuel Oil Tank No. 3
34. Fuel Oil Reclaim Tank
35. Distillate Oil Tank
36. Gasoline Tank
37. Diesel Oil Tank
38. (New) Diesel Oil Tank Associated With the Hydrant Main

Fuel Dispensing Operations

39. Truck Loading/Unloading (for items 29-33)
40. Truck Loading/Unloading for Distillate Oil Tank
41. Truck Loading/Unloading for Gasoline Tank
42. Fuel Dispensing Operations for Diesel Oil Tank
43. Barge Unloading Station
44. Truck Loading/Unloading Rack 1
45. Truck Loading/Unloading Rack 2

Fugitive VOC Emissions

46. (1-15) Parts Washers - Nonhalogenated Solvents

Space Heaters

47. (1-7) Space Heaters

Fugitive PM_{10} Emissions

48. Paved Roads
49. Unpaved Roads
50. Heavy Construction Activities
51. Aggregate Handling & Storage

Laboratory

52. Laboratory Equipment
53. Chemical Usage
54. Vacuum Pumps
55. Laboratory Fume Hoods

56. Central Vacuum System

Appendix I-1, Continued.

Maintenance Activities

57. Welding - Exempt per Rule 62-210.300(3)(a)16., F.A.C.

Plant Operations

58. Lube Oil Storage Tanks
59. Propane Storage Tanks

Exempt Emissions Related to the Auxiliary Boiler

60. Deaerator Tank Vents
61. Noncondensable Gas Extractor

Exempt Emissions Related to the Combined Cycle Combustion Turbine (Unit 8)[3]

62. Oil Vapor Extractor
63. Fuel Oil Piping
64. Hydrogen Gas Vents
65. Lube Oil Tanks
66. Deaerator Tank Vents
67. Noncondensable Gas Extractor
68. Lube/Fuel Oil Drip Pans

Notes: [1] - Emissions Units will be shut down as part of the Purdom Unit 8 Project.
[2] - Emissions unit will be re-commissioned as a waste water tank as part of the Purdom Unit 8 Project.
[3] - New emissions units associated with the Purdom Unit 8 Project.

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Appendix U-1, List of Unregulated Emissions Units and/or Activities.

City of Tallahassee, Electric Utilities
Sam O. Purdom Generating Station

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
-010	Fugitive VOC Sources - Painting Operations
-012	General Purpose Internal Combustion Engines
-013	Emergency Generators

-010 Fugitive VOC Emissions. Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.

-012 General purpose internal combustion engines.
Located for use at this source are(2) Welding Generators and a single Fire Pump.

-013 Emergency generators.
Located for use at this source are (4) Emergency Generators.

Appendix H-1, Permit History/ID Number Changes

City of Tallahassee
Sam O. Purdom Generating Station

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1,2]	Revised Date(s)
-001	Boiler #1	AO65-242828	3/25/94	3/1/99*		
-002	Boiler #2	AO65-242828	3/25/94	3/1/99*		
-003	Boiler #3	AO65-242828	3/25/94	3/1/99*		
-004	Boiler #4	AO65-242828	3/25/94	3/1/99*		
-005	Boiler #5	AO65-242831	3/8/94	3/1/99		
-006	Boiler #6	AO65-242831	3/8/94	3/1/99		
-007	Boiler #7	AO65-242831	3/8/94	3/1/99		
-008	Combustion Turbine #1	AO65-242827	3/8/94	3/1/99		6/10/94, 6/24/94
-009	Combustion Turbine #2	AO65-242827	3/8/94	3/1/99		6/10/94, 6/24/94
-011	Auxiliary Boiler	1290001-002-AC BACT	12/5/96 10/8/96	12/31/97		
-012	Combustion Turbine #8	PSD-FL-239/PA97-35 (Includes BACT)	5/28/98	5/15/03		

* Permit surrendered October 2, 1996.

ID Number Changes (for tracking purposes):

From: **Facility ID No.**: 10TLH650001
To: **Facility ID No.**: 1290001

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Referenced Attachments

Phase II Acid Rain Application/Compliance Plan

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

Appendix SS-1, Stack Sampling Facilities (version dated 3/25/96)

Appendix TV-1, Title V Conditions (version dated 12/2/97)

Permit Number 1290001-002-AC

BACT Determination Dated October 8, 1996

Permit Number PSD-FL-239/PA97-35, Including BACT Determination

ASP Number 97-B-01
(With Scrivener's Order Dated July 9, 1997)

Figure 1: Summary Report-
Gaseous and Opacity Excess Emission and Monitoring System Performance

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

Table 2-1, Summary of Compliance Requirements

Phase II Acid Rain Permit Application/Compliance Plan

Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: X **New** ☐ **Revised**

STEP 1
Identify the source by plant name, State, and ORIS code from NADB

Sam O. Purdom	FL	689
Plant Name	State	ORIS Code

STEP 2
Enter the boiler ID# from NADB for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

a	b	c	d	e
Boiler ID#	Compliance Plan: Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Compliance Plan: Repowering Plan	New Units: Commence Operation Date	New Units: Monitor Certification Deadline
7	Yes	No		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

Sam O. Purdom

Plant Name (from Step 1)

Recordkeeping and Reporting Requirements (cont.)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

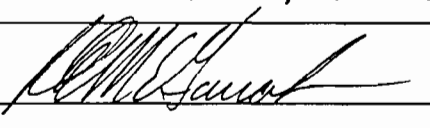
(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	**Rob E. McGarrah, Production Superintendent**	
Signature		Date **December 15, 1995**

STEP 5 (optional) Enter the source AIRS and FINDS identification numbers, if known	
	AIRS
	FINDS

Acid Rain Program
Instructions for
Phase II Permit Application
(40 CFR 72.30- 72.31 and Rule 62-214.320, F.A.C.)

The Acid Rain Program regulations require the designated representative to submit an Acid Rain part application for Phase II for each source with an Acid Rain unit. A complete Phase II part application is binding on the owners and operators of the Acid Rain source and is enforceable in the absence of a permit until the permitting authority either issues a permit with an Acid Rain part to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the permitting authority.

STEP 1 NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 233-9620. This data file is in dBase format for use on an IBM-compatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS Code, and Boiler ID listed on the certificate of representation for the plant.

STEP 2 The monitor certification deadline is determined in accordance with 40 CFR 75.4. If the commence operation date or monitor certification date changes after the Phase II permit is issued, the source must submit a request for an administrative permit amendment.

STEP 5 "AIRS" is the Aerometric Information Retrieval System operated by EPA's Office of Air Quality Planning and Standards. The AIRS number for a source has 12 digits. "FINDS" is the Facility Indexing System. It provides an Agency-wide ID number to cross-identify facilities in all EPA data systems. Please enter these numbers if they are available; this step is optional.

Submission Instructions

For initial Phase II permit applications: If, by November 15, 1995, the State or local jurisdiction (*e.g.*, District, County, or City) in which the source is located has both (1) an acid rain program identified in a Federal Register notice as acceptable to the Administrator and (2) an operating permits program granted full or interim approval by the Administrator in a Federal Register notice, mail this form and three copies to that state or local authority. If not, mail this form and one copy to the EPA regional office and two copies to the State or local jurisdiction in which the source is located.

If you have questions regarding this form, contact your local, State, or EPA regional representative, or call EPA's Acid Rain Hotline at (202) 233-9620.

Appendix A-1,
Abreviations, Definitions, Citations, and Identification Numbers
(Version Dated 2/5/97)

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit
BACT: Best Available Control Technology
CFR: Code of Federal Regulations
DEP: State of Florida, Department of Environmental Protection
DARM: Division of Air Resource Management
EPA: United States Environmental Protection Agency
F.A.C.: Florida Administrative Code
F.S.: Florida Statute
ISO: International Standards Organization
LAT: Latitude
LONG: Longitude
MMBtu: million British thermal units
MW: Megawatt
ORIS: Office of Regulatory Information Systems
SOA: Specific Operating Agreement
UTM: Universal Transverse Mercator

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:	40	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213, F.A.C.]**

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:

AC = Air Construction Permit
AV = Air Operation Permit (Title V Source)
105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by permit tracking database
001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC = old Air Construction Permit numbering

Appendix SS-1,
Stack Sampling Facilities (version dated 10/7/96)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

Appendix TV-1,
Title V Conditions (version dated 12/2/97)

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. **Not federally enforceable.** General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.
[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

2. **Not federally enforceable.** Procedure to Obtain Permits: Application.
(1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
(2) All applications and supporting documents shall be filed in quadruplicate with the Department.
(3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
(4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
(5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
(c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
(d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
(e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
(6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
(7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.
[Rule 62-4.050, F.A.C.]

3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.
[Rule 62-4.070(7), F.A.C.]

4. Modification of Permit Conditions.

(1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:

(a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

(b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.

(c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.

(e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.

(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

6. Suspension and Revocation.

(1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.

(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.

(3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:

(a) Submitted false or inaccurate information in application or operational reports.

(b) Has violated law, Department orders, rules or permit conditions.

(c) Has failed to submit operational reports or other information required by Department rules.

(d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules.

[Rule 62-4.110, F.A.C.]

8. Transfer of Permits.
(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.
[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.
[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.
[Rule 62-4.150, F.A.C.]

12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
(1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
(2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
(3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

(4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
(5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
(6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
(7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

(a) Have access to and copy any records that must be kept under conditions of the permit;
(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
(c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

(8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of noncompliance; and,
(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

(9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
(10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
(12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
(14) The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and,
6. the results of such analyses.

(15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
[Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.
(1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:

(a) A completed application on forms furnished by the Department.

(b) An engineering report covering:

1. plant description and operations,
2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
3. proposed waste control facilities,
4. the treatment objectives,
5. the design criteria on which the control facilities are based, and,
6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

(c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.
[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.
[Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C.
[Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C.
[Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.
[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

(1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.

(2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.

(a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;

2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.

3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.

a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.

b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

(i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,

(ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,

(iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.

4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

19. **Not federally enforceable.** Notification of Startup. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.

(a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

(a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

(1) Public Notice of Proposed Agency Action.

(a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:

1. An air construction permit;

2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or

3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

(b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.

(2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.

(a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;

2. A 30-day period for submittal of public comments; and,

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.

(b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.

(d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.

(e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.

(f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.

(g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.

(h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:

1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.

2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.

(3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.

(a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,

2. A 30-day period for submittal of public comments.

(b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) The notice shall identify:

1. The facility;

2. The name and address of the office at which processing of the permit occurs;

3. The activity or activities involved in the permit action;

4. The emissions change involved in any permit revision;

5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;

6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;

7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

(1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

(a) Typographical errors noted in the permit;

(b) Name, address or phone number change from that in the permit;

(c) Any other similar minor administrative change at the source; and,

(d) A change requiring more frequent monitoring or reporting by the permittee.

(e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

(f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).

(2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.

(3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

(4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application.

[Rule 62-210.360, F.A.C.]

23. Reports.

(3) Annual Operating Report for Air Pollutant Emitting Facility.

(a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.

(c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

24. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.650, F.A.C.]

25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Application for Air Permit - Long Form, Form and Instructions.

(a) Acid Rain Part (Phase II), Form and Instructions.

1. Repowering Extension Plan, Form and Instructions.
2. New Unit Exemption, Form and Instructions.
3. Retired Unit Exemption, Form and Instructions.

(b) Reserved.

(5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions.

[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

26. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.
[Rules 62-213.205 and 62-213.900(1), F.A.C.]

27. Annual Emissions Fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
[Rule 62-213.205(1)(g), F.A.C.]

28. Annual Emissions Fee. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
[Rule 62-213.205(1)(j), F.A.C.]

29. Annual Emissions Fee. DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee.
[Rule 62-213.205(4), F.A.C.]

30. Air Operation Permit Fees. After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.
[Rule 62-213.205(5), F.A.C.]

31. Permits and Permit Revisions Required. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C.
[Rule 62-213.400, F.A.C.]

32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
[Rule 62-213.400(1), F.A.C.]

33. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
(1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
(2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
(a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
(b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
(c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
(3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
(a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
(b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
(4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
[Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

(1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:

(a) Does not violate any applicable requirement;

(b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;

(c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;

(d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.

(2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.

(3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.

(4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.

(5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.

