



H. D. KING POWER PLANT

311 North Indian River Drive
 Fort Pierce, Florida 34950
 (561) 464-5792

RECEIVED
 DEC 02 1999
 DEPT OF ENV PROTECTION
 WEST PALM BEACH

November 30, 1999

Mr. Lennon Anderson
 Florida Department Of Environmental Protection
 Southeast District
 400 North Congress Avenue
 P.O.Box 15425
 West Palm Beach , Florida 33416-5425

Subject: **Title V Permit for H. D. King Power Plant
 Ft. Pierce Utility Authority
 Permit No. 1110003-003-AV**

Dear Mr. Anderson:

The Fort Pierce Utilities Authority (FPUA) is making plans for fuel supply changes at the subject plant. Effective immediately the H. D. King Power Plant will store and utilize only No. 2 fuel oil, with a sulfur content of 0.5 % by weight, as a backup fuel supply to all of the generating units at the site. Steam Units 6, 7 and 8 have previously utilized No. 6 fuel oil with a sulfur content of 0.84 % by weight. Commitment to utilization of only No. 2 fuel oil will reduce fuel handling, operations, and maintenance requirements and will reduce emissions when fuel oil is being fired in Units 6, 7 and 8. Assuming fuel oil usage of 400 hours per year, which is the total amount permitted for Units 6, 7 and 8, Table 1 summarizes the potential SO₂ emission reductions from this fuel change.

TABLE 1

**POTENTIAL SO₂ EMISSION REDUCTIONS FOR
 H. D. KING POWER PLANT
 Fuel Oil Usage Change**

	Unit 6, 7 & 8 Heat Input (mmBtu/hr)	Fuel Sulfur Content (%)	SO ₂ Emissions Rate (lbs/mmBtu)	SO ₂ Emissions for 400 Operating Hours Per Year (tons)
No. 6 Fuel	1300	0.84	0.80 ⁽¹⁾	208
No. 2 Fuel	1300	0.50	0.51 ⁽²⁾	132.6
Potential Emission Reduction	-	-	-	75.4

(1) Based on the permit limit for No. 6 fuel oil.

(2) Based on 0.5% sulfur No. 2 fuel oil.

Emissions for particulates, NO_x, CO and VOC would not be expected to significantly change with this fuel change.

Florida Department of Environmental Protection
November 30, 1999
Page 2

If there are questions concerning the requested change, please feel free to contact me at (561) 464-5792.

Sincerely,

A handwritten signature in black ink, appearing to read 'Edward S. Leongomez', written over the word 'Sincerely,'.

Edward S. Leongomez
Superintendent-Power Generation

cc: T. Richards
S. Treece
G. Miller



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

Ed Ivec

P.E. Certification Statement

Permittee:
Fort Pierce Utilities Authority
H. D. King Power Plant

DRAFT Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

Project type: Title V Air Operation Permit Revision

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

Scott M. Sheplak 01/18/00
Scott M. Sheplak, P.E. date
Registration Number: 48866

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/921-9532
Fax: 850/922-6979

STATEMENT OF BASIS

Fort Pierce Utility Authority
H. D. King Power Plant
Facility ID No.: 1110003
Putnam County

Title V Air Operation Permit Revision
DRAFT Title V Permit Revision No.: 1110003-004-AV

The initial Title V air operation permit went final on December 31, 1997 and effective on January 1, 1998. This Title V air operation permit with revision 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.

The subject of the permit revision is to incorporate the request of Ft. Pierce Utilities Authority to eliminate No. 6 residual fuel oil, where previously permitted, and substitute the use of No. 2 fuel oil at the plant. This will result in a decrease in actual sulfur dioxide emissions when fuel oil is combusted.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

January 21, 2000

Mr. Thomas W. Richards
Director of Operations
Ft. Pierce Utilities Authority
P. O. Box 3191
Ft. Pierce, Florida 34948

Re: DRAFT Title V Permit Revision No.: 1110003-004-AV
H. D. King Power Plant

Dear Mr. Richards:

One copy of the DRAFT Title V Air Operation Permit Revision for the H. D. King Power Plant located at 311 North Indian River Drive, Ft. Pierce, St. Lucie County, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Edward J. Svec at 850/921-8985.

Sincerely,

A handwritten signature in black ink, appearing to read "C. H. Fancy".

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

CHF/es

Enclosures

cc: U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

In the Matter of an
Application for Permit Revision by:

Ft. Pierce Utilities Authority
P. O. Box 3191
Ft. Pierce, Florida 34948

DRAFT Title V Permit Revision No.:1110003-004-AV
H. D. King Power Plant
St. Lucie County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit revision (copy of DRAFT Title V Permit Revision enclosed) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Ft. Pierce Utilities Authority, applied on December 2, 1999, to the permitting authority for a Title V air operation permit revision for the H. D. King Power Plant located at 311 North Indian River Drive, St. Lucie County.

The subject of this permit revision is to incorporate the request of Ft. Pierce Utilities Authority to eliminate No. 6 residual fuel oil, where previously permitted, and substitute the use of No. 2 fuel oil at the plant.

The permitting authority has permitting jurisdiction 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. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit revision is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit revision based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "**PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION**." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit revision. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication. Failure to

publish the notice and provide proof of publication within the allotted time may result in the denial of the permit revision pursuant to Rule 62-110.106, F.A.C.

The permitting authority will issue the PROPOSED Title V Permit Revision, and subsequent FINAL Title V Permit Revision, in accordance with the conditions of the attached DRAFT Title V Permit Revision unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Permit Revision, the permitting authority shall issue a Revised DRAFT Title V Permit Revision and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall 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 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, F.S., 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 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when each petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. 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 of Environmental Protection, 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), F.S., 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 United States Environmental Protection Agency 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.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit revision. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION (including the PUBLIC NOTICE and the DRAFT Title V Permit Revision) and all copies were sent by certified mail before the close of business on 1/25/00 to the person(s) listed:

Mr. Thomas W. Richards, Ft. Pierce Utilities Authority

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION (including the PUBLIC NOTICE and the DRAFT Title V Permit Revision) were sent by U.S. mail on the same date to the person(s) listed:

Mr. Isidore Goldman, PE, FDEP, SWD

Clerk Stamp

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

Barbara J. Boutwell 1/25/00
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRAFT Title V Permit Revision No.: 1110003-004-AV
H. D. King Power Plant
St. Lucie County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit revision to Ft. Pierce Utilities Authority for the H. D. King Power Plant located at 311 North Indian River Drive, St. Lucie County. The applicant's name and address are: Ft. Pierce Utilities Authority, P. O. Box 3191, Ft. Pierce, Florida 34948.

The subject of this permit revision is to incorporate the request of Ft. Pierce Utilities Authority to eliminate No. 6 residual fuel oil, where previously permitted, and substitute the use of No. 2 fuel oil at the plant.

The permitting authority will issue the PROPOSED Title V Permit Revision, and subsequent FINAL Title V Permit Revision, in accordance with the conditions of the DRAFT Title V Permit Revision unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed DRAFT Title V Permit Revision issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Permit Revision, the permitting authority shall issue a Revised DRAFT Title V Permit Revision and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall 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 within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., 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 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address and telephone number of the petitioner; name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during

the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so state;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit revision. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Affected District:

Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 407/681-6600
Fax: 407/681-6755

The complete project file includes the DRAFT Title V Permit Revision, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.

Fort Pierce Utilities Authority
H. D. King Power Plant
Facility ID No.: 1110003
St. Lucie County

Title V Air Operation Permit Revision
DRAFT Title V Permit Revision No.: 1110003-004-AV

Permitting Authority:

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

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

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

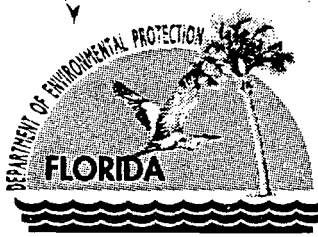
Compliance Authority:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

Title V Air Operation Permit Revision
DRAFT Title V Permit Revision No.: 1110003-004-AV

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Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

Permittee:
Fort Pierce Utilities Authority
P. O. Box 3191
Fort Pierce, Florida 34948

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Revision

This permit with revision is for the operation of the H. D. King Power Plant. This facility is located at 311 North Indian River Drive, Fort Pierce, St. Lucie County; UTM Coordinates: Zone 17, 566.8 km East and 3036.3 km North; Latitude: 27° 27' 00" North and Longitude: 80° 19' 26" West.

STATEMENT OF BASIS: This Title V air operation permit revision 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-3, Title V Conditions (version dated 04/30/99)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)
Phase II Acid Rain Application/Compliance Plan received 12/18/95
Alternate Sampling Procedure: ASP Number 97-B-01
OGC Case No. 91-1610: Final Order filed 7/21/92

Effective Date: January 1, 1998
Title V Permit Revision Effective Date:
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/es

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of one 16.5 megawatt (electric) 219 million Btu per hour fossil fuel fired steam generator; one 33 megawatt (electric) 470 million Btu per hour fossil fuel fired steam generator; one 56.1 megawatt (electric) 611 million Btu per hour fossil fuel fired steam generator; and one 23.4 megawatt (electric) combined cycle gas turbine with a 8.2 megawatt (electric) heat recovery steam generator (HRSG).

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

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

Unregulated Emissions Units and/or Activities

-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

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

Subsection C. Relevant Documents.

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

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

Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996
Additional Information Request dated January 27, 1997
Additional Information Response received February 24, 1997
Letter received July 18, 1997, from Mr. Thomas W. Richards.
Letter received November 6, 1997, from Mr. Thomas W. Richards.
Request for revision received December 2, 1999, from Mr. Edward S. Leongomez

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. 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. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
8. **Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: paved fuel delivery roads and parking lots.
[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

9. 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 51., APPENDIX TV-3, TITLE V CONDITIONS}
[Rule 62-214.420(11), F.A.C.]

10. 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.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

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

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Unit #9 is a combined cycle gas turbine and a HRSG with a maximum heat input of 415 million Btu per hour. The HRSG is not supplementary-fired. The turbine is capable of producing 23.4 megawatts and the HRSG is capable of producing 8.2 megawatts of electric power. The primary fuel is natural gas with No. 2 fuel oil used as a backup fuel.

{Permitting notes: (IMPORTANT REGULATORY CLASSIFICATIONS - The emissions unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Combined cycle gas turbine #9 began commercial operation in May, 1990.)}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum process/operation rate is 415 MMBtu per hour (lower heating value) heat input.

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

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.25.

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

A.3. Methods of Operation. Fuels.

a. This emissions unit fires natural gas as the primary fuel.

b. This emissions unit fires No. 2 distillate oil as the emergency back-up fuel.

[Rules 62-210.200(PTE), 62-212.400, and 62-212.410, F.A.C.; and, AC 56-141460]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: 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. Nitrogen Oxides. The NO_x emissions shall not exceed: $STD = 0.0075 (14.4)/Y + F$

where:

STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph 40 CFR 60.332(a)(3).

or 84 ppmv at 15 percent oxygen on a dry basis.
[40 CFR 60.332(a)(1); and, AC 56-141460]

A.6. Sulfur Dioxide. Sulfur dioxide gases discharged to the atmosphere shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis.
[40 CFR 60.333(a); and, AC 56-141460]

A.7. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of the No. 2 distillate oil shall not exceed 0.5 percent by weight.
[AC 56-141460]

A.8. Visible Emissions. Visible emissions shall not exceed 15 percent opacity.
[AC 56-141460]

A.9. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 32.85 pounds per hour and 110.4 tons per year.
[AC 56-141460]

Excess Emissions

A.10. Excess emissions from this emissions unit 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.]

A.11. 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.]

A.12. 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 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)]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

A.13. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using steam injection to control NO_x emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of steam to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.

[40 CFR 60.334(a); and, AC 56-141460]

A.14. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) & (2)]

A.15. 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: 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.16. 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)]

A.17. During performance tests to determine compliance, measured NO_X emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NO}_X = [\text{NO}_X \text{ obs}] [(P_{\text{ref}}) / P_{\text{obs}}]^{0.5} e^{19(H_{\text{obs}} - 0.00633)} [288^{\circ} \text{K} / T_{\text{amb}}]^{1.53}$$

where:

NO_X = Emissions of NO_X at 15 percent oxygen and ISO standard ambient conditions.

NO_X obs = Measured NO_X emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

H_{obs} = Specific humidity of ambient air at test.

T_{amb} = Temperature of ambient air at test.

[40 CFR 60.335(c)(1); and , AC 56-141460]

A.18. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the steam-to-fuel ratio necessary to comply with the permitted NO_X standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

A.19. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).

[40 CFR 60.335(c)(3)]

A.20. The owner or operator may determine compliance with the sulfur dioxide standard by calculations based on the fuel analysis for sulfur content. Certified analyses by the appropriate test method from the fuel supplier is acceptable. See specific condition **A.21**.

[AC 56-141460A]

A.21. The fuel sulfur content of 0.5 percent, by weight, shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246. See specific condition **A.7**.

[AC 56-141460A]

A.22. 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. See specific condition **A.14**.

[40 CFR 60.335(e)]

A.23. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.

[AC 56-141460]

A.24. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C.

[AC 56-141460]

A.25. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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.

[Rule 62-297.310(2), F.A.C. and 1110003-002-AO]

A.26. 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.]

A.27. 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 three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

A.28. 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, attached to this permit.

(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.]

A.29. 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.]

A.30. 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 and/or solid 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 and/or solid 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.; and, SIP approved]

Record Keeping and Reporting Requirements

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

Nitrogen oxides. Any one-hour period during which the average steam-to-fuel ratio, as measured by the continuous monitoring system, falls below the steam-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average steam-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

A.32. 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 (excess emissions are defined in applicable subparts) 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), & (4)]

A.33. 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) & (2)]

A.34. 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.]

A.35. All recorded data shall be maintained on file by the Source for a period of five years.

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

A.36. 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 Requirements.

A.37. 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.]

A.38. 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]

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6

Fossil fuel fired steam generator # 6 is a nominal 16.5 megawatt (electric) steam generator designated as H. D. King Unit # 6. The emission unit is fired on natural gas with a maximum heat input of 218.9 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel.

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #6 began commercial operation in 1958.}

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 rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
6	218.9	Natural Gas
	218.9	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.26.**

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

B.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
 - b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.
- The use of No. 2 fuel oil is limited. See specific conditions **B.36.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

{Permitting note: 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.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

B.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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 0.4 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 1.31 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.0236 pound per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 0.15 pound per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

B.13. 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.]

B.14. 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.]

B.15. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.16. 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: 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.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **B.18.**

[Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.18. 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.]

B.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **B.21.**

[AC 56-141460A]

B.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.

[AC 56-141460A]

B.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.25. 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.]

B.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.27. 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.]

B.28. 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, attached to this permit.

(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.]

B.29. 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.]

B.30. 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.
 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]

B.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

B.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

B.33. 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.]

B.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

B.35. 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.]

B.36. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7

Fossil fuel fired steam generator # 7 is a nominal 33.0 megawatt (electric) steam generator designated as H. D. King Unit # 7. The emission unit is fired on natural gas with a maximum heat input of 470.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are discharged through a multicyclone collector.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #7 began commercial operation in 1964.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
7	470.0	Natural Gas
	470.0	No. 2 Fuel Oil

See specific condition E.1.

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.26.

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

C.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
- b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **C.37.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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.}

C.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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.]

C.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.568 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

C.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 104.35 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

C.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.266 pound per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610; Final Order filed 7/21/92]

C.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 7.589 pounds per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610; Final Order filed 7/21/92]

Excess Emissions

C.13. 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.14. 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.15. 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.16. 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: 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.}

C.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **C.18.**

[Rules 62-213.440 and 62-297.401, F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

C.18. 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.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

C.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **C.21.**

[AC 56-141460A]

C.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.

[AC 56-141460A]

C.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

C.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

C.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

C.25. 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.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.27. 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.28. 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, attached to this permit.

(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.29. 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.30. 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.
 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]

C.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

C.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

C.33. 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.]

C.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

C.35. 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.36. 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.]

C.37. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-008	56.1 MW Boiler - Unit #8

H. D. King Unit #8 is a nominal 56.1 megawatt (electric) fossil fuel fired steam generator. The emission unit is fired on natural gas with a maximum heat input of 611.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are uncontrolled.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Fossil fuel fired steam generator # 8 began commercial operation in May 1976.}

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

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	611.0	Natural Gas
	611.0	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.26.**

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

D.3. Methods of Operation. Fuels.

a. This emissions unit fires natural gas as the primary fuel.

b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **D.45.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year and shall meet the requirements of specific condition **E.1.** See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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 shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one six-minute period per hour during which opacity shall not exceed 27 percent.