(6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

(1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.

(a) Timely Application.

3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.

(b) Complete Application.

1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.

2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C. 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete. 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

36. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA.
[Rule 62-213.420(2), F.A.C.]

37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
[Rule 62-213.420(3), F.A.C.]

38. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[Rule 62-213.420(4), F.A.C.]

39. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.

b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

(1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:

(i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).

(ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

40. Insignificant Emissions Units or Pollutant-Emitting Activities.

(a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.

(b) An emissions unit or activity shall be considered insignificant if:

1. Such unit or activity would be subject to no unit-specific applicable requirement;
2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and
3. Such unit or activity would not emit or have the potential to emit:
   a. 500 pounds per year or more of lead and lead compounds expressed as lead;
   b. 1,000 pounds per year or more of any hazardous air pollutant;
   c. 2,500 pounds per year or more of total hazardous air pollutants; or
   d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

41. Permit Duration. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years.
[Rule 62-213.440(1)(a), F.A.C.]

42. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.
[Rule 62-213.440(1)(b)2.a., F.A.C.]

43. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[Rule 62-213.440(1)(b)2.b., F.A.C.]

44. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.
[Rule 62-213.440(1)(b)3.a., F.A.C.]

45. Deviation from Permit Requirements Reports. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
[Rule 62-213.440(1)(b)3.b., F.A.C.]

46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(1)(b)3.c, F.A.C.]

47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect.
[Rule 62-213.440(1)(d)1., F.A.C.]

48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.
[Rule 62-213.440(1)(d)3., F.A.C.]

49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C.
[Rule 62-213.440(1)(d)4., F.A.C.]

50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.
[Rule 62-213.440(1)(d)5., F.A.C.]

51. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.
[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance, the actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(3), F.A.C.]

53. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.
[Rule 62-213.460, F.A.C.]

54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
(1) Major Air Pollution Source Annual Emissions Fee (AEF) Form.
[Rule 62-213.900(1), F.A.C.]

Chapter 62-256, F.A.C.

55. Not **federally enforceable.** Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.
[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

56. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
(1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
(2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
(3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
(4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.
[40 CFR 82; and, Chapter 62-281, F.A.C. **(Chapter 62-281, F.A.C., is not federally enforceable)**]

Chapter 62-296. F.A.C.

57. **Not federally enforceable until SIP approved.** Industrial, Commercial, and Municipal Open Burning Prohibited. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:

(a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or

(b) An emergency exists which requires immediate action to protect human health and safety; or

(c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

3. Reasonable precautions may include, but shall not be limited to the following:

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

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

c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.

d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.

e. Landscaping or planting of vegetation.

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

g. Confining abrasive blasting where possible.

h. Enclosure or covering of conveyor systems.

4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

[electronic file name: tv-1.doc]

Permit Number 1290001-002-AC

Department of Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

December 6, 1996

Robert E. McGarrah
Production Superintendent
City of Tallahassee, Electric Utility
2602 Jackson Bluff Road
Tallahassee, Florida 32304

Dear Mr. McGarrah:

On December 5, 1996, the Department issued permit 1290001-002-AC to construct an auxiliary boiler. This letter will correct an error made in that permit.

The Emission Unit number for the auxiliary boiler was listed incorrectly. The correct Emission Unit number for the auxiliary boiler is 011.

By this letter Specific Condition 13 is changed

From:

13. The emission unit covered by this permit is 1290001010. Please cite this number on all test reports and other correspondence specific to this permitted emission unit. [FAC Rule 62-297.310(8)]

To:

13. The emission unit covered by this permit is 1290001011. Please cite this number on all test reports and other correspondence specific to this permitted emission unit. [FAC Rule 62-297.310(8)]

Sincerely,

Ed K. Middleswart

Ed K. Middleswart, P.E.
Air Program Administrator

EKM:cmc

cc: Jennette Curtis, City of Tallahassee
DEP Northwest District Branch Office, Tallahassee

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the matter of an
Application for Permit
By:
Robert E. McGarrah, Production Superintendent
City of Tallahassee, Electric Utility
2602 Jackson Bluff Road
Tallahassee, FL 32304

DEP File No. 1290001-002-AC
Wakulla County

Enclosed is Permit Number 1290001-002-AC, issued pursuant to Section 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Pensacola, Florida.

State of Florida Department
of Environmental Protection

Ed K. Middleswart

ED K. MIDDLESWART, P.E.
Director of District Management

160 Governmental Center
Pensacola, Florida 32501-5794
(904) 444-8364

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on December 5, '96 to the listed persons.

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department clerk, receipt of which is hereby acknowledged.

Clerk M B Curtis Date 12/5/96

Copies Furnished to:
Jennette D. Curtis, City of Tallahassee
DEP Northwest District Branch Office, Tallahassee

Department of Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

PERMITTEE:

City of Tallahassee
Sam O. Purdom Generating Station

AIRS I.D. Number: 1290001
Air Permit Number: 1290001-002-AC
Emission Unit: 010
Date of Issue: December 5, 1996
Expiration Date: December 31, 1997
County: Wakulla
Project: Natural Gas Fired Auxiliary Boiler

This permit is issued under the provisions of Section 403.087, Florida Statutes, and Florida Administrative Code Rules 62-296, 62-297 and 62-4. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construction of a 16.74 MMBtu/hr natural gas fired auxiliary steam generating boiler (Kewanee, model number H3S-400-G) at the City of Tallahassee's Sam O. Purdom Generating Station.

Construction shall be consistent with the construction permit application signed September 20, 1996.

Located on the east side of State Road 363 at 667 Port Leon Drive, St. Marks

PERMITTEE:

Sam O. Purdom Generating Station

AIRS I.D. Number: 1290001
Air Permit Number: 1290001-002-AC
Emission Unit: 010
Date of Issue: December 5, 1996
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

General

1. The attached General Conditions are part of this permit. [FAC Rule 62-4.160]

Construction

2. The Department shall be notified of the date construction of this emission unit commences postmarked no later than 30 days after such date, of the anticipated date of initial startup postmarked not more than 60 days nor less than 30 days prior to such date, and of the actural date of initial startup postmarked within 15 days after such date. [FAC Rule 62-4.070, 62.204.800(7)(d)]

3. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during construction. [FAC Rule 62-4.030]

Operation

4. The maximum allowable operating rate is 16.74 MMBtu/hr heat input. [FAC Rule 62-4.070]

5. The maximum hours of operation are 2000 hours per year. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation and fuel consumption annually. [FAC-Rule 62-4.070 and construction permit application]

6. This emission unit shall only be operated as an auxiliary source of steam when the existing steam generating units (boilers 5,6, &7) are not operating. (Construction permit application)

7 . All applicable requirements of 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, shall be met. (FAC Rule 62-204.800)

PERMITTEE:

Sam O. Purdom Generating Station

AIRS I.D. Number: 1290001
Air Permit Number: 1290001-002-AC
Emission Unit: 010
Date of Issue: December 5, 1996
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

Emissions

8. The maximum allowable emission limit for each pollutant is as follows:

Pollutant	FAC Rule	Allowable Emissions
VE	62-296.406	20% opacity except for one two minute period per hour during which the opacity shall not exceed 40%.

9. Excess emissions resulting from startup, shutdown or malfunction shall be allowed providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. The Permittee shall immediately notify the Department's Tallahassee Branch Office of excess emissions resulting from malfunctions. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence. (Rules 62-210.700, 62-4.130)

Testing

10. Visible emissions tests are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. [FAC Rule 62-297.310(2)] A sixty minute visible emissions tests shall be conducted in accordance with DEP method 9 within 60 days after achieving the maximum production rate at which the emission unit will be operated, but not later than 180 days after initial startup of the emission unit. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing.

The test report shall comply with F.A.C. Rule 62-297.310(8), Test Reports.

The Department can require special compliance tests in accordance with F.A.C. Rule 62-297.310(7)(b).

Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.

SPECIFIC CONDITIONS:

[10. (cont.'d)]

Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90 to 100% of the maximum allowable heat input rate. If it is impractical to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. [FAC Rule 62-297.310(2)]

Administrative

11. An annual operating report for air pollutant emitting facility, DEP Form 62-210.990(5), shall be submitted by March 1 of each year. A copy of the form and instructions may be obtained from the Department of Environmental Protection, Northwest District Air Resources Management Program, (904) 444-8364. [FAC Rule 62-210.370(3)]

12. The applicant shall retain a Professional Engineer, registered in the State of Florida, for the inspection of this project. Upon completion the engineer shall inspect for conformity to the permit application and associated documents. An application for an operation permit [Form DEP 62-210.900(1), Long Form]shall be submitted with the compliance test results and appropriate fee when applicable. These are to be submitted within 105 days after achieving the maximum production rate at which the emission unit will be operated, but no later than 225 days after initial startup of the emission unit. The permittee shall obtain an operating permit for this source before the expiration of this construction permit if the permittee desires to continue operation. [FAC Rule 17-210.300]

13. The emission unit covered by this permit is 1290001010. Please cite this number on all test reports and other correspondence specific to this permitted emission unit. [FAC Rule 62-297.310(8)]

14. The Permittee, for good cause, may request that this construction permit be extended. Such a request with the required $50 extension fee shall be submitted 60 days prior to the expiration date of this permit. (FAC Rule 17-4.080(3)

PERMITTEE:

Sam O. Purdom Generating Station

AIRS I.D. Number: 1290001
Air Permit Number: 1290001-002-AC
Emission Unit: 010
Date of Issue: December 5, 1996
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

15. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8364, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 413-9911. For routine business, telephone (904) 488-3704 during normal working hours. [FAC Rule 62-4.130]

Expiration Date:

December 31, 1997

Issued this 5th day of DEC, 1996.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Ed K. Middleswart

ED K. MIDDLESWART, P.E.
Air Program Administrator

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions", and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

GENERAL CONDITIONS:

a. Having access to and copying any records that must be kept under the conditions of this permit;
b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and,
c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of noncompliance; and
b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

GENERAL CONDITIONS:

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

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

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

BACT Determination Dated October 8, 1996

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION
City of Tallahassee, Purdom Generating Station Auxiliary Boiler
Wakulla County

RECEIVED
JAN 27 1997
BUREAU OF
AIR REGULATION

The City of Tallahassee submitted a construction permit application September 23, 1996 for an auxiliary boiler to be located at their Purdom Generating Station, Wakulla County. The proposed boiler is a 16.74 MMBtu/hr natural gas fired boiler that will be used for steam only when the existing, larger steam generating units (boilers 5,6,or 7) are not operating.

This BACT determination is required for the source as set forth in FAC Rule 62-296.406 - Fossil Fuel Steam Generators with Less than 250 MMBtu/hr Heat Input.

BACT Determination Requested by Applicant:

Particulate matter and sulfur dioxide emissions shall be controlled by the firing of natural gas and operation of this proposed auxiliary boiler only when the existing steam generating units are not operating.

Date of Receipt of BACT Application: September 23, 1996

BACT Determination by DEP:

As requested by applicant.

BACT Determination Rationale:

Emissions will be minimal as a result of firing clean burning natural gas. Additionally, any emissions associated with this proposed auxiliary boiler will be offset by not operating the existing, larger steam generating units.

Details of the Analysis May be Obtained by Contacting:

Bob Kriegel
Department of Environmental Protection
160 Governmental Center
Pensacola, FL 32503

Recommended by:

A.S. Allen for Bob

Bob Kriegel
Environmental Specialist

Approved by:

Ed Middleswart
10/8/96

Ed Middleswart, P.E.
Air Program Administrator

Permit Number PSD-FL-239 / PA97-35, Including BACT Determination

NOTE:

The following attachment contains numerous references to permit numbers PSD-FL-239 / PA97-36.

The correct reference should be PSD-FL-239 / PA97-35.

Please note this correction when referring to the attached document.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit

Ms. Jennette Curtis
Environmental Administrator
City of Tallahassee Utility Services
300 South Adams Street
Tallahassee, Florida 32301

DEP File No. 1290001
Permit Nos: PSD-FL-239 / PA97-36

Enclosed is the FINAL Permit Nos. PSD-FL-239 / PA97-36 for Purdom Unit 8, a new combined cycle combustion turbine. This permit is issued pursuant to Chapter 403, Florida Statutes and 62-4 through 297 F.A.C and 40 CFR 52.21-Prevention of Significant Deterioration (PSD).