[40 CFR 60.42(a)(2); OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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.]

D.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.945 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

D.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.10. Nitrogen Oxides. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.

See specific condition **E.3**.

[40 CFR 60.44(a)(1) & (2); and, OGC Case No. 91-1610: Final Order filed 7/21/92]

D.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.441 pound per hour when firing natural gas. See specific condition **E.3**.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

D.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 12.59 pounds per hour when firing natural gas. See specific condition **E.3**.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

D.13. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) **Opacity.** Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported

(3) **Nitrogen oxides.** Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1) & (3)]

D.14. 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.]

D.15. 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.]

D.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.]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

D.17. 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: 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.18. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **D.19.**

[Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.19. 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.]

D.20. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.21. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **D.22.**

[AC 56-141460A]

D.22. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.

[AC 56-141460A]

D.23. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.24. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.25. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.26. The owner or operator shall determine compliance with the particulate matter, SO₂, and NO_x standards as follows:

(1) The emission rate (E) of particulate matter, SO₂, or NO_x shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O₂ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ sample concentrations at each traverse point.

(iii) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.

(3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO₂ concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO_X concentration.

(i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.

(iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

D.27. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO₂ and NO_X may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% \text{CO}_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO₂ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_O (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_O value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{Oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:

(A) When F_O is less than 0.97 F_{Oa}, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_O is less than 0.97 F_{Oa} and when the average difference (\bar{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_O is greater than $1.03 F_{Oa}$ and when \bar{d} is positive, then E shall be decreased by that proportion over $1.03 F_{Oa}$, e.g., if F_O is $1.05 F_{Oa}$, E shall be decreased by 2 percent.

This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160°C (320°F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of SO_2 (including moisture) are used.

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO_2 emission rate, under the conditions in 40 CFR 60.46(d)(1).

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration (% O_2) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]

D.28. 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.]

D.29. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

D.30. 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.]

D.31. 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, attached to this permit.

(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.]

D.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.]

D.33. 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.

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]

D.34. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

D.35. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Continuous Monitoring Requirements

D.36. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring nitrogen oxide emissions, and oxygen or carbon dioxide.

[40 CFR 60.45(a) & (b)]

D.37. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	{1}	500
Liquid.....	1,000	500
Solid.....	1,500	1000
Combinations.....	1,000y+1,500z	500(x+y)+1,000z

{1} Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel, and

z = the fraction of total heat input derived from solid fossil fuel.

[40 CFR 60.45(c)(2) & (3)]

D.38. For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9-\text{percent } O_2)]$$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)(1)]

D.39. The values used in the equations under 40 CFR 60.45(e) (1) are derived as follows:

- (1) E = pollutant emissions, ng/J (lb/million Btu).
- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O₂, % CO₂ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_C = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_C), respectively. Values of F and F_C are given as follows:
 - (iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/million Btu) and $F_C = 0.384 \times 10^{-7}$ scm CO₂ /J (1,430 scf CO₂ /million Btu).
 - (iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_C = 0.279 \times 10^{-7}$ scm CO₂ /J (1,040 scf CO₂ /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂/million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_C factor (scm CO₂ /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_C factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_C = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV}}$$

(SI units)

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV}}$$

(English units)

$$F_c = \frac{321 \times 10^3 (\%C)}{GCV}$$

(English units)

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)

(ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable.

(These two methods are incorporated by reference-see 40 CFR 60.17.)

(6) For affected facilities firing combinations of fossil fuels, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F_i or (F_c)_i = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)(1), (2), (3), (4), (5), & (6)]

Recordkeeping and Reporting Requirements

D.40. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and monitoring systems performance report shall include the information required in 40 CFR 60.7(c). The summary report form shall contain the information and be in the format shown in figure 1 (attached to this permit) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

[40 CFR 60.7(d) & 60.45(g)]

D.41. 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.42. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

D.43. 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.]

D.44. 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.]

D.45. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Miscellaneous Requirements.

D.46. 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.]

D.47. 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]

Subsection E. Common Conditions.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

The following conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

E.1. The total combined heat input for Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed 4,534,930 million Btu per year.
[AC 56-141460, amended 11/9/90; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

E.2. No. 2 fuel oil can be fired as a standby fuel for up to a combined total of 400 hours per year, when necessary in order to avoid curtailing electric power to its customers.
[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

E.3. The total combined emissions from Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed:

PARAMETER	TONS PER YEAR
Particulate Matter	16.0
Sulfur Dioxide	101.6
Nitrogen Oxides	622.0
Volatile Organic Compounds	2.3
Carbon Monoxide	45.3

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Section IV. This section is the Acid Rain Part.

Operated by: Fort Pierce Utilities Authority
ORIS code: 658

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

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

- a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit is as follows:

<u>E.U. ID</u>	<u>EPA ID</u>	<u>Year</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
-007	ID No. 07	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	63*	63*	63*
-008	ID No. 08	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	26*	26*	26*

* 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), F.A.C.]

A.4. 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, F.A.C., Fast-Track Revisions of Acid Rain Parts.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. 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, F.A.C.

[40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

A.7. Comments, notes, and justifications: None.

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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

<u>No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

[electronic file name: 1110003u.doc]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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

1. No. 2 Fuel Oil Storage Tank #5
2. Diesel Fuel Storage Tank
3. No. 6 Fuel Oil Storage Tank #6
4. No. 6 Fuel Oil Storage Tank #7
5. Waste Oil Storage Tank
6. Compressed Nitrogen Bottles
7. Storage and Use of Water Treatment Chemicals
8. 55 Gallon Drum of Trichloroethylene and Perchloroethylene
9. Lube Oil Storage
10. Parts Washer
11. Miscellaneous Painting Activities
12. Miscellaneous Welding Activities
13. Oil/Water Separator

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

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
NO _x	All	8,760	STD = 0.0075(14.4)/Y + F (Max 84 ppm)			135.65	592.53	40 CFR 60.332(a)(1) & AC 56-141460	A.5.
SO ₂	All	8,760	0.015% vol. @ 15% Oxygen			319.51	1,395.52	40 CFR 60.332(a)(1) & AC 56-141460	A.6.
SO ₂	Oil	8,760	0.5% S by weight			319.51	1,395.52	AC 56-141460	A.7.
VE	All	8,760	Not to exceed 15%					AC 56-141460	A.8.
CO	All	8,760		32.85	110.4			AC 56-141460	A.9.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

[electronic file name: 11100031.xls]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	B.5.
VE	Oil	8,760	20% except 40% 2 min/hr					OGC Case#91-1610	B.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	B.6.
PM	Gas	8,760		0.4	16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil	400	0.1 lb/MMBtu		16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	B.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	B.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	B.9. & E.3.
NO _x	Gas	8,760		1.31	622.0**			OGC Case#91-1610	B.10. & E.3.
VOC	Gas	8,760		0.0236	2.3**			OGC Case#91-1610	B.11. & E.3.
CO	Gas	8,760		0.15	45.3**			OGC Case#91-1610	B.12. & E.3.

Notes:
 * The "Equivalent Emissions" listed are for informational purposes only.
 ** The total combined emissions from EU [-004], [-007], and [-008]

[electronic file name: 11100031.xls]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
I-007] 33.0 MW Boiler - Unit #7

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	C.5.
VE	Oil	8,760	20% except 40% 2 min/hr					OGC Case#91-1610	C.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	C.6.
PM	Gas	8,760		0.568	16.0**			OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0**			OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	C.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	C.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	C.9. & E.3.
NO _x	Gas	8,760		104.35	622.0**			OGC Case#91-1610	C.10. & E.3.
VOC	Gas	8,760		0.266	2.3**			OGC Case#91-1610	C.11. & E.3.
CO	Gas	8,760		7.589	45.3**			OGC Case#91-1610	C.12. & E.3.

Notes:
 * The "Equivalent Emissions" listed are for informational purposes only.
 ** The total combined emissions from EU [-004], [-007], and [-008]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-008] 56.1 MW Boiler - Unit #8

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	D.5.
VE	Oil	8,760	20% except 27% 6 min/hr					OGC Case#91-1610	D.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	D.6.
PM	Gas	8,760		0.945	16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	D.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	D.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	D.9. & E.3.
NO _x	Gas	8,760	0.20 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(1)	D.10. & E.3.
NO _x	Oil	8,760	0.30 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(2)	D.10. & E.3.
VOC	Gas	8,760		0.441	2.3**			OGC Case#91-1610	D.11. & E.3.
CO	Gas	8,760		12.59	45.3**			OGC Case#91-1610	D.12. & E.3.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.
** The total combined emissions from EU [-004], [-007], and [-008]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
SO ₂	All	EPA Method 20	Annual	9/30/1990	1 hr		A.14., A.18, A.19., & A.22.
SO ₂	Oil	Fuel Analysis		9/30/1990			A.21.
VE	All	EPA Method 9	Annual	9/30/1990	60 min		A.23.
CO	All	EPA Method 10	Annual	9/30/1990	1 hr		A.24.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

** CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
VE	Oil	DEP Method 9	Annual	6/24/1983	60 min		B.17. & B.18.
PM	All	EPA Method 5	Renewal	6/24/1983	60 min		B.18., B.30. & B.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	6/24/1983	60 min		B.20., B.21. & B.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	6/24/1983	60 min		B.22. & B.30.
VOC	Gas	EPA Method 25A	Renewal	6/24/1983	60 min		B.23. & B.30.
CO	Gas	EPA Method 10	Renewal	6/24/1983	60 min		B.24. & B.30.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

** CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[007] 33.0 MW Boiler - Unit #7

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency Base	Min. Compliance Test	CMS**	See permit condition(s)
			Frequency	Date *	Duration		
VE	Gas	EPA Method 9	Annual	9/30/1991	30 min		C.17. & C.31.
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		C.17. & C.18.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		C.19., C.30. & C.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		C.20., C.21. & C.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min		C.22. & C.30.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		C.23. & C.30.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		C.24. & C.30.

Notes:
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
** CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-008] 56.1 MW Boiler - Unit #8

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency Base	Min. Compliance Test	CMS**	See permit condition(s)
			Frequency	Date *	Duration		
VE	Gas	EPA Method 9	Annual	9/30/1991	30 min		D.18.. & D.34.
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		D.18.. & D.19.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		D.20., D.33. & D.35.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		D.21., D.22. & D.33.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min	Yes	D.23. & D.33.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		D.24. & D.33.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		D.25. & D.33.

Notes:
 * The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
 **CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Appendix H-1, Permit History/ID Number Changes

Ft. Pierce Utilities Authority

DRAFT Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

Permit History (for tracking purposes):

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> ^{1,2,3}	<u>Revised Date(s)</u>
-001	Diesel Generator #1	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-002	Diesel Generator #2	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-003	Combined Cycle Gas Turbine	AC56-141460A		07/01/96		04/18/90, 11/09/90, 06/28/91
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-004	Boiler #6 (Backup Only)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-007	Boiler (Unit #7)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-008	Boiler (Unit #8)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		

(if applicable) ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 50WPB560003

To: **Facility ID No.:** 1110003

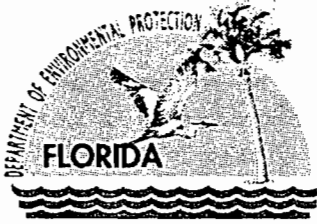
Notes:

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.

3 - ORDER EXTENDING PERMIT EXPIRATION DATE dated 11/13/97.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

Ed Ives

PROPOSED Permit Electronic Posting Courtesy Notification

Fort Pierce Utility Authority
H.D. King Power Plant
Facility ID No.: 1110003
Putnam County

Title V Air Operation Permit Revision
PROPOSED Permit No.: 1110003-004-AV

The electronic version of the PROPOSED permit was posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review on March 31, 2000.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is May 14, 2000. If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is May 24, 2000.

The web site address is <http://www2.dep.state.fl.us/air>.

STATEMENT OF BASIS

Fort Pierce Utility Authority
H. D. King Power Plant
Facility ID No.: 1110003
Putnam County

Title V Air Operation Permit Revision
PROPOSED Title V Permit Revision No.: 1110003-004-AV

The initial Title V air operation permit went final on December 31, 1997 and effective on January 1, 1998. This Title V air operation permit with revision 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.

The subject of the permit revision is to incorporate the request of Ft. Pierce Utilities Authority to eliminate No. 6 residual fuel oil, where previously permitted, and substitute the use of No. 2 fuel oil at the plant. This will result in a decrease in actual sulfur dioxide emissions when fuel oil is combusted.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 30, 2000

Mr. Thomas W. Richards
Director of Operations
Ft. Pierce Utilities Authority
P. O. Box 3191
Ft. Pierce, Florida 34948

Re: PROPOSED Title V Permit Revision No.: 1110003-004-AV
H. D. King Power Plant

Dear Mr. Richards:

One copy of the "PROPOSED PERMIT DETERMINATION" for the H. D. King Power Plant located at 311 North Indian River Drive, Ft. Pierce, St. Lucie County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is: <http://www2.dep.state.fl.us/air>.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Edward J. Svec at 850/921-8985.

Sincerely,

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

CHF/s

Enclosures

copy furnished to:
Mr. George Miller, Ft. Peirce Utilities Authority
Mr. Isidore Goldman, PE, FDEP, SWD
U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

Printed on recycled paper.

PROPOSED PERMIT DETERMINATION

PROPOSED Title V Permit Revision No.: 1110003-004-AV

Page 1 of 1

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to the Ft. Pierce Utilities Authority for the H. D. King Power Plant located at 311 North Indian River Drive, Ft. Pierce, St. Lucie County was clerked on January 25, 2000. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in The Tribune on February 21, 2000. The DRAFT Title V Air Operation Permit Revision was available for public inspection at the Department's Southeast District office in West Palm Beach and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received on March 2, 2000.

II. Public Comment(s).

No comments were received during the 30 (thirty) day public comment period. However, on February 28, 2000, an Administratively Corrected page to the initial Title V operation permit, 1110003-003-AV, was issued. In order to incorporate this Administratively Corrected page, the following change is made to the DRAFT Title V Air Operation Permit Revision:

A permitting note is added after Specific Condition D.37., as follows:

Add: {Permitting note: The Stationary Source Compliance Division has determined that continuous emissions monitor (CEMs) requirements of 40 CFR Part 75 (Acid Rain) are equivalent to or more stringent than the requirements of 40 CFR Part 60 (NSPS). EPA and the Department do accept Acid Rain CEMs as NSPS CEMs provided that the utility demonstrates compliance with all applicable NSPS regulations. (Memorandum from John B. Rasnic, Director)}

The enclosed PROPOSED Title V Air Operation Permit Revision includes the aforementioned change to the DRAFT Title V Air Operation Permit Revision.

III. Conclusion.

The permitting authority hereby issues the PROPOSED Title V Air Operation Permit Revision No.: 1110003-004-AV, with any changes noted above.

Fort Pierce Utilities Authority
H. D. King Power Plant
Facility ID No.: 1110003
St. Lucie County

Title V Air Operation Permit Revision
PROPOSED Title V Permit Revision No.: 1110003-004-AV

Permitting Authority:

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

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

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

Compliance Authority:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

Title V Air Operation Permit Revision
PROPOSED Title V Permit Revision No.: 1110003-004-AV

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Permittee:
Fort Pierce Utilities Authority
P. O. Box 3191
Fort Pierce, Florida 34948

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Revision

This permit with revision is for the operation of the H. D. King Power Plant. This facility is located at 311 North Indian River Drive, Fort Pierce, St. Lucie County; UTM Coordinates: Zone 17, 566.8 km East and 3036.3 km North; Latitude: 27° 27' 00" North and Longitude: 80° 19' 26" West.

STATEMENT OF BASIS: This Title V air operation permit revision 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-3, Title V Conditions (version dated 04/30/99)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)
Phase II Acid Rain Application/Compliance Plan received 12/18/95
Alternate Sampling Procedure: ASP Number 97-B-01
OGC Case No. 91-1610: Final Order filed 7/21/92

Effective Date: January 1, 1998
Title V Permit Revision Effective Date:
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/es

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of one 16.5 megawatt (electric) 219 million Btu per hour fossil fuel fired steam generator; one 33 megawatt (electric) 470 million Btu per hour fossil fuel fired steam generator; one 56.1 megawatt (electric) 611 million Btu per hour fossil fuel fired steam generator; and one 23.4 megawatt (electric) combined cycle gas turbine with a 8.2 megawatt (electric) heat recovery steam generator (HRSG).