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

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5-29-98 to the person(s) listed:

Ms. Jennette Curtis *
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Ed Middleswart, NWD

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kim Tober 5-29-98
(Clerk) (Date)

FINAL DETERMINATION

City of Tallahassee

Permit No. PSD-FL-239 / PA97-36
Purdom Generating Station

An Intent to Issue an Air Construction Permit for the City of Tallahassee Utilities Services, Purdom Generating Station located on the north end of the City of St. Marks on SR 363, Wakulla County, Florida, was distributed on July 1, 1997. The Public Notice of Intent to Issue Air Construction Permit was published in the Tallahassee Democrat on September 29, 1997. No Comments on the PSD permit were submitted in response to the public notice.

On October 30, 1997 a public meeting was held in the Crawfordville Elementary school. Interested parties asked about control options including selective catalytic reduction, dry low NO_X burners on the combustion turbine and mist eliminators on the cooling tower. There was also a concern about sulfuric acid emissions. Department representatives at the meeting described the process by which the best available control technology (BACT) determination was made. The technical evaluation and preliminary determination (part of the Intent to Issue and Air Construction Permit package referenced above) explains in detail how the Department determined BACT for each pollutant regulated under the Prevention of Significant Deterioration (PSD) rule.

No written comments have been received from the public meeting. A summary of the substantive verbal questions/comments from the public meeting and answers to those questions are provided in the following paragraphs:

Question: Potential impacts of fugitive dust generated during construction on water quality in the St. Marks River.

Response: The PSD construction permit requires dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary to control fugitive dust (specific condition A7 of the permit).

Question: Would like cleaner air; standards may not be protective enough.

Response: The Ambient Air Quality Standards (AAQS) have been designed to protect public health and welfare with an adequate margin of safety. The primary standards are designed to protect public health and the secondary standards are designed to protect public welfare (effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being). Florida's standards are as stringent as, or in one case, more stringent than the National standards, and are considered to be fully protective of the public health and welfare. Further, the PSD program is designed to keep areas with good air

quality such as Wakulla County from having their air quality deteriorate significantly. The Purdom 8 Project will not cause exceedences of the AAQS and will not cause significant deterioration of the existing air quality conditions in Wakulla County.

Question: Why not use the "top" technology to control emissions; why not pay a little more for cleaner air?

Response: The Department considered several factors in it's Best Available Control Technology (BACT) determination and concluded that the use of dry low NO_x (DLN) combustion technology is BACT in this case. The Department considered the energy, environmental, and economic impacts of available control options in this case. The "top" control technology reference in the question, presumably selective catalytic reduction (SCR), has some adverse environmental impacts and increased costs associated with the use of ammonia injection and the oxidation catalyst. These factors were considered in the Department's BACT determination.

Question: How much fuel oil use would be expected?

Response: The Purdom 8 Project will use natural gas as its primary fuel. Low sulfur diesel will be used as an alternate fuel, most likely if there is a natural gas curtailment situation. The Project will use the existing 10,770 barrel tank for this diesel oil; this will supply Purdom Unit 8 with only one and a half days of capacity at full load. Also, because of the facility-wide caps on emission of SO_2 and NO_x, the amount of fuel oil firing must be limited as emissions of both pollutants are higher when firing fuel oil than when firing natural gas.

Question: Winds in Wakulla County are from SW to the NE; the plume may impact residents of a new housing development.

Response: The modeling of the air quality impacts of the Project was done using a data base of five years of actual hourly meteorological data from available sources. These computer simulations of plume impacts took into account all wind directions and all wind speeds observed during the entire five year period. Impacts were estimated for a large number of receptor points, including close to the plant site and at distances of up to six miles in all directions. Additional simulations evaluated impacts on the St. Marks and Bradwell Bay National Wilderness Areas, at distances ranging from less than half a mile to up to 25 miles from the Purdom Station. In summary, plume impacts were thoroughly evaluated in accordance with Department modeling procedures and will be in compliance with all standards.

Question: Does the Department have reasonable assurance that the GE Dry Low NO_x (DLN) combustor can achieve the required emission rates?

Response: Based on the operation of GE units in Clark County Washington and Fort St. Verain Colorado which have achieved single digit levels of NO_X concentrations, as well as laboratory test results, and a guaranteed NO_X emission rate from GE, the Department has reasonable assurance that 12 ppmvd NO_x by summer of 2000 is feasible for natural gas and 42 ppmvd for fuel oil, each

on a 30 day rolling average basis. Other GE combustion turbines in Florida such as Kissimmee Utility Authority unit 2, a frame 7 EA unit rated at 120 MW combined cycle, currently operate at concentrations of less than 12 ppm NO_X according to operators at this plant.

Question: How often will the unit run at less than 50 percent load? What about emissions during start-up, shut down, and malfunction?

Response: The unit is not planned to run at less than 50 percent load at all except during periods of time when the unit is ramping up during start-up (including fuel switching), or ramping down during shutdown. Of course, if there is a malfunction, the unit could operate briefly at less than 50 percent load. These periods of start-up (including fuel switching), shut down and malfunction are strictly limited by the Department's rules. There is no incentive for the City to operate the unit at low load because the unit is most efficient at high load. Furthermore, as the unit is subject to the emission standards at all times except during these transient conditions (start-up(including fuel switching), shut down, and malfunction), there is a strong incentive to operate at greater than 50 percent load where the emission levels are guaranteed by the combustion turbine vendor. Excess emissions must be reported to the Department within one working day and excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up (including fuel switching), shut down, or malfunction are prohibited by the Department's rules.

Question: What assurance is there that the emissions will be properly recorded and reported? Are there logs kept?

Response: Continuous emissions monitoring systems (CEMS) will be used to continuously track the emissions from the plant for priority pollutants. The results of the monitoring are stored in computer data files which are available to the Department at any time. In accordance with the Department's rules, these monitors must be kept in good working order and the results must be reported quarterly (excess emission and Acid Rain Program operating reports) and annually (annual operating report).

Question: There will be an increase in CO emissions. Why not use a catalyst to reduce those emissions?

Response: The Department considered several factors in it's Best Available Control Technology (BACT) determination and concluded that the proper tuning of the dry low NO_x (DLN) burners and good operating practices is BACT in this case. The Department considered the energy, environmental, and economic impacts of the available control options in this case. An oxidation catalyst was found to be too expensive compared to other similar projects. CO concentrations are generally problematic only in large cities with congested intersections and major traffic problems. Maximum off-site ambient impacts due to this Project will be about one tenth of one percent of the ambient air quality standard or less.

Question: There will be an increase in sulfuric acid mist from about 3 tpy to over 8 TPY; this seems like a large increase. Why will sulfuric acid mist emissions increase even if SCR is not used?

Response: Sulfuric acid mist emissions are minimized through the use of low sulfur fuels like natural gas or No. 2 fuel oil with a limit of 0.05% sulfur content. Little or no increase in sulfuric acid mist emissions is expected because the facility-wide cap on SO_2 emissions will limit the amount of sulfur in the fuels which in turn limits the emissions of both SO_2 and sulfuric acid mist. Sulfuric acid emissions from gas fired units are relatively low. Although sulfuric acid emissions have not been measured on the existing boilers, the emission factor estimated by EPA literature (AP-42) is lower than the emission factor estimated for the new combustion turbine. Sulfuric acid mist emissions are a small fraction (typically about 3%) of the sulfur dioxide emissions.

Question: The Class I PSD increments to protect the plants and animals seem more protective than the Class II PSD increments which protect humans.

Response: The Ambient Air Quality Standards(AAQS) are the standards designed to protect human health and welfare. Welfare protection includes the protection of plants and animals, some species of which are more sensitive to certain levels of certain pollutants than are humans. On the other hand, the PSD classifications and PSD increments were established to prevent air quality from deteriorating from baseline levels (the air quality levels which existed when the increments were promulgated). The increments allowed within each PSD classification are designed to keep air quality from deteriorating significantly while still allowing for some growth in the economy. In developing the PSD program Congress decided that certain areas should be designated as Class I areas in which only extremely small increases in pollutant concentrations should be allowed. These included certain large National Parks and National Wilderness Areas in and around which only very limited economic growth and associated growth in emissions would be allowed. The remainder of the country was designated as Class II, where moderate increases in pollutant concentrations would be allowed to accommodate some growth in the economy and associated emissions. Thus, it is the AAQS which are protective of human health as well as that of the animals and plants; these standards are the same regardless of the PSD classification. The PSD increments are designed to prevent deterioration in air quality in all areas, with certain areas (Class I) allowed even less deterioration than most (Class II). Because of its Class I areas, Wakulla County and its citizens are even better protected from air quality deterioration than persons located elsewhere.

Question: With the Outstanding Florida Waters (OFW) nearby and the sensitive sea grasses in the St. Marks River and Apalachee Bay, how will the Project be protective of them?

Response: The emissions from the Project were evaluated to determine whether there would be a negative impact on water quality in the St. Marks River and ultimately in Apalachee Bay. The analysis indicated that there would be no measurable changes in water quality parameters as a result of the Project except for two parameters, where the changes are improvements. Any chemical changes in the water due to the Project would be far too small compared to natural changes that occur from rainfall, from deposition, from fires, etc. to cause any negative impact on sea grasses.

Similarly, there would be insufficient changes in salinity or turbidity of the water to affect the sea grasses.

Question: Is a higher or lower stack better?

Response: The proposed stack height for Unit 8 is the height calculated in accordance with the "Good Engineering Practice (GEP)" stack height regulations, and is an appropriate height for a source of this type. The GEP stack height calculations take into account nearby building heights so as to determine a height which is sufficient to avoid problems with aerodynamic downwash caused by these structures and yet is not so high as to be considered excessive.

Question: Emissions of mercury are projected to increase. With the fish consumption warnings, isn't this going to be a problem?

Response: Mercury emissions are typically a concern only with solid fuel projects where emissions are higher. For this Project actual emissions of mercury are only expected to increase by 0.0004 tons per year or less. This is less than one tenth of one percent of the value considered "significant" under the PSD rules. Maximum modeled ambient concentrations of mercury due to the Purdom Station will be well below the draft Florida Ambient Reference Concentrations (FARCs), which are conservative estimates of values below which there are not likely to be any health effects. Contrary to some statements which were made, the Florida Game and Fresh Water Fish Commission and the Florida Department of Health do not list the St. Marks or Wakulla Rivers among the rivers for which limited or no consumption of fish is recommended and, in fact, the St. Marks National Wildlife Refuge is listed among the wildlife refuges as having all species of fish being safe for unlimited consumption.

Question: Will there be an odor from the chlorine in the wastewater that gets put into the cooling tower?

Response: There will not be any noticeable odor from the cooling tower. There will be little or no emissions of chlorine gas from the water because: (1) chlorine concentrations in the water in the cooling tower will be very small, and (2) the water will not be sufficiently acid to allow significant emissions of free chlorine. Furthermore, the emissions of "drift" (small water droplets in the cooling tower that get carried out the top of the tower by the air stream) will be minimized through the use of high efficiency drift eliminators. These drift eliminators will limit drift to 0.002 percent of the circulating water flow. The amount of reuse water from the City of St. Marks will be a small fraction of the total cooling tower makeup water. Most of the makeup water will come from the river.

Question: If an SCR were added to control NO_x emissions, would there be a noticeable odor from the ammonia?

Response: If an SCR were to be used, it would likely be designed to have an ammonia slip of less than 10 ppm. At this emission rate, an off-site ammonia odor would not be expected.

Question: Would the Purdom 8 Project rely on emission trading or purchasing emission credits from other plants?

Response: If the question is referring to Acid Rain Program emission allowances, then the answer is that the Purdom Station has sufficient acid rain emission allowances to operate the new unit without purchasing additional allowances from any other source. If the question is referring to emission reductions or emission credits from the shut down of other units, then the answer is that the Purdom 8 Project is relying on the permanent shut down of Units 5 and 6 at the Purdom Station and the facility-wide caps for SO_2 and NO_x to "make room" for the emissions from Unit 8, but that no emission trades, reductions, or credits from other plants are needed.