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

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

Unregulated Emissions Units and/or Activities

-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

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

Subsection C. Relevant Documents.

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

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

Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996
Additional Information Request dated January 27, 1997
Additional Information Response received February 24, 1997
Letter received July 18, 1997, from Mr. Thomas W. Richards.
Letter received November 6, 1997, from Mr. Thomas W. Richards.
Request for revision received December 2, 1999, from Mr. Edward S. Leongomez

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.
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. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
8. **Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: paved fuel delivery roads and parking lots.
[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

9. 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 51., APPENDIX TV-3, TITLE V CONDITIONS}
[Rule 62-214.420(11), F.A.C.]

10. 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.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

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

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Unit #9 is a combined cycle gas turbine and a HRSG with a maximum heat input of 415 million Btu per hour. The HRSG is not supplementary-fired. The turbine is capable of producing 23.4 megawatts and the HRSG is capable of producing 8.2 megawatts of electric power. The primary fuel is natural gas with No. 2 fuel oil used as a backup fuel.

{Permitting notes: (IMPORTANT REGULATORY CLASSIFICATIONS - The emissions unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Combined cycle gas turbine #9 began commercial operation in May, 1990.)}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum process/operation rate is 415 MMBtu per hour (lower heating value) heat input.

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

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.25.**

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

A.3. Methods of Operation. Fuels.

- This emissions unit fires natural gas as the primary fuel.
- This emissions unit fires No. 2 distillate oil as the emergency back-up fuel.

[Rules 62-210.200(PTE), 62-212.400, and 62-212.410, F.A.C.; and, AC 56-141460]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: 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. Nitrogen Oxides. The NO_x emissions shall not exceed: $STD = 0.0075 (14.4)/Y + F$

where:

STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph 40 CFR 60.332(a)(3).

or 84 ppmv at 15 percent oxygen on a dry basis.

[40 CFR 60.332(a)(1); and, AC 56-141460]

A.6. Sulfur Dioxide. Sulfur dioxide gases discharged to the atmosphere shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis.

[40 CFR 60.333(a); and, AC 56-141460]

A.7. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of the No. 2 distillate oil shall not exceed 0.5 percent by weight.

[AC 56-141460]

A.8. Visible Emissions. Visible emissions shall not exceed 15 percent opacity.

[AC 56-141460]

A.9. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 32.85 pounds per hour and 110.4 tons per year.

[AC 56-141460]

Excess Emissions

A.10. Excess emissions from this emissions unit 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.]

A.11. 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.]

A.12. 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 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)]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

A.13. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using steam injection to control NO_x emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of steam to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.

[40 CFR 60.334(a); and, AC 56-141460]

A.14. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) & (2)]

A.15. 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: 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.16. 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)]

A.17. During performance tests to determine compliance, measured NO_X emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_X = [NO_X \text{ obs}] [(P_{ref}) / P_{obs}]^{0.5} e^{19(H_{obs} - 0.00633)} [288^{\circ} K / T_{amb}]^{1.53}$$

where:

NO_X = Emissions of NO_X at 15 percent oxygen and ISO standard ambient conditions.

NO_X obs = Measured NO_X emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

H_{obs} = Specific humidity of ambient air at test.

T_{amb} = Temperature of ambient air at test.
[40 CFR 60.335(c)(1); and , AC 56-141460]

A.18. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the steam-to-fuel ratio necessary to comply with the permitted NO_X standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

A.19. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).
[40 CFR 60.335(c)(3)]

A.20. The owner or operator may determine compliance with the sulfur dioxide standard by calculations based on the fuel analysis for sulfur content. Certified analyses by the appropriate test method from the fuel supplier is acceptable. See specific condition **A.21**.

[AC 56-141460A]

A.21. The fuel sulfur content of 0.5 percent, by weight, shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246. See specific condition **A.7**.

[AC 56-141460A]

A.22. 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. See specific condition **A.14**.

[40 CFR 60.335(e)]

A.23. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.

[AC 56-141460]

A.24. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C.

[AC 56-141460]

A.25. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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.

[Rule 62-297.310(2), F.A.C. and 1110003-002-AO]

A.26. 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.]

A.27. 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 three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

A.28. 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, attached to this permit.

(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.]

A.29. 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.]

A.30. 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 and/or solid 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 and/or solid 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.; and, SIP approved]

Record Keeping and Reporting Requirements

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

Nitrogen oxides. Any one-hour period during which the average steam-to-fuel ratio, as measured by the continuous monitoring system, falls below the steam-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average steam-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

A.32. 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 (excess emissions are defined in applicable subparts) 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), & (4)]

A.33. 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) & (2)]

A.34. 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.]

A.35. All recorded data shall be maintained on file by the Source for a period of five years.

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

A.36. 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 Requirements.

A.37. 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.]

A.38. 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]

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6

Fossil fuel fired steam generator # 6 is a nominal 16.5 megawatt (electric) steam generator designated as H. D. King Unit # 6. The emission unit is fired on natural gas with a maximum heat input of 218.9 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel.

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #6 began commercial operation in 1958.}

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 rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
6	218.9	Natural Gas
	218.9	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.26.**

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

B.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
- b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **B.36.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

{Permitting note: 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.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

B.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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 0.4 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 1.31 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.0236 pound per hour when firing natural gas. See specific condition E.3.
[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 0.15 pound per hour when firing natural gas. See specific condition E.3.
[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

B.13. 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.]

B.14. 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.]

B.15. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.16. 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: 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.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **B.18.** [Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.18. 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.]

B.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **B.21.**

[AC 56-141460A]

B.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.

[AC 56-141460A]

B.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.25. 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.]

B.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.27. 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.]

B.28. 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, attached to this permit.

(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.]

B.29. 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.]

B.30. 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.
- 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]

B.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

B.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

B.33. 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.]

B.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

B.35. 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.]

B.36. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7

Fossil fuel fired steam generator # 7 is a nominal 33.0 megawatt (electric) steam generator designated as H. D. King Unit # 7. The emission unit is fired on natural gas with a maximum heat input of 470.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are discharged through a multicyclone collector.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #7 began commercial operation in 1964.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
7	470.0	Natural Gas
	470.0	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.26.**

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

C.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
 - b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.
- The use of No. 2 fuel oil is limited. See specific conditions **C.37.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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.}

C.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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.]

C.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.568 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

C.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 104.35 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

C.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.266 pound per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

C.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 7.589 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

C.13. 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.14. 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.15. 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.16. 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: 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.}

C.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **C.18.** [Rules 62-213.440 and 62-297.401, F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

C.18. 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.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

C.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **C.21.**

[AC 56-141460A]

C.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.
[AC 56-141460A]

C.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.25. 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.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.27. 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.28. 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, attached to this permit.

(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.29. 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.30. 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.

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]

C.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

C.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

C.33. 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.]

C.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

C.35. 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.36. 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.]

C.37. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-008	56.1 MW Boiler - Unit #8

H. D. King Unit #8 is a nominal 56.1 megawatt (electric) fossil fuel fired steam generator. The emission unit is fired on natural gas with a maximum heat input of 611.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are uncontrolled.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Fossil fuel fired steam generator # 8 began commercial operation in May 1976.}

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

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	611.0	Natural Gas
	611.0	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.26.**

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

D.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
 - b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.
- The use of No. 2 fuel oil is limited. See specific conditions **D.45.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year and shall meet the requirements of specific condition **E.1.** See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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 shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one six-minute period per hour during which opacity shall not exceed 27 percent.

[40 CFR 60.42(a)(2); OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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.]

D.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.945 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

D.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.10. Nitrogen Oxides. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.

See specific condition **E.3.**

[40 CFR 60.44(a)(1) & (2); and, OGC Case No. 91-1610: Final Order filed 7/21/92]

D.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.441 pound per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

D.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 12.59 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

D.13. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported

(3) Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1) & (3)]

D.14. 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.]

D.15. 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.]

D.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.]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

D.17. 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: 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.18. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **D.19.**

[Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.19. 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.]

D.20. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.21. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **D.22.**

[AC 56-141460A]

D.22. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246.

[AC 56-141460A]

D.23. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.24. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.25. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.26. The owner or operator shall determine compliance with the particulate matter, SO₂, and NO_x standards as follows:

(1) The emission rate (E) of particulate matter, SO₂, or NO_x shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O₂ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ sample concentrations at each traverse point.