Question: Will the Purdom 8 Project use up the available PSD increment and possibly preclude other sources from locating in Wakulla County?

Response: The Purdom Unit 8 Project actually consumes very little PSD increment in the Class II area in which the plant is located and in the two Class I areas which are nearby - St. Marks NWA and Bradwell Bay NWA. This is because the emission reductions from the units which have been shut down or will be shut down at the Purdom Station more than make up for the emissions from Unit 8 for most pollutants. In fact, the available increment is expanded for SO_2 as a result of the Project. While it is true that much of the available increment for SO_2 for the Bradwell Bay NWA Class I area is used up, this does not preclude new sources from locating in Wakulla County. Depending upon their locations, the levels of their SO_2 emissions, and any emission reductions available from the shut down or clean up of existing sources, new sources could be located in the area. They would have to comply with the same kind of stringent emission control limitations (BACT) as was applied to the Purdom 8 Project and demonstrate through modeling that the total increment consumption from the proposed new source and all other increment consuming and increment expanding sources do not exceed the allowable values.

The final action of the Department will be to issue the permit as proposed with minor clarifications.

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

City of Tallahassee
Utilities Services
300 South Adams Street
Tallahassee, FL 32301

FID No.	1290001
PSD No.	PSD-FL-239
SIC No.	4911
PPS No.	PA97-36
Expires:	May 15, 2003

Authorized Representative:
Jennette Curtis
Environmental Administrator

PROJECT AND LOCATION:

Permit for the construction of Unit 8, a combined cycle combustion turbine generating system at the Purdom Generating Station, located on the north end of the City of St. Marks on SR 363, Wakulla County, Florida.

UTM: Zone 16; 769.611 km E; 3339.767 km N

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendices and Tables made a part of this permit:

Appendix BD	BACT Determination
Appendix GC	Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

The City of Tallahassee is authorized to install a new combined cycle combustion turbine system, Unit 8, at the existing Purdom facility consisting of a 160 MW (nominal rating) GE Series MS7FA combustion turbine with DLN-2.6 (or later version) dry low NOx (gas) and water injection (diesel) burners and a nonfired heat recovery steam generator (HRSG) with a nominal 90 MW steam turbine. The compressor inlet air will be conditioned by an evaporative cooler when needed. The turbine will be started using the generator and a static start system. A new 200 foot stack and a cooling tower will be added to the facility for Unit 8.

Unit 8 will be located at the City's Sam O. Purdom Generating Station in St. Marks, Wakulla County. Existing steam generating Units 5 and 6 will be permanently shut down once Unit 8 has completed the initial performance test for natural gas firing. Other existing units at the plant consist of: Unit 7, a pre-NSPS boiler with a nominal rating of 44 MW fired by natural gas, residual fuel oil or distillate fuel oil; two pre-NSPS distillate fuel oil or natural gas fired combustion turbines with a nominal rating of 12.3 MWs each (GT1 and GT2); and a Subpart Dc auxiliary steam boiler fired by natural gas.

SUBSECTION B. REGULATORY CLASSIFICATION

The Purdom Generating Station is classified as a major air pollutant emitting facility. Air pollutant emissions are over 100 TPY for nitrogen oxides (NO_x) and carbon monoxide (CO).

This facility is on the list of the 28 Major Facility Categories in Table 62-212.400-1. This facility is also classified as a Title IV and Title V facility.

SUBSECTION C. RELEVANT DOCUMENTS:

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

Application (as revised 7/16/97, and 12/22/97)
Department's letter dated 5/1/97
Department of Interior's letter dated 1/21/97
EPA's letter dated October 14, 1997

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

SUBSECTION A. ADMINISTRATIVE

1. Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications or for permits to construct or modify an emission unit(s) *subject to the Prevention of Significant Deterioration (PSD) or to Nonattainment Areas (NA) Review requirements* should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP) located at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Mail Station 5505, and phone number (850) 488-0114.

2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in *Appendix GC* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

SECTION III. SPECIFIC CONDITIONS

SUBSECTION A. SPECIFIC CONDITIONS:

A. General Operation Requirements

1. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Part 60 including Subpart A and GG (1997 version), adopted by reference in the Florida Administrative Code regulation [Rule 62-204.800 F.A.C.]. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

2. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Purdom Unit 8 at ambient conditions of 95°F temperature, 60% relative humidity, and 14.7 psi pressure shall not exceed 1,467.7 mmBtu/hr when firing natural gas, nor 1,659.5 mmBtu/hr when firing No. 2 fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. These curves or equations shall be used to establish the maximum allowable heat input at other ambient conditions for compliance determinations.

3. Purdom Unit 8 may operate continuously (i.e., 8760 hours per year).

4. Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight shall be fired in the combined cycle combustion turbine.

5. The permittee shall install duct module(s) suitable for possible future installation of SCR equipment on the combined cycle generating unit.

6. Dry low NO_X combustors shall be used on Unit 8 when firing natural gas and water injection shall be used when firing No. 2 fuel oil for control of NO_X emissions.

7. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

8. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Permitting Authority as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

9. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]

10. The dry low NO_X burner system shall be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize NO_X emissions and CO emissions. While firing natural gas, operation of the unit when the dry low NO_X burner system is in the diffusion firing mode shall be minimized.

11. Circumvention: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]

B. Emission Limits and Standards

The following shall apply upon completion of the initial compliance tests:

1. Best Available Control Technology. The following is a summary of the BACT determinations by DEP:

Table 1. Emission Limits

Pollutant	Fuel	BACT Standard
NO_x	Gas Oil	12 ppmvd @ 15 % O_2 (a) (d) 42 ppmvd @ 15 % O_2 (a) (b) (d)
SO_2	Gas Oil	Good combustion Good combustion of low (0.05%) sulfur fuel oil
PM/PM_{10}	Gas Oil	Good combustion Good combustion of low (0.05%) sulfur fuel oil
Visible Emissions	Gas Oil	10 percent opacity 10 percent opacity
CO	Gas Oil	25 ppmvd (c) 90 ppmvd (c)

(a) 30-day rolling average excluding startup, shutdown, malfunction, and fuel switching.

(b) Plus an allowance for fuel bound nitrogen using the formula provided in Condition B4.

(c) By testing concurrent to RATA testing or by 3 one hour runs of Method 10.

(d) Not corrected to ISO conditions.

2. Visible Emissions. Visible emissions shall not exceed 10 percent opacity when firing either natural gas or No. 2 fuel oil. Drift eliminators shall be installed on the cooling tower to reduce PM/PM_{10} emissions.

3. Oxides of Nitrogen. Oxides of nitrogen emissions when firing natural gas shall not exceed 12 ppmvd at 15% O_2 on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching) as measured by CEMS. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 30 day rolling average.

4. Oxides of Nitrogen. Oxides of nitrogen emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O_2 on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by CEMS, when fuel bound nitrogen(FBN) values are less than or equal to 0.015 percent. For fuel bound

nitrogen values up to 0.03 percent, the allowance (and the adjusted standard) shall be determined, recorded, and maintained for each fuel delivery by the following formula:

STD = 0.0042 + F where:

STD = allowable NO_X emissions (percent by volume at 15 percent O_2 and on a dry basis).

F = NO_X emission allowance for fuel-bound nitrogen defined by the following table:

Fuel-Bound Nitrogen (% by Weight)	F (NO_X % by Volume)
$0 < N \leq 0.015$	0
$0.015 < N \leq 0.03$	0.04 (N-0.015)

where: N = the nitrogen content of the fuel (% by weight) Note: 0.0042 percent = 42 ppm

Adjustments to the NO_X standard (either up or down) shall be calculated based on volume weighted averages of the nitrogen content for each fuel oil shipment and the nitrogen content of the existing fuel in the storage tank.

5. Oxides of Nitrogen. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of NO_X shall not exceed 467 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods. [Requested by the applicant]

6. Sulfur Dioxide. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of SO_2 shall not exceed 80 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods. [Requested by the applicant]

7. Carbon Monoxide. Carbon monoxide emissions when firing natural gas shall not exceed 25 ppmvd as measured by Method 10.

8. Carbon Monoxide. Carbon monoxide emissions when firing No. 2 fuel oil shall not exceed 90 ppmvd as measured by Method 10.

C. Excess Emissions

1. Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.

2. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited pursuant to Rule 62-210.700, F.A.C.

3. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Northwest District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

D. Compliance Determination

1. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, for each fuel, but not later than 180 days from the initial operation date for each fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-297, F.A.C.

   Initial (I) compliance tests shall be performed on Unit 8 while firing each fuel (gas, oil). Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C., on Unit 8 as indicated. The following reference methods shall be used:

   -Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A); annual on oil if greater than 400 hours of oil firing; however, testing on gas is required only once every five years.

   -Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I, A). Testing may be conducted at less than capacity when compliance testing is conducted concurrent with the RATA testing required pursuant to 40 CFR 75 (annual for gas firing and annual for oil only if greater than 400 hours of oil firing).

   -Method 20 Determination of Oxides of Nitrogen and diluent emissions from Stationary Gas Turbines (I only, for compliance with 40 CFR 60 Subpart GG)

   Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMs). A CEMS operated and maintained in accordance with 40 CFR 75 may be used. Compliance with the NO_X emissions standards in Table 1 shall be demonstrated with this CEMS system based on a 30 day rolling average. Based on CEMS data at the end of each operating day, a new 30 day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days. Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200 where emissions exceed the NO_X standard in Table 1. These excess emission periods shall be reported as required in Section C. A valid hourly emission rate shall be calculated for each hour in which at least two NO_X concentrations are obtained at least 15 minutes apart.

   Note: No other methods may be used for compliance testing unless prior DEP approval is received in writing. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

2. Notwithstanding the requirements of Rule 62-297.340, F.A.C., the exclusive use of fuel oil with a maximum sulfur content limit of 0.05% or less, by weight, or pipeline quality natural gas is the method for determining compliance for SO_2 and PM_{10}. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA approved custom fuel monitoring schedule in Condition F.3. However, the permittee is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335 (e) (1997 version). For the purposes of demonstrating compliance with the emissions caps (Conditions B5 and B6), natural gas and fuel oil supplier data for sulfur content may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized.

3. An initial test for CO, concurrent with the initial NO_X test, is required. The initial NO_X and CO test results shall be the average of three valid one-hour runs. The DEP's Northwest District office shall be notified, in writing, at least 30

days prior to the initial compliance tests and at least 15 days before annual compliance test(s). Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity.

E. Notification, Reporting and Recordkeeping

1. All measurements, records, and other data required to be maintained by the City of Tallahassee shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.

2. Compliance Test Reports: A test report indicating the results of the required compliance tests shall be filed with the DEP NW District Office as soon as practical, but no later than 45 days after the last sampling run is completed. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

F. Monitoring Requirements

1. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 8. Thirty day rolling average periods when NO_X emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported to the DEP Northwest District Office pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards in Table 1 following the format of 40 CFR 60.7 (1997 version). The NO_x CEMS shall be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring required for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from DEP, the CEMS emission rates for NO_X on Unit 8 shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332.

2. The following monitoring schedule for No. 2 fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at the Purdom Station, an analysis which reports the sulfur content and fuel bound nitrogen content of the fuel shall be provided by the fuel vendor or other sources which follow the appropriate fuel test methods listed in Specific Condition D2. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).

3. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2):

   a. Monitoring of natural gas nitrogen content shall not be required.

b. Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods in Condition D2 for the measurement of sulfur in gaseous fuels, or an approved alternative method. Once Unit 8 becomes operational, monitoring of the sulfur content of the natural gas shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then fuel sulfur monitoring shall be conducted once per quarter for six quarters and after that, semiannually.

c. Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the City shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.

d. The City shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

e. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the City for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.

f. The City may obtain the sulfur content of the natural gas from the fuel supplier provided the test methods listed in Specific Condition D2 are used.