(iii) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.

(3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO₂ concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO_x concentration.

(i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.

(iii) The NO_x emission rate shall be computed for each pair of NO_x and O₂ samples. The NO_x emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

D.27. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO₂ and NO_x may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% \text{CO}_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO₂ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_O (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_O value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{Oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:

(A) When F_O is less than 0.97 F_{Oa}, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_O is less than 0.97 F_{Oa} and when the average difference (\bar{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_O is greater than $1.03 F_{Oa}$ and when \bar{d} is positive, then E shall be decreased by that proportion over $1.03 F_{Oa}$, e.g., if F_O is $1.05 F_{Oa}$, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]

D.28. 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.]

D.29. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

D.30. 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.]

D.31. 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, attached to this permit.

(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.]

D.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.]

D.33. 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.

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]

D.34. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

D.35. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Continuous Monitoring Requirements

D.36. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring nitrogen oxide emissions, and oxygen or carbon dioxide.

[40 CFR 60.45(a) & (b)]

D.37. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	{1}	500
Liquid.....	1,000	500
Solid.....	1,500	1000
Combinations.....	1,000y+1,500z	500(x+y)+1,000z

{1} Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel, and

z = the fraction of total heat input derived from solid fossil fuel.

[40 CFR 60.45(c)(2) & (3)]

{Permitting note: The Stationary Source Compliance Division has determined that continuous emissions monitor (CEMs) requirements of 40 CFR Part 75 (Acid Rain) are equivalent to or more stringent than the requirements of 40 CFR Part 60 (NSPS). EPA and the Department do accept Acid Rain CEMs as NSPS CEMs provided that the utility demonstrates compliance with all applicable NSPS regulations. (Memorandum from John B. Rasnic, Director)}

D.38. For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis

(wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9 - \text{percent } O_2)]$$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)(1)]

D.39. The values used in the equations under 40 CFR 60.45(e) (1) are derived as follows:

- (1) E = pollutant emissions, ng/J (lb/million Btu).
- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O₂, % CO₂ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_C = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_C), respectively. Values of F and F_C are given as follows:
 - (iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/million Btu) and $F_C = 0.384 \times 10^{-7}$ scm CO₂/J (1,430 scf CO₂ /million Btu).
 - (iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_C = 0.279 \times 10^{-7}$ scm CO₂ /J (1,040 scf CO₂ /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂/million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_C factor (scm CO₂ /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_C factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_C = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV}} \quad (\text{SI units})$$

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV}} \quad (\text{English units})$$

$$F_c = \frac{321 \times 10^3 (\%C)}{GCV}$$

(English units)

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)

(ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable.

(These two methods are incorporated by reference-see 40 CFR 60.17.)

(6) For affected facilities firing combinations of fossil fuels, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)(1), (2), (3), (4), (5), & (6)]

Recordkeeping and Reporting Requirements

D.40. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and monitoring systems performance report shall include the information required in 40 CFR 60.7(c). The summary report form shall contain the information and be in the format shown in figure 1 (attached to this permit) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

[40 CFR 60.7(d) & 60.45(g)]

D.41. 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.42. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

D.43. 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.]

D.44. 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.]

D.45. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Miscellaneous Requirements.

D.46. 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.]

D.47. 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]

Subsection E. Common Conditions.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

The following conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

E.1. The total combined heat input for Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed 4,534,930 million Btu per year.

[AC 56-141460, amended 11/9/90; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

E.2. No. 2 fuel oil can be fired as a standby fuel for up to a combined total of 400 hours per year, when necessary in order to avoid curtailing electric power to its customers.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

E.3. The total combined emissions from Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed:

PARAMETER	TONS PER YEAR
Particulate Matter	16.0
Sulfur Dioxide	101.6
Nitrogen Oxides	622.0
Volatile Organic Compounds	2.3
Carbon Monoxide	45.3

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Section IV. This section is the Acid Rain Part.

Operated by: Fort Pierce Utilities Authority
ORIS code: 658

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

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

- a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit is as follows:

<u>E.U. ID</u>	<u>EPA ID</u>	<u>Year</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
-007	ID No. 07	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	63*	63*	63*
-008	ID No. 08	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	26*	26*	26*

* 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), F.A.C.]

A.4. 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, F.A.C., Fast-Track Revisions of Acid Rain Parts.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. 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, F.A.C.

[40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

A.7. Comments, notes, and justifications: None.

Appendix H-1, Permit History/ID Number Changes

Ft. Pierce Utilities Authority

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

Permit History (for tracking purposes):

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> ^{1,2,3}	<u>Revised Date(s)</u>
-001	Diesel Generator #1	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-002	Diesel Generator #2	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-003	Combined Cycle Gas Turbine	AC56-141460A		07/01/96		04/18/90, 11/09/90, 06/28/91
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-004	Boiler #6 (Backup Only)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-007	Boiler (Unit #7)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-008	Boiler (Unit #8)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		

(if applicable) ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 50WPB560003

To: **Facility ID No.:** 1110003

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.

3 - ORDER EXTENDING PERMIT EXPIRATION DATE dated 11/13/97.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

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		
NO _x	All	8,760	STD = 0.0075(14.4)/Y + F (Max 84 ppm)			135.62	592.69	40 CFR 60.332(a)(1) & AC 56-141460	A.5.
SO ₂	All	8,760	0.015% vol. @ 15% Oxygen			319.51	1,395.62	40 CFR 60.332(a)(1) & AC 56-141460	A.6.
SO ₂	Oil	8,760	0.5% S by weight			319.51	1,395.62	AC 56-141460	A.7.
VE	All	8,760	Not to exceed 15%					AC 56-141460	A.8.
CO	All	8,760		32.85	110.4			AC 56-141460	A.9.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

[electronic file name: 11100031.xls]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	B.5.
VE	Oil	8,760	20% except 40% 2 min/hr					OGC Case#91-1610	B.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	B.6.
PM	Gas	8,760		0.4	16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil	400	0.1 lb/MMBtu		16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	B.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	B.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	B.9. & E.3.
NO _x	Gas	8,760		1.31	622.0**			OGC Case#91-1610	B.10. & E.3.
VOC	Gas	8,760		0.0236	2.3**			OGC Case#91-1610	B.11. & E.3.
CO	Gas	8,760		0.15	45.3**			OGC Case#91-1610	B.12. & E.3.

Notes:
 * The "Equivalent Emissions" listed are for informational purposes only.
 ** The total combined emissions from EU [-004], [-007], and [-008]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-007] 33.0 MW Boiler - Unit #7

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	C.5.
VE	Oil	8,760	20% except 40% 2 min/hr					OGC Case#91-1610	C.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	C.6.
PM	Gas	8,760		0.568	16.0 **			OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0 **			OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0 **			62-210.700(3), FAC	C.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6 **			OGC Case#91-1610	C.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6 **			OGC Case#91-1610	C.9. & E.3.
NO _x	Gas	8,760		104.35	622.0 **			OGC Case#91-1610	C.10. & E.3.
VOC	Gas	8,760		0.266	2.3 **			OGC Case#91-1610	C.11. & E.3.
CO	Gas	8,760		7.589	45.3 **			OGC Case#91-1610	C.12. & E.3.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.
** The total combined emissions from EU [-004], [-007], and [-008]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-008] 56.1 MW Boiler - Unit #8

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	D.5.
VE	Oil	8,760	20% except 27% 6 min/hr					OGC Case#91-1610	D.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	D.6.
PM	Gas	8,760		0.945	16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	D.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	D.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	D.9. & E.3.
NO _x	Gas	8,760	0.20 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(1)	D.10. & E.3.
NO _x	Oil	8,760	0.30 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(2)	D.10. & E.3.
VOC	Gas	8,760		0.441	2.3**			OGC Case#91-1610	D.11. & E.3.
CO	Gas	8,760		12.59	45.3**			OGC Case#91-1610	D.12. & E.3.

Notes:
 * The "Equivalent Emissions" listed are for informational purposes only.
 ** The total combined emissions from EU [-004], [-007], and [-008]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS **	See permit condition(s)
NO _x	All	EPA Method 20	Annual	9/30/1990	1 hr	Yes	A.14., A.18, A.19., & A.22.
SO ₂	All	EPA Method 20	Annual	9/30/1990	1 hr		A.14., A.18, A.19., & A.22.
SO ₂	Oil	Fuel Analysis		9/30/1990			A.21.
VE	All	EPA Method 9	Annual	9/30/1990	60 min		A.23.
CO	All	EPA Method 10	Annual	9/30/1990	1 hr		A.24.