4. Determination of Process Variables:

(a) The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C]

5. Compliance with the annual facility-wide NO_X cap shall be reported as required in Condition G6 and shall be determined by adding the annual NO_X emissions in tons per year for Unit 8 and Unit 7 (determined by the CEMS as required by 40 CFR 75) to annual NO_X emissions calculated for units GT1, GT2 and the auxiliary boiler determined by the following formulas:

GT 1 & GT 2 NO_X(natural gas)= (Fuel Usage)X (Heating Value of Natural Gas) X (0.44 lb/mmBtu) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated
Heating Value of Natural Gas will be determined from fuel supplier data
0.44 lb/mmBtu = AP-42 emission factor

GT 1 & GT 2 NOx (fuel oil)= (Fuel Usage)X (Heating Value of Fuel Oil) X (0.698 lb/mmBtu) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated
Heating Value of Fuel Oil will be determined from fuel supplier data
0.698 lb/mmBtu = AP-42 emission factor

Aux. Boiler NO_X(natural gas)= (Fuel Usage)X (140 lb/mmCF) X units conversion factors

Fuel Usage shall be measured by flow meter, recorded daily when unit is operated
140 lb/mmCF = AP-42 emission factor

6. Compliance with the annual facility-wide SO_2 cap shall be reported as required in Condition G6 and shall be determined by adding the annual SO_2 emissions in tons per year for Unit 8 and Unit 7 (determined by the methods required by 40 CFR 75) to the annual SO_2 emissions calculated for units GT1, GT2 and the auxiliary boiler determined by the following formulas:

GT 1 & GT 2 SO2 Emissions (natural gas)= (Fuel Usage) X (Heating Value of Natural Gas) X (0.0006 lb/mmBtu) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated
Heating Value of Natural Gas from fuel supplier data
Sulfur Content default of NADB = 0.0006 lb-SO2/mmBtu

GT 1 & GT 2 SO2 Emissions (fuel oil) = (Fuel Usage) X (Fraction Sulfur in the fuel oil) X (Molecular weight SO2 / Molecular weight of S) X (Conversion factor) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated % Sulfur will be determined from fuel oil analysis each time fuel is delivered (i.e., 0.05% S = 0.0005 in the above formula).

Molecular weight of SO2 = 64
Molecular weight of S = 32
Conversion factor of 95% = 0.95

Aux. Boiler SO2 Emissions (natural gas)= (Fuel Usage) X (Heating Value of Natural Gas) X (0.0006 lb/mmBtu) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated
Heating Value of Natural Gas from fuel supplier data
Sulfur Content default of NADB = 0.0006 lb/mmBtu

G. Rule Requirements

1. The emission unit shall be operated in compliance with all applicable requirements of 40 CFR 60, Subpart A, Appendix A and Appendix B (1997 version), Subpart GG - Standards of Performance for Stationary Gas Turbines (1997 version), and Rule 62-204.800 (7) (b) 38, F.A.C., except as otherwise specified herein. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance

determinations with the BACT standard(s). All notifications and reports specified in this section shall be submitted to the DEP's Northwest District office.

2. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62-210.300(1), F.A.C.).

3. Except as otherwise specified herein, the emission unit shall be operated in compliance with all applicable provisions of Rule 62-210.650, F.A.C.: Circumvention; Rule 62-210.700, F.A.C.: Excess Emissions; Rule 62-204.800 (7) (b) 38, F.A.C.: Standards of Performance for New Stationary Sources (NSPS); Chapter 62-297, F.A.C.: Stationary Sources - Emissions Monitoring; and, Rule 62-4.130, F.A.C.: Plant Operation - Problems.

4. Notification of the following dates shall be provided to the DEP Northwest District office: 1)anticipated date of the initial startup of Unit 8 shall be postmarked not more than 60 days nor less than 30 days prior to such date, 2) the actual date of the initial startup shall be postmarked within 15 days after such date, and 3) commencement of construction shall be postmarked no later than 30 days after such date pursuant to 40 CFR 60.7. If construction does not commence within 18 months of issuance of this permit, the permittee shall obtain from the DEP's Bureau of Air Regulation a review and, if necessary, a modification of the BACT determination and allowable emissions (40 CFR 52.21(r)(2) (1997 version)).

5. Quarterly excess emission reports, in accordance with 40 CFR 60.7 (7) (c) (1997 version), shall be submitted to the DEP's Northwest District office.

6. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Northwest District office by March 1st of each year.

7. Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

H. Modifications

1. The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

(a) Have access to and copy and records that must be kept under the conditions of the permit;
(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of non-compliance; and
(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

G.13 This permit also constitutes:

(a) Determination of Best Available Control Technology *(X)*
(b) Determination of Prevention of Significant Deterioration *(X)*; and
(c) Compliance with New Source Performance Standards *(X)*.

G.14 The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The dates analyses were performed;
4. The person responsible for performing the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

Purdom Generating Station/Unit 8
City of Tallahassee

Facility ID No. 1290001 - Unit No. 8
Wakulla County, Tallahassee, Florida

Air Construction Permit No. PSD-FL-239
Power Plant Siting No. PA 97-36

The City of Tallahassee plans to install a new combined cycle combustion turbine system, Unit 8, at the existing Purdom facility consisting of a 160 MW (nominal rating) GE Series MS7FA combustion turbine with DLN-2.6 (or later version) dry low NOx (gas) and water injection (diesel) burners and a nonfired heat recovery steam generator (HRSG) with a nominal 90 MW steam turbine. The compressor inlet air will be conditioned by an evaporative cooler when needed. The turbine will be started using the generator and a static start system. A new 200 foot stack and a cooling tower will be added to the facility for Unit 8.

Unit 8 will be located at the City's Sam O. Purdom Generating Station in St. Marks, Wakulla County. Existing steam generating Units 5 and 6 will be permanently shut down once Unit 8 has completed the initial performance test for natural gas firing. Other existing units at the plant consist of: Unit 7, a pre-NSPS boiler with a nominal rating of 44 MW fired by natural gas, residual fuel oil or distillate fuel oil; two pre-NSPS distillate fuel oil or natural gas fired combustion turbines with a nominal rating of 12.3 MWs each (GT1 and GT2); and a Subpart Dc auxiliary steam boiler fired by natural gas. A process description is included in the Technical Evaluation and Preliminary Determination.

BACT DETERMINATION REQUESTED BY THE APPLICANT:

See Table 4-8 (ATTACHMENT A) for the BACT requested by the applicant.

The Sam O. Purdom facility is among the major facilities listed in Florida Administrative Code (F.A.C.) Chapter 62-212, Prevention of Significant Deterioration (PSD), Table 62-212.400-1, "Major Facilities Categories." A BACT determination is required for each pollutant exceeding the significant emission rates in Table 62-212.400-2, "Regulated Air Pollutants Significant Emissions Rates," which in this case are particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), carbon monoxide (CO), and nitrogen oxides (NO_X),

This facility is also subject to:

- 40 CFR 60, Subpart GG
- 40 CFR 75

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

DATE OF RECEIPT OF A BACT APPLICATION:

03-17-97

REVIEW GROUP MEMBERS:

Martin Costello, P.E., of the New Source Review Section.

BACT DETERMINATION PROCEDURE:

In accordance with Chapter 62-212, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 - Standards of Performance for New Stationary Sources or 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants.

(b) All scientific, engineering, and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determination of any other state.

(d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The air pollutant emissions from this facility can be grouped into categories based upon the control equipment and techniques that are available to control emissions from these emission units. Using this approach, the emissions can be classified as follows:

o *Combustion Products* (e.g. NO_x and SO_2)

Nitrogen Oxides (NO_X)

Oxides of nitrogen (NO_X) are generated during fuel combustion by oxidation of chemically bound nitrogen in the fuel (fuel NO_X) and by thermal fixation of nitrogen in the combustion air (thermal NO_X). As flame temperature increases, the amount of thermally generated NO_x increases. Fuel type affects the quantity and type of NO_X generated. Natural gas is very low in fuel bound nitrogen and therefore the dominant mechanism for NO_X formation is thermal NO_X. On combustion turbines, controls for NO_X include Selective Catalytic Reduction (SCR) systems, wet injection or dry low NO_X burner systems.

Sulfur Dioxide (SO_2)

In a combustion turbine (CT) sulfur dioxide emissions result from the oxidation of fuel bound sulfur. Natural gas has very low levels of sulfur and low sulfur distillate fuel oils have 0.05% sulfur by weight which is also low compared to heavy fuel oils or coal. Add on controls (e.g. wet scrubber or spray dryer absorber systems) are not feasible nor are they needed when low sulfur fuels are fired in combustion turbines. SO_2 emissions are minimized solely by firing low sulfur fuels. As discussed below, sulfur dioxide (and sulfuric acid mist) emissions will be controlled on unit 8 by firing low sulfur fuels.

o *Products of Incomplete Combustion* (e.g., PM_{10}, CO, VOC).

Particulate Matter less than 10 micrometers aerometric diameter (PM_{10})

Particulate Matter is generated by various physical and chemical processes during combustion. The particulate matter emitted from this combustion turbine will predominately be less than 10 micrometers in diameter (PM_{10}). Common control devices for stack gases include settling chambers, inertial separators, impingement separators, wet scrubbers, fabric filters, and electrostatic precipitators. These add on control devices have not been used on combustion turbines mainly due to the low particulate loadings and the increased back pressure. Filtering of the compressor inlet air and good combustion practices constitute the top control option for combustion turbines firing natural gas or low sulfur distillate fuel oil.

The cooling tower will emit PM/PM_{10} as particulate laden water is emitted and evaporated from the tower. A single BACT determination for a cooling tower was identified in the technology review. The BACT in this case specified drift eliminators to control PM/PM_{10} emissions from the cooling tower drift losses.

Carbon Monoxide (CO)

Carbon monoxide (CO) is a pollutant formed by the incomplete combustion (oxidation) of hydrocarbons in the turbine's combustors. The most stringent control technology for CO emissions is the use of an oxidation catalyst. This control option is not considered cost effective as discussed in the next section. The second most stringent control option, combustion controls and good combustion practices is considered BACT for this project.

o ***Other Pollutants:***

VOC is also a pollutant formed by the incomplete combustion of fuel. It will be controlled in the same manner as chosen for CO control. Other pollutants (sulfuric acid mist, heavy metals) will be minimized by the exclusive use of clean fuels and the same good combustion practices listed above.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "non-regulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., PM_{10}, NO_X, SO_2, etc.), if a reduction in "non-regulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT POLLUTANT ANALYSIS

NITROGEN OXIDES (NO_X)

A review of EPA's RACT/BACT/LAER Clearinghouse (RBLC) information indicates that NO_X emissions for most new combustion turbines in attainment areas for ozone and nitrogen dioxides are controlled by either wet injection or dry low NO_X burner technology. The applicant has proposed dry low NO_X burner technology for gas firing and water injection for fuel oil firing. It is compared below with previous determinations documented by the BACT Clearinghouse.

BACT Clearinghouse Determinations

BASIS:	*Limit*	*Technology*	*Facility ID*
LAER- gas fired	*3.5 ppm*	*SCR*	*NY-0044*
LAER- oil fired	*10 ppm*	*SCR*	*NY-0044*
BACT-gas	*9ppm*	*DLNB*	*NY-0047*
BACT-oil	*42ppm*	*water injection*	*NY-0047*

The most stringent or top control option for controlling NO_X emissions from a combustion turbine is the above listed facility (NY-0044) from EPA's RACT/BACT/LAER Clearinghouse Information System (RBLC). The Brooklyn Navy Yard Cogeneration Partnership L.P. facility consists of two CTs which are gas/oil fired cogeneration units rated at 240 MW total (160 MW simple cycle) and is located in a nonattainment area for ozone. In addition to SCR add on controls for NO_X emissions, offsets (reductions in NO_X emissions at a nearby facility) were purchased when this unit was permitted.

The city analyzed the feasibility of installing a SCR system for Purdom unit 8. The initial capital cost based on a vendor quote was $1,676,000 based on a design which would meet 3.5 ppm on gas and 10 ppm on fuel oil. The total levelized annual cost was estimated to be $1.5 million per year for 20 years resulting in an incremental cost effectiveness of $7,225 per ton of NO_X removed. This incremental cost effectiveness value is considerably higher than those determined to constitute BACT for other projects in Florida of similar nature. Therefore SCR is deemed too expensive in this application.