Notes:
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
**CMS [=] continuous monitoring system

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Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	Compliance	
						CMS**	See permit condition(s)
VE	Gas	EPA Method 9	Annual	6/24/1983	30 min		B.17. & B.31.
VE	Oil	DEP Method 9	Annual	6/24/1983	60 min		B.17. & B.18.
PM	All	EPA Method 5	Renewal	6/24/1983	60 min		B.18., B.30. & B.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	6/24/1983	60 min		B.20., B.21. & B.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	6/24/1983	60 min		B.22. & B.30.
VOC	Gas	EPA Method 25A	Renewal	6/24/1983	60 min		B.23. & B.30.
CO	Gas	EPA Method 10	Renewal	6/24/1983	60 min		B.24. & B.30.

Notes:
 * The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
 **CMS [=] continuous monitoring system

Electronic file name: 11100032.xls

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[I-007] 33.0 MW Boiler - Unit #7

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing	Frequency	Min. Compliance	CMS**	See permit condition(s)
			Time Frequency	Base Date *	Test Duration		
VE	Gas	EPA Method 9	Annual	9/30/1991	30 min		C.17. & C.31.
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		C.17. & C.18.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		C.19., C.30. & C.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		C.20., C.21. & C.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min		C.22. & C.30.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		C.23. & C.30.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		C.24. & C.30.

Notes:
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
**CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

PROPOSED Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-008] 56.1 MW Boiler - Unit #8

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		D.18.. & D.19.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		D.20., D.33. & D.35.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		D.21., D.22. & D.33.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min	Yes	D.23. & D.33.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		D.24. & D.33.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		D.25. & D.33.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

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

Ft. Pierce Utilities Authority **PROPOSED Title V Permit Revision No.:** 1110003-004-AV
H. D. King Power Plant **Facility ID No.:** 1110003

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

<u>No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

[electronic file name: 1110003u.doc]

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

Ft. Pierce Utilities Authority **PROPOSED Title V Permit Revision No.:** 1110003-004-AV
H. D. King Power Plant **Facility ID No.:** 1110003

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

1. No. 2 Fuel Oil Storage Tank #5
2. Diesel Fuel Storage Tank
3. No. 6 Fuel Oil Storage Tank #6
4. No. 6 Fuel Oil Storage Tank #7
5. Waste Oil Storage Tank
6. Compressed Nitrogen Bottles
7. Storage and Use of Water Treatment Chemicals
8. 55 Gallon Drum of Trichloroethylene and Perchloroethylene
9. Lube Oil Storage
10. Parts Washer
11. Miscellaneous Painting Activities
12. Miscellaneous Welding Activities
13. Oil/Water Separator

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: New Revised

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

H. D. King Power Plant	FL	658
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

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
8	Yes	No		
7	Yes	No		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
4	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.

Best Available Copy

Plant Name (from Step 1)

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard RequirementsPermit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit.
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the permitting authority; and
 - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.5(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.5(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and

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;

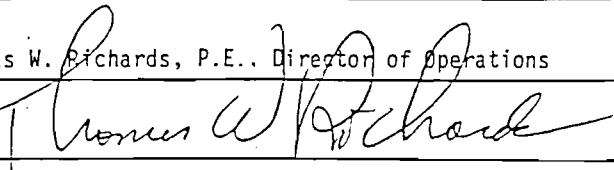
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(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 Thomas W. Richards, P.E., Director of Operations	
Signature 	Date 12/14/95

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

AIRS
FINDS 50WPB560003

Allowance Tracking System Report

Date: 08/25/94

Page: 1

AUTHORIZED ACCOUNT REPRESENTATIVE INFORMATION

AAR Number: 000357
AAR Name: Thomas W. Richards
Firm Name:
Address 1: P.O. Box 3191
Address 2:
City/State/Zip: Fort Pierce, FL 34948-3191
Phone: 407/466-1600 Extension: 3400
Fax: 407/466-0396

Account Num	Plant/Account Name	AAR/Alternate	AAR Start Date
000658000007	Henry D King	AAR	07/19/94
000658000008	Henry D King	AAR	07/19/94

Please review the information shown above and report any errors, along with supporting documentation, to the address listed below, or call the Acid Rain Hotline.



Acid Rain Hotline: (202) 233-9620

U.S. Environmental Protection Agency
Acid Rain Division
401 M Street, SW
Mail Code 6204J
Washington, DC 20460

RECEIVED

ATTACHMENT "C"

J. Miller
H

RECEIVED

JUL 23 1992

APR 03 1992

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Hopping Boyd
Green & Sams

POWER PLANT

FORT PIERCE UTILITIES AUTHORITY,

Petitioner,

vs.

OGC CASE NO. 91-1610
DOAH CASE NO. 91-6989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION,

Respondent.

FINAL ORDER

On October 28, 1991, the State of Florida Department of Environmental Regulation ("Department") received a Petition for administrative hearing from Petitioner, FORT PIERCE UTILITIES AUTHORITY. The Petitioner challenged the Department's decision to issue Permit No. AO 56-190275 to Fort Pierce Utilities Authority, to operate an air pollution source in St. Lucie County.

On July 10, 1992, after receiving a Stipulation for Dismissal and the Settlement Agreement the assigned Hearing Officer issued an Order which closed the Division of Administrative Hearings file and relinquished jurisdiction back to the Department. (Exhibit 1) There being no further matters to consider,

IT IS ORDERED:

The petition is hereby dismissed and the Department's Southeast District Office is directed to issue Permit No. AO 56-190275 in accordance with the Settlement Agreement. (Exhibit 2)

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the

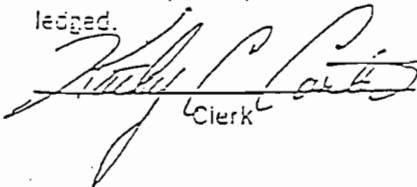
filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the clerk of the Department.

DONE AND ORDERED this 28th day of July, 1992, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

FILING AND ACKNOWLEDGEMENT

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


Clerk

7.21.92
Date


CAROL M. BROWNER
Secretary

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-4805

CERTIFICATE OF SERVICE

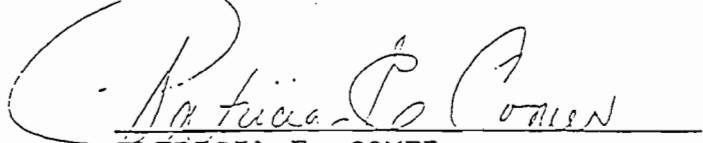
I HEREBY CERTIFY that a true and correct copy of the foregoing
has been furnished by U.S. Mail to:

Peter C. Cunningham, Esq.
Gary V. Perko, Esq.
Post Office Box 6526
Tallahassee, Florida 32314

Linda Rigot, Hearing Officer
Ann Cole, Clerk
Division of Administrative Hearing
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550

on this 22 day of July, 1992.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



PATRICIA E. COMER
Assistant General Counsel

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 25-May-2000 08:07am

From: Ed Svec TAL
SVEC_E

Dept: Air Resources Management

Tel No: 850/488-1344

To: Yi Zhu TAL

(ZHU_Y)

CC: Bruce Mitchell TAL

(MITCHELL_B)

CC: Scott Sheplak TAL

(SHEPLAK_S)

Subject: ARMS Upload

The EARS version of the Title V Permit Revision, 1110003-004-AV, for Ft. Pierce Utilities Authority's H. D. King Power Plant is ready for upload as of 5/25/00.

Thank You

Ed Svec

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 27-Oct-2000 11:39am

From: Yi Zhu TAL
ZHU_Y

Dept: Air Resources Management

Tel No: 850/921-9558

To: Ed Svec TAL (SVEC_E)
CC: Bruce Mitchell TAL (MITCHELL_B)
CC: Scott Sheplak TAL (SHEPLAK_S)

Subject: Re: ARMS Upload

The upload is complete. I did notice that the project is not linked to any EU in ARMS. Could you please link the proper EUs. Thanks. Yi

*The EARS version of the Title V Permit Revision, 1110003-004-AV, for Ft. Pierce

*Utilities Authority's H. D. King Power Plant is ready for upload as of 5/25/00.