The most stringent emission limit for a large industrial combustion turbine with dry low NO_X burners is listed in the table above (NY-0047). This unit is located in Holtsville New York at the PASNY Holtsville Combined Cycle Plant. This unit is a Siemens model V84.2 rated at 150 MW simple cycle. This unit uses a single vertical silo combustor in contrast to the GE frame 7FA unit which uses a can annular combustor. The silo design allows for longer residence time in the combustor and may operate at lower peak flame temperatures (which reduces thermal NOx). It was permitted in 1992 and has recently demonstrated emissions less than 9 ppmvd except during startup (up to 3 hours) /shutdown/malfunction and is required to demonstrate compliance using the NO_X CEMS. The firing temperature and the reliability of this unit are not known as this time. The majority of the 9 ppm units listed in EPA's database employ both SCR and dry low NOx burners.

The current level of dry low NO_X burner technology which can be reliably achieved over a long time period appears to be approximately 15 ppm of NO_X at full load firing natural gas. This standard is shown on at least 10 units listed in EPA's RACT/BACT/LAER Clearinghouse. The actual emissions level achieved from dry low NO_X burner technology is dependent on firing temperature, size of the unit and type of combustor (silo vs. annular combustor designs). In general the smaller aeroderivative designs have not been able to achieve 15 ppm without having problems with reliability. Several units in Florida have been granted extensions for the deadline to attain 15 ppm. Some of the smaller industrial turbines (frame units) are able to achieve less than 15 ppm today. For instance, Unit 2 at the Kissimmee Utility Authority's Cane Island plant has actual emissions of 6 to 12 ppm at full load on this GE frame 7 EA unit. It is rated at 80 MW and has a firing temperature of about 2025 F. Because the city requested compliance to be demonstrated on a continuous basis (by CEMS) using a 30 day rolling average, the Department considered a BACT limit below 15 ppm to compensate for the longer averaging time. An additional consideration in determining BACT for NO_X was the fact that the technology for this dry low NO_X system is still under development, even though it has been demonstrated on a lower firing temperature unit.

Dry low NO_X technology is a combustion staging technology which reduces the formation of thermal NO_X by keeping peak flame temperatures as low as possible. But higher firing temperatures enable higher thermal efficiencies because these hotter exhaust gases have more energy to turn the turbine blades. Because thermal NO_X can be higher for the higher firing temperature units (e.g. the unit proposed by the City of Tallahassee) it is more difficult to achieve low NO_X emissions on these units with firing temperatures of 2400 F. Compensating for this is the higher electrical power output for a given heat input, therefore on a (lbs of NO_X emissions) / (KW-hr) basis, the more efficient units may not be at a disadvantage to the lower firing temperature units.

Dry low NO_X burner technology is the next most stringent control technology (after SCR) for combustion turbines. The applicant proposes to use GE's DLN-2.6 (or later version) controls which is a third generation dry low NO_X burner technology that was first demonstrated in commercial operation in 1996. Emissions from this unit were less than 9 ppm. This application was a Frame 7FA unit with a firing temperature of 2350 F. The first application of a Frame 7FA with a 2400 F firing temperature is scheduled for operation this summer and has a contract for less than 15 ppm. Although not currently demonstrated on the higher firing temperature unit which the city of Tallahassee will purchase, the contractor has guaranteed an emission rate of less than 9 ppm for Purdom Unit 8. This guarantee is based on operation above the 50-55% load range since emissions (ppm) will be higher at loads below this.

Nitrogen Oxides (NO_X) emissions will be controlled by using GE's DLN-2.6 (or later version) with a BACT standard of 12 ppmvd corrected to 15% oxygen, compliance by CEMS and using a 30 day rolling average. The firing temperature on this Frame 7FA combustion turbine is 2400 F. When firing natural gas, the combustor operates in a diffusion mode at low loads (less than about 50% of capacity) and in a premixed mode at high loads. When firing fuel oil, the combustors are operated in a diffusion mode at all loads and diluent injection (water) is used to control NO_X formation. The DLN-2.6 control system regulates fuel distribution to the primary, secondary, tertiary and quaternary fuel systems for each of the five combustors. As the combustion turbine is started and operated through the full range, the diffusion, piloted premix, and premix flames are established by changing the distribution of fuel flow in the combustors. Fuel and air flow to the combustors are controlled by GE's Speedtronic control system. GE's Mark V control system will be used to continuously maintain the NO_X concentration in the exhaust at the specified level throughout a range of loads and ambient conditions. This system receives inputs from a compressor inlet temperature and humidity sensor, load sensors, speed sensors, and ambient pressure sensors.

SULFUR DIOXIDE (SO_2)

SO_2 control processes can be classified into five categories: fuel/material sulfur content limitations, absorption by a solution, adsorption on a solid bed, direct conversion to sulfur, or direct conversion to sulfuric acid.

A review of the BACT determinations for combustion turbines as contained in EPA's Clearinghouse shows that the exclusive use of low sulfur fuels constitutes the top control option for SO_2. The applicant has proposed the exclusive use of natural gas or distillate fuel oil with sulfur content limited to 0.05% by weight. This is considered BACT for this project.

PARTICULATE MATTER (PM/PM_{10})

A technology review indicated that the top control option for PM_{10} is a combination of good combustion practices, fuel quality, and filtration of inlet air. The applicant has proposed this top control option. In addition, GE indicates that the PM_{10} emissions will not exceed 9 lb/hr (0.0058 lb/mmBtu) for natural gas and 17 lb/hr (0.0096 lb/mmBtu) for low sulfur distillate fuel oil exclusive of background dust loadings. Because these low emission levels are difficult to reliably measure by EPA reference methods over a one hour test period, BACT is not an emission limit but is based on good combustion practices and the exclusive use of clean, low sulfur fuels. The emission control technology for PM_{10} will be good combustion practices and the use of only low sulfur, and low ash content fuels including natural gas and distillate fuel oil containing no more than 0.05% sulfur by weight. The inlet air for the combustion turbine will be filtered to protect the internal components from wear. This filtration may also reduce PM_{10} emissions. Good combustion practices shall be implemented by using computer monitored and controlled systems with appropriate alarms for improper operating parameters. Proper tuning and operation of the dry low NO_X burner system shall be employed to minimize products of incomplete combustion (PM_{10}, VOC, and CO) while meeting the NO_X emission limit.

BACT for the cooling tower is the use of drift eliminators to control PM/PM_{10} emissions from the cooling tower drift losses.

CARBON MONOXIDE(CO)

The most stringent control technology for CO emissions is the use of an oxidation catalyst. The city evaluated the use of an oxidation catalyst designed for 90 percent reduction and having a two year catalyst life. The oxidation catalyst control system is estimated to increase the capital cost of the project by $1.5 million and results in an incremental cost effectiveness of $7,720 per ton of CO reduced. In addition, there will be a reduction in the unit's output by as much as 0.5% or 1.25 MW due to the increased pressure drop across the catalyst. The catalyst may also result in an increase in the oxidation of SO_2 to SO_3 which combines with moisture in the exhaust to form sulfuric acid mist. This impact is not considered significant. The catalyst life is limited and may result in an additional solid waste load to the local landfill if the catalyst can not be rejuvenated by the manufacturer. This control option is not considered cost effective. The second most stringent control option, combustion controls and good combustion practices is considered BACT for this project. Carbon monoxide (CO) will be controlled by proper tuning of the dry low NO_X burner system and good combustion practices. Operation of the dry low NO_X burner system shall be optimized in order to

minimize CO emissions while keeping NO_X emissions below the emission limit. Low load operation will result in the highest levels of CO emissions (ppm and lb/hr). The BACT emission limit for CO, 25 ppm for gas and 90 ppm for fuel oil, was set at the level which could be achieved for worst case operation i.e., low load operation (50% load) so that the full range of operation of this unit could be employed. It may be cost effective to conduct annual CO emission tests concurrent with the annual relative accuracy test audits (RATA) which are conducted at 50 % load or higher. According to GE's data, operation at higher loads should result in CO emissions which are at or below 10 ppmvd when firing natural gas.

BACT DETERMINATION RATIONALE:

The BACT emission level chosen for NO_X, 12 ppm and compliance by CEM, is similar to the basis for the 165 MW units (simple cycle rating) at for FPC's Hines Energy Center and is the lowest NO_X limit (ppm level) to date in Florida. In contrast to Unit 8, the Hines Energy Center units are not required to demonstrate compliance on a continuous basis but EPA Method 20 is required once per year. Selective Catalytic Reduction (SCR) was not considered cost effective for the city of Tallahassee. SCR is an add on NO_X control technology which requires ammonia injection and the installation of a catalyst bed downstream of the combustion turbine. Because combustion turbines pump large volumes of exhaust gases, the pressure drop introduced by the catalyst causes energy losses on these large industrial combustion turbines. Water usage associated with an SCR system would increase by 136,000 gallons per year.

BACT for SO_2 emissions from the combustion turbine was based on the top control option which is the exclusive use of low sulfur distillate fuel oil and pipeline quality natural gas. These fuels are among the lowest sulfur fuels available. This BACT will also insure that ambient SO_2 impacts on the nearby St. Marks Class I area are minimized to the greatest extent possible.

BACT for PM_{10} was determined to be good combustion practices, inlet air filtering, and clean, low ash and low sulfur fuels which is currently the only feasible PM_{10} control technology for combustion turbines. Particulate matter is generated by various physical and chemical processes during combustion and will be affected by the design and operation of the NO_X controls. The particulate matter emitted from this unit will mainly be less than 10 micrometers in diameter (PM_{10}). Common control devices for stack gases include settling chambers, inertial separators, impingement separators, wet scrubbers, fabric filters, and electrostatic precipitators. Fabric filters (baghouses) and electrostatic precipitator (ESPs) have not been used on combustion turbines mainly due to the low particulate loadings and the increased back pressure. Filtering of the compressor inlet air and good combustion practices constitute the top control option for combustion turbines firing natural gas or low sulfur distillate fuel oil. The applicant has proposed this top control option. This is considered BACT for this project.

The city evaluated the use of an oxidation catalyst designed for 90 percent reduction of CO and a two year catalyst life. The oxidation catalyst control system is estimated to increase the capital cost

of the project by $1.5 million and results in an incremental cost effectiveness of $7,720 per ton of CO reduced. In addition, there will be a reduction in the unit's output by as much as 0.5% or 1.25 MW due to the increased pressure drop across the catalyst. The catalyst may also result in an increase in the oxidation of SO_2 to SO_3 which combines with moisture in the exhaust to form sulfuric acid mist. This impact is not considered significant. The catalyst life is limited and may result in an additional solid waste load to the local landfill if the catalyst can not be rejuvenated by the manufacturer. This control option is not considered cost effective. The second most stringent control option, combustion controls and good combustion practices is considered BACT for this project. The BACT emission limit for CO, 25 ppm for gas and 90 ppm for fuel oil, was set at the level which could be achieved for worst case operation i.e., low load operation (50% load) so that the full range of operation of this unit could be employed. It may be cost effective to conduct annual CO emission tests concurrent with the annual relative accuracy test audits (RATA) which are conducted at 50 % load or higher. According to GE's data, operation at higher loads should result in CO emissions which are at or below 10 ppmvd when firing natural gas.

BACT DETERMINATION BY DEP:

Based on the information provided by the applicant and the information searches conducted by the Department, lower emissions limits can be obtained employing the top-down BACT approach for SO_2 , NO_X , PM_{10} , and CO.

PM_{10} DETERMINATION

Filtering of the compressor inlet air and good combustion practices while firing low sulfur fuels (natural gas or distillate fuel oil with no more than 0.05% sulfur content).

BACT for the cooling tower is the use of drift eliminators to control PM/PM_{10} emissions from the cooling tower drift.

SO_2 DETERMINATION

The exclusive use of pipeline quality natural gas or distillate fuel oil with sulfur content limited to 0.05% by weight is considered BACT for this project.

NO_x DETERMINATION

An emission limit of 12 ppmvd corrected to 15% oxygen firing natural gas and 42 ppmvd corrected to 15% oxygen firing fuel oil is considered BACT. The NO_X standard for firing fuel oil shall be adjusted from 42 ppm up to 48 ppm based on fuel bound nitrogen (FBN) levels above 0.015 percent according to the equation submitted by the applicant and incorporated into the draft PSD permit (Section III Condition B4). This adjustment, upward or downward between 42 and 48 ppm, shall be made only at the time of each new fuel shipment. Compliance shall be demonstrated on a

30 day rolling average basis using the NO_X CEMS system. Emissions during startup (including fuel switching), shutdown and malfunction shall be excluded from the calculation of these 30 day rolling averages provided the operator minimizes the occurrence, magnitude, and duration of excess emissions pursuant to 62-210.700 Florida Administrative Code (version dated 10/15/96). Excess Emissions during these transient periods shall be reported quarterly to the Department pursuant to 40 CFR 60.7. Excess emissions shall be reported based on the NO_X CEMS data in lieu of the water/fuel monitoring specified in 40 CFR 60.334. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate of the 30 day rolling average.

CO DETERMINATION

Carbon monoxide (CO) will be controlled by proper tuning of the dry low NO_X burner system and good combustion practices. Operation of the dry low NO_X burner system shall be optimized during the initial compliance test and at other times as needed in order to minimize CO emissions while keeping NO_X emissions below the emission limit. The BACT emission limit for CO, 25 ppm for gas and 90 ppm for fuel oil, was set at the level which could be achieved for worst case operation i.e., low load operation (50% load) so that the full range of operation of this unit could be employed. It may be cost effective to conduct annual CO emission tests concurrent with the annual relative accuracy test audits (RATA) which are conducted at 50 % load or higher.

OTHER POLLUTANTS

Visible Emissions shall be limited to 10 % opacity as a secondary and ongoing indicator of PM_{10} emissions.

The BACT emission levels established by the Department are as follows:

Table 1-1: Air Pollutant Standards and Terms

POLLUTANT	EMISSION LIMIT
	Natural Gas / Fuel Oil
Particulate Matter (PM_{10})	good combustion of clean, low sulfur fuels
	drift eliminators for the cooling tower
Visible Emissions	10% opacity / 10 % opacity
Carbon Monoxide	25ppm / 90 ppm
NO_X (30 day rolling average)	12 ppm @ 15 % O_2 / 42 ppm @ 15% O_2 and adjusted for FBN
SO_2	natural gas / limit of 0.05% sulfur by weight

Table 1-2: Compliance Procedures

POLLUTANT	COMPLIANCE DETERMINED BY
Visible Emissions	Method 9
Carbon Monoxide	Method 10 (can conduct concurrent with RATA testing)
NO_X (30 day rolling average)	NO_X CEMS and O_2 or CO_2 diluent monitor
SO_2	ASTM D 3246 gas / ASTM D 4294 fuel oil, or other gas and fuel oil test methods in 40 CFR 60

DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:

Martin Costello, PE II
New Source Review Section
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended By:

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

5/28/98
Date:

Approved By:

Howard L. Rhodes, Director
Division of Air Resources Management

Date:

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)
ATTACHMENT A

BACT DETERMINATION REQUESTED BY THE CITY OF TALLAHASSEE

TABLE 4-8
SUMMARY OF PROPOSED BEST AVAILABLE CONTROL TECHNOLOGY

Pollutant	Proposed BACT
Carbon Monoxide (CO)	Good Combustion Practices
Particulate Matter (TSP)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil, Good Combustion Practices, and Combustion Inlet Air Filtration
PM_{10}	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil, Good Combustion Practices, and Combustion Inlet Air Filtration
Sulfur Dioxide (SO_2)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil.
Sulfuric Acid Mist (H_2SO_4)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil.
Nitrogen Oxides (NO_x)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil and Good Combustion Practices including Dry-Low NOx Combustors and Water Injection
Volatile Organic Compounds (Including Benzene)	Good Combustion Practices
Trace Metals Lead (Pb) Beryllium (Be) Mercury (Hg) Arsenic (As)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil and Combustion Inlet Air Filtration
Total Fluorides (Fl)	Fuel Quality (Clean Pipeline Quality natural gas and No. 2 (0.05% S) diesel fuel oil.
Cooling Tower (TSP & PM_{10})	Drift Eliminators (0.002 percent - Recirculation Water)

Note: Pollutants presented in bold and italics are subject to BACT by rule.

Source: Foster Wheeler Environmental, 1997

Table 1-2: Compliance Procedures

POLLUTANT	COMPLIANCE DETERMINED BY
Visible Emissions	Method 9
Carbon Monoxide	Method 10 (can conduct concurrent with RATA testing)
NO_X (30 day rolling average)	NO_X CEMS and O_2 or CO_2 diluent monitor
SO_2	ASTM D 3246 gas / ASTM D 4294 fuel oil, or other gas and fuel oil test methods in 40 CFR 60

DETAILS OF THE ANALYSIS MAY BE OETAINED BY CONTACTING:

Martin Costello, PE II
New Source Review Section
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended By:

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

Date: 5/28/98

Approved By:

Howard L. Rhodes, Director
Division of Air Resources Management

Date: 5/28/98

ASP Number 97-B-01
(With Scrivener's Order Dated July 9, 1997)

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact; Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]

2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.

3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.

5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."

6. Rule 297.310(7)(a)2., F.A.C., states, "The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision.

7. Rule 297.310(7)(a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: a. Did not operate; or, b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours."

8. Rule 297.310(7)(a)4., F.A.C., states, "During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for: a. Visible emissions, if there is an applicable standard; b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."

9. Rule 297.310(7)(a)5., F.A.C., states. "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."

10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup."

11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]

12. The fifth edition of the U. S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]

13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours;

2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;

3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

(a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(b) A statement of the preliminary agency action;

(c) A statement of the relief sought; and

(d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner;

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;

(c) Each rule or portion of a rule from which a variance or waiver is requested;

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above;

(e) The type of action requested;

(f) The specific facts that would justify a variance or waiver for the petitioner;

(g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully

each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes

HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 18th day of March 1997.

Clerk Stamp

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

Martha O. Willis 3-18-97
Clerk Date

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
405 REO STREET, SUITE 100 • (813) 289-5644 • FAX (813) 289-5648
TAMPA, FLORIDA 33609-1004

January 28, 1997

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32301

RE: Comments Regarding Draft Title V Permits

Dear Mr. Fancy:

The Florida Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter.

Primarily, the FCG members are concerned that the Title V permits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

1. Federal Enforceability--The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that *all* terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DARM-PER/V-18), but we understand that the Department may now intend to remove all references to

Exhibit 1

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do *not* become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

2. PM Testing on Gas--The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBtu emission limit established under Rule 62-296.405(1)(c), F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fuel. Typically only *de minimis* amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department, and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.

3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

4. Compliance Testing for Combustion Turbines--While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion turbines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition *only* if requested by a permittee, we understand that the Department may intend to include this requirement in Title V permits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO *only* to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Standard Subpart GG under 40 CFR § 60.332 and not annually thereafter.

5. Test Methods--The FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should *not* be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

6. Quarterly Reports--The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied *only* if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., oil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.

7. Trivial Activities--As you may recall, in May of 1996, the FCG submitted to the Department a list of small, *de minimis* emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DARM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1996, list to be "trivial." We would like to discuss a possible resolution of this issue with you and your staff at the January 30 meeting.

8. Permit Shield--The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to caveat the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the draft Title V permits. We very much appreciate the cooperation we have received from the Department throughout the

Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-625-7661.

Sincerely,

Rich Piper

Rich Piper, Chair
FCG Air Subcommittee

Enclosures

cc: Howard L. Rhodes, DEP
John Brown, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
FCG Air Subcommittee
Angela Morrison, HGSS

s2601

AP-42
FIFTH EDITION
JANUARY 1995

COMPILATION OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

Office Of Air Quality Planning And Standards
Office Of Air And Radiation
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

January 1995

Exhibit 2

1.4 Natural Gas Combustion

1.4.1 General[1-2]

Natural gas is one of the major fuels used throughout the country. It is used mainly for industrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9800 kcal/scm (900 to 1100 Btu/scf).

1.4.2 Emissions And Controls[3-5]

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combustion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-containing mercaptan is added to natural gas to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen oxides (NO_x) are the major pollutants of concern when burning natural gas. Nitrogen oxide emissions depend primarily on the peak temperature within the combustion chamber as well as the furnace-zone oxygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO_x control techniques being applied to natural gas-fired boilers (which result in characteristic changes in emission rates) are low NO_x burners and flue gas recirculation. Low NO_x burners reduce NO_x by accomplishing the combustion process in stages. Staging partially delays the combustion process, resulting in a cooler flame which suppresses NO_x formation. The three most common types of low NO_x burners being applied to natural gas-fired boilers are staged air burners, staged fuel burners, and radiant fiber burners. Nitrogen oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (e. g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO_x emission rates for these systems.

In a flue gas recirculation (FGR) system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO_x emissions by two mechanisms. The recycled flue gas is made up of combustion products which are as inerts during combustion of the fuel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak flame temperature and reducing the amount of NO_x formed. To a lesser extent, FGR also reduces NO_x formation by lowering the oxygen concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO_x emission rates for these systems. Flue gas

recirculation is normally used in combination with low NO_x burners. When used in combination, these techniques are capable of reducing uncontrolled NO_x emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion flue gases to reduce inlet NO_x emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than 1 micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO_x control systems such as FGR and low NO_x burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, and 1.4-3.[6] For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units). EMISSION FACTORS FOR PARTICULATE MATTER (PM) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	Filterable PM[c]			Condensable PM[d]		
	$kg/10^6 m^3$	$lb/10^6 ft^3$	RATING	$kg/10^6 m^3$	$lb/10^6 ft^3$	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	16 - 80	1 - 5	B	ND	ND	NA
Small industrial boilers (10 - 100) (1-02-006-02)	99	6.2	B	120	7.5	D
Commercial boilers (0.3 - < 10) (1-03-006-03)	72	4.5	C	120	7.5	C
Residential furnaces (< 0.3) (No SCC)	2.8	0.18	C	180	11	D

[a] References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10^6 cubic meters natural gas fired and lb of pollutant/10^6 cubic feet natural gas fired. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

[b] SCC = Source Classification Code.

[c] Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

[d] Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO_2), NITROGEN OXIDES (NO_x), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	SO_2[c]			NO_x[d]			CO[e]		
	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING
Utility/large Industrial Boilers (>100) (1-01-006-01, 1-01-006-04)									
Uncontrolled	9.6	0.6	A	8800	550[f]	A	640	40	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	ND	ND	NA
Controlled - Flue gas recirculation	9.6	0.6	A	850	53[f]	D	ND	ND	NA
Small Industrial Boilers (10 - 100) (1-02-006-02)									
Uncontrolled	9.6	0.6	A	2240	140	A	560	35	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	A	480	30	C	590	37	C
Commercial Boilers (0.3 - <10) (1-03-006-03)									
Uncontrolled	9.6	0.6	A	1600	100	B	330	21	C
Controlled - Low NO_x burners	9.6	0.6	A	270	17	C	425	27	C
Controlled - Flue gas recirculation	9.6	0.6	A	580	36	D	ND	ND	NA
Residential Furnaces (<0.3) (No SCC)									
Uncontrolled	9.6	0.6	A	1500	94	B	640	40	B

[a] Units are kg of pollutant/10^6 cubic meters natural gas fired and lb of pollutant/10^6 cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

[b] SCC = Source Classification Code.

[c] Reference 7. Based on average sulfur content of natural gas, 4600 g/10^6 Nm^3 (2000 gr/10^6 scf).

Table 1.4-2 (cont.).

[d] References 10,15-19. Expressed as NO_2.. For tangentially fired units, use 4400 kg/10^6 m^3 (275 lb/10^6 ft^3). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO_x emissions from controlled boilers will be reduced at low load conditions.

[e] References 9-10,16-18,20-21.

[f] Emission factors apply to packaged boilers only.

Table 1.4-2 (metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO_2) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr Heat Input) (SCC)[b]	CO_2[c]			TOC[d]		
	kg/10^6 m^3	lb/10^6 ft^3	RATING	kg/10^6 m^3	lb/10^6 ft^3	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	ND[e]	ND	NA	28[f]	1.7[f]	C
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	D	92[g]	5.8[g]	C
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 E+05	C	128[h]	8.0[h]	C
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180[h]	11[h]	D

[a] All factors represent uncontrolled emissions. Units are kg of pollutant/10^6 cubic meters and lb of pollutant/10^6 cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. NA = not applicable.