*

*Thank You

*

*Ed Svec

Ed Ivec

STATEMENT OF BASIS

Fort Pierce Utility Authority
H. D. King Power Plant
Facility ID No.: 1110003
St. Lucie County

Title V Air Operation Permit Revision
FINAL Title V Permit Revision No.: 1110003-004-AV

The initial Title V air operation permit went final on December 31, 1997 and effective on January 1, 1998. This Title V air operation permit with revision 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.

The subject of the permit revision is to incorporate the request of Ft. Pierce Utilities Authority to eliminate No. 6 residual fuel oil, where previously permitted, and substitute the use of No. 2 fuel oil at the plant. This will result in a decrease in actual sulfur dioxide emissions when fuel oil is combusted.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

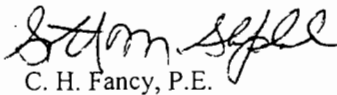
Mr. Thomas W. Richards
Director of Operations
Fort Pierce Utilities Authority
P. O. Box 3191
Fort Pierce, Florida 34948

FINAL Permit No.: 1110003-004-AV
H. D. King Power Plant

Enclosed is FINAL Title V Permit Revision No.: 1110003-004-AV for the operation of the H. D. King Power Plant located at 311 North Indian River Drive, Fort Pierce, St. Lucie County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

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

Executed in Tallahassee, Florida.

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

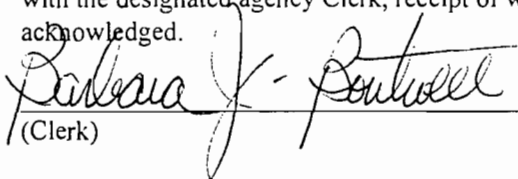
CERTIFICATE OF SERVICE

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 6/27/00 to the person(s) listed or as otherwise noted:

Mr. Thomas W. Richards*
Mr. George Miller, Ft. Peirce Utilities Authority
Mr. Isidore Goldman, PE, FDEP SED
Mr. Gregg Worley, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Elizabeth Bartlett, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

 6/27/00
(Clerk) (Date)

FINAL PERMIT DETERMINATION

FINAL Title V Permit Revision No.: 1110003-004-AV

Page 1 of 1

I. Comment(s).

No comments were received from USEPA during their 45 day review period of the PROPOSED permit.

II. Conclusion.

Since there were no comments received during the USEPA 45 day review period, no changes were made to the PROPOSED Title V Permit Revision and the permitting authority hereby issues the FINAL Title V Permit Revision No.: 1110003-004-AV.

Fort Pierce Utilities Authority
H. D. King Power Plant
Facility ID No.: 1110003
St. Lucie County

Title V Air Operation Permit Revision
FINAL Title V Permit Revision No.: 1110003-004-AV

Permitting Authority:

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

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

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

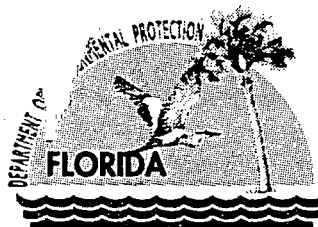
Compliance Authority:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

Title V Air Operation Permit Revision
FINAL Title V Permit Revision No.: 1110003-004-AV

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Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

Permittee:
Fort Pierce Utilities Authority
P. O. Box 3191
Fort Pierce, Florida 34948

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Revision

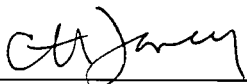
This permit with revision is for the operation of the H. D. King Power Plant. This facility is located at 311 North Indian River Drive, Fort Pierce, St. Lucie County; UTM Coordinates: Zone 17, 566.8 km East and 3036.3 km North; Latitude: 27° 27' 00" North and Longitude: 80° 19' 26" West.

STATEMENT OF BASIS: This Title V air operation permit revision 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 U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-3, Title V Conditions (version dated 04/30/99)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)
Phase II Acid Rain Application/Compliance Plan received 12/18/95
Alternate Sampling Procedure: ASP Number 97-B-01
OGC Case No. 91-1610: Final Order filed 7/21/92

Effective Date: January 1, 1998
Title V Permit Revision Effective Date: May 25, 2000
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002


Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/es

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of one 16.5 megawatt (electric) 219 million Btu per hour fossil fuel fired steam generator; one 33 megawatt (electric) 470 million Btu per hour fossil fuel fired steam generator; one 56.1 megawatt (electric) 611 million Btu per hour fossil fuel fired steam generator; and one 23.4 megawatt (electric) combined cycle gas turbine with a 8.2 megawatt (electric) heat recovery steam generator (HRSG).

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

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

Unregulated Emissions Units and/or Activities

-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

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

Subsection C. Relevant Documents.

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

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

Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996
Additional Information Request dated January 27, 1997
Additional Information Response received February 24, 1997
Letter received July 18, 1997, from Mr. Thomas W. Richards.
Letter received November 6, 1997, from Mr. Thomas W. Richards.
Request for revision received December 2, 1999, from Mr. Edward S. Leongomez

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.
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. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
 - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
 - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
8. **Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: paved fuel delivery roads and parking lots.
[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

9. 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 51., APPENDIX TV-3, TITLE V CONDITIONS}

[Rule 62-214.420(11), F.A.C.]

10. 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.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

Florida Department of Environmental Regulation
Southeast District
400 North Congress Avenue
P.O. Box 15425
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600
Fax: 561/681-6790

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

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Unit #9 is a combined cycle gas turbine and a HRSG with a maximum heat input of 415 million Btu per hour. The HRSG is not supplementary-fired. The turbine is capable of producing 23.4 megawatts and the HRSG is capable of producing 8.2 megawatts of electric power. The primary fuel is natural gas with No. 2 fuel oil used as a backup fuel.

{Permitting notes: (IMPORTANT REGULATORY CLASSIFICATIONS - The emissions unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Combined cycle gas turbine #9 began commercial operation in May, 1990.)}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum process/operation rate is 415 MMBtu per hour (lower heating value) heat input.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.25.
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
 - b. This emissions unit fires No. 2 distillate oil as the emergency back-up fuel.
- [Rules 62-210.200(PTE), 62-212.400, and 62-212.410, F.A.C.; and, AC 56-141460]

{Permitting note: Emergency backup fuel use is authorized for maintenance, as per manufacturer's specifications, and during restricted availability of natural gas.}

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: 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. Nitrogen Oxides. The NO_x emissions shall not exceed: $STD = 0.0075 (14.4)/Y + F$

where:

STD = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis).
Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph 40 CFR 60.332(a)(3).

or 84 ppmv at 15 percent oxygen on a dry basis.
[40 CFR 60.332(a)(1); and, AC 56-141460]

A.6. Sulfur Dioxide. Sulfur dioxide gases discharged to the atmosphere shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis.
[40 CFR 60.333(a); and, AC 56-141460]

A.7. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of the No. 2 distillate oil shall not exceed 0.5 percent by weight.
[AC 56-141460]

A.8. Visible Emissions. Visible emissions shall not exceed 15 percent opacity.
[AC 56-141460]

A.9. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 32.85 pounds per hour and 110.4 tons per year.
[AC 56-141460]

Excess Emissions

A.10. Excess emissions from this emissions unit 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.]

A.11. 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.]

A.12. 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 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)]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

A.13. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using steam injection to control NO_x emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of steam to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.

[40 CFR 60.334(a); and, AC 56-141460]

A.14. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) & (2)]

A.15. 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: 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.16. 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)]

A.17. During performance tests to determine compliance, measured NO_X emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NO}_X = [\text{NO}_X \text{ obs}] \left[\frac{P_{\text{ref}}}{P_{\text{obs}}} \right]^{0.5} e^{19(H_{\text{obs}} - 0.00633)} \left[\frac{288^\circ \text{K}}{T_{\text{amb}}} \right]^{1.53}$$

where:

NO_X = Emissions of NO_X at 15 percent oxygen and ISO standard ambient conditions.

NO_X obs = Measured NO_X emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

H_{obs} = Specific humidity of ambient air at test.

T_{amb} = Temperature of ambient air at test.
[40 CFR 60.335(c)(1); and , AC 56-141460]

A.18. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the steam-to-fuel ratio necessary to comply with the permitted NO_X standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

A.19. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2).
[40 CFR 60.335(c)(3)]

A.20. The owner or operator