[b] SCC = Source Classification Code.

[c] References 10,22-23.

[d] References 9-10,18.

[e] ND = no data.

[f] Reference 8: methane comprises 17% of organic compounds.

[g] Reference 8: methane comprises 52% of organic compounds.

[h] Reference 8: methane comprises 34% of organic compounds.

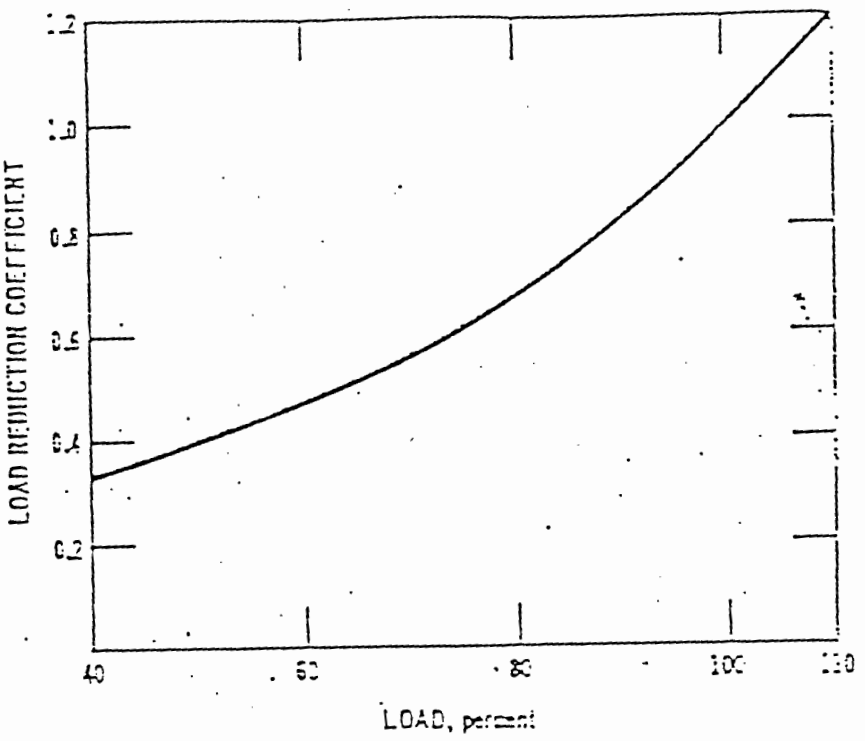


Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO_x reductions at reduced loads in large boilers.)

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Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair
Florida Power Coordinating Group, Inc.
405, Reo Street, Suite 100
Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section
Bureau of Air Monitoring and
Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP
Pat Comer, FDEP

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit ~~pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.,~~ the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes

HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 10th day of July 1997.

Clerk Stamp

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

Martha Jane Wise 7/10/97
Clerk Date

Figure 1: Summary Report- Gaseous and Opacity Excess Emission and Monitoring System Performance

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission data summary [1]	**CMS performance summary** [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown ..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ..... ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes ..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes ..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

[electronic file name: figure1.doc]

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

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

City of Tallahassee, Electric Utilities Department
Sam O. Purdom Generating Station

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/ Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
	Facility Wide Conditions ***	SO_2	(See Respective Sections)		N/A	N/A	80	N/A	80.0	PSD-FL-239, BACT	13
		NO_X	(See Respective Sections)		N/A	N/A	467	N/A	467.0	PSD-FL-239, BACT	15
-005	Boiler #5 (300 MMBtu/hour)	VE	No. 6 - No. 2 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
-006	Boiler #6 (300 MMBtu/hour)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 6 - No. 2 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	30.0	131.4	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	30.0	131.4	62-296.405(1)(b)	A.7.
		PM - SB	No. 6 - No. 2 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	90.0	164.3	62-210.700(3)	A.8.
		**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	90.0	164.3	62-210.700(3)	A.8.
	(22 MW Turbine-generator)	SO_2	No. 6 - No. 2 F.O.	8760	1.3 lbs/MMBtu	N/A	N/A	390.0	80.0	Applicant Request	A.10.
	(each unit)		Natural Gas	8760	N/A	N/A	N/A	N/A	80.0	62-296.405(1)(c)	A.10.
		% Sulfur	No. 6 - No. 2 F.O.	8760	max. sulfur content 1.20 %, by wt.			390.0	1,708.2	Applicant Request	A.11.
-007	Boiler #7 (621 MMBtu/hour)	VE	No. 6 - No. 2 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5.
			Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5.
	Acid Rain Phase II Unit	PM	No. 6 - No. 2 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	62.1	272.0	62-296.405(1)(b)	B.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	62.1	272.0	62-296.405(1)(b)	B.7.
		PM - SB	No. 6 - No. 2 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	186.3	340.0	62-210.700(3)	B.8.
		**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	186.3	340.0	62-210.700(3)	B.8.
	(44 MW Turbine-generator)	SO_2	No. 6 - No. 2 F.O.	8760	1.87 lbs/MMBtu	N/A	N/A	1,161.3	80.0	62-296.405(1)(c)1.h.	B.9.
			Natural Gas	8760	N/A	N/A	N/A	N/A	80.0	62-296.405(1)(c)	B.9.
		% Sulfur	No. 6 - No. 2 F.O.	8760	max. sulfur content 1.70%, by wt.			1,161.3	80.0	Applicant Request	B.10.
-008	Combustion Turbine No. 1	VE	No. 2 F.O.	6993	Less than 20%	N/A	N/A	N/A	N/A	62-296.320(4)(b)	D.5.
	(228 MMBtu/hour)		Natural Gas	6993	Less than 20%	N/A	N/A	N/A	N/A	62-296.320(4)(b)	D.5.
-009	Combustion Turbine No. 2	SO_2	No. 2 F.O.	6993	0.4% sulfur	N/A	N/A	97.4	80.0	AO65-242827	D.6.
	(228 MMBtu/hour)		Natural Gas	6993	N/A	N/A	N/A	N/A	80.0	N/A	N/A
-011	Auxiliary Boiler	VE	Natural Gas	2000	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.406(1)	E.6.
		PM	Natural Gas	2000	N/A	N/A	N/A	N/A	N/A	62-296.406(2)	E.8.
		SO_2	Natural Gas	2000	N/A	N/A	N/A	N/A	80.0	62-296.406(3)	E.9.

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

City of Tallahassee, Electric Utilities Department — **FINAL Permit No.:** 1290001-003-AV
Sam O. Purdom Generating Station — **Facility ID No.:** 1290001

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/ Year	Allowable Emissions Standard(s)	Allowable Emissions lbs./hour	Allowable Emissions TPY	Equivalent Emissions* lbs./hour	Equivalent Emissions* TPY	Regulatory Citation(s)	See Permit Condition(s)
-012	Combustion Turbine #8	VE	No. 2 F.O.	8760	10%	N/A	N/A	N/A	N/A	BACT	F.9.
	(1,467.7 MMBtu/hr - N.G.)		Natural Gas	8760	10%	N/A	N/A	N/A	N/A	BACT	F.9.
	(1,659.5 MMBtu/hr - F.O.)	PM/	No. 2 F.O.	8760	max. sulfur content 0.05%, by wt.			N/A	N/A	BACT	BACT
		PM_{10}	Natural Gas	8760	Good Combustion			N/A	N/A	BACT	BACT
	Acid Rain Phase II Unit	SO_2	No. 2 F.O.	8760	max. sulfur content 0.05%, by wt.			N/A	80.0	BACT	F.10., F.25
			Natural Gas	8760	N/A	N/A	N/A	N/A	80.0	BACT	N/A
		NO_x	No. 2 F.O.	8760	42 ppmvd @ 15 % O2			N/A	467.0	BACT	F.12.
			Natural Gas	8760	12 ppmvd @ 15 % O2			N/A	467.0	BACT	F.11.
		CO	No. 2 F.O.	8760	90 ppmvd			N/A	193.0	BACT	F.14.
			Natural Gas	8760	25 ppmvd			N/A	193.0	BACT	F.13.

Notes:
* The "Equivalent Emissions" listed are for informational purposes.
** PM - SB refers to "soot blowing" and "load change".
*** Facility-wide caps begin the year following initial compliance testing of Unit 8.

Table 2-1, Summary of Compliance Requirements

Table 2-1, Summary of Compliance Requirements

City of Tallahassee, Electric Utilities
Sam O. Purdom Generating Station

FINAL Permit No.: 1290001-003-AV
Facility ID No.: 1290001

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date [2]	Min. Compliance Test Duration	CMS [1]	See Permit Condition(s)
	Facility Wide Conditions [5]	SO_2	No. 2 F.O.	(See Respective Sections)				Yes	Facility Condition 14.
		NO_X	Natural Gas	(See Respective Sections)				Yes	Facility Condition 16.
-005	Boiler No. 5	VE	No. 6 - No. 2 F.O.	DEP method 9	Annually [3]	7/1 - 9/30	60 Minutes	No	C.5., C.6., C.11., C.13., C.16.
-006	Boiler No. 6		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes	No	
		PM	No. 6 - No. 2 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	C.7., C.10. - 15., C.17.
			Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	
		SO_2	No. 6 - No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor				No	C.8. & C.9.
-007	Boiler No. 7	VE	No. 6 - No. 2 F.O.	DEP method 9	Annually [3]	7/1 - 9/30	60 Minutes	No	C.5., C.6., C.11., C.13., C.16.
	(Phase II, Acid Rain)		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes	No	
		PM	No. 6 - No. 2 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	C.7., C.10. - 15., C.17.
			Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	
		SO_2	No. 6 - No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor and per Acid Rain Phase II Commitment				No	C.8. & C.9. and Acid Rain Part
-008	Combustion Turbine No. 1	VE	No. 2 F.O.	EPA Method 9	Annually [4]	7/1 - 9/30	30 Minutes	No	D.13. - D.16.
-009	Combustion Turbine No. 2		Natural Gas	EPA Method 9	Annually [4]	7/1 - 9/30	30 Minutes	No	
		SO_2	No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor				No	D.9. & D.12.
-011	Auxiliary Boiler	VE	Natural Gas	EPA Method 9	Renewal		60 Minutes	No	E.15. - E.19.
		PM	Natural Gas	N/A	N/A	N/A	N/A	No	N/A
		SO_2	Natural Gas	N/A	N/A	N/A	N/A	No	N/A
-012	Combustion Turbine #8	VE	No. 2 F.O.	EPA Method 9	Annually [3]	7/1 - 9/30	60 Minutes	No	F.23., 24., 29., 30., 34., 36.-38.
	(1,467.7 MMBtu/hr - N.G.)		Natural Gas	EPA Method 9	Annually [3]	7/1 - 9/30	60 Minutes	No	F.23., 24., 29., 30., 34., 36.-38.
	(1,659.5 MMBtu/hr - F.O.)	PM/PM_{10}	No. 2 F.O.	Max. sulfur content 0.05%, by wt.				No	F.25.
			Natural Gas	Good Combustion Practices				No	
	Acid Rain Phase II Unit	SO_2	No. 2 F.O.	< 0.05% S., by wt.	N/A	N/A	N/A	Yes	13., 14.; F.19., 20., 25., 28., 29., 35., 49.
			Natural Gas	Good Combustion	N/A	N/A	N/A	Yes	
		NO_X	No. 2 F.O.	EPA Method 20	Initial	N/A	N/A	Yes	15., 16.; F.18. - 20., 22., 27., 28., 41. - 46., 50.
			Natural Gas	EPA Method 20	Initial	N/A	N/A	Yes	
		CO	No. 2 F.O.	EPA Method 10	N/A	N/A	N/A	No	F.21., 23., 26., 29. - 37., 47., 48.
			Natural Gas	EPA Method 10	Annually	7/1 - 9/30	1 - hr.	No	

Notes:

[1] CMS [=] continuous monitoring system.

[2] Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

[3] Test not required in years that fuel oil is fired less than 400 hours.

[4] If a combustion turbine is operated less than 400 hours per year, test is only required once every 5 years, during the year prior to permit renewal.

[5] Facility-wide caps begin the year following initial compliance testing of Unit 8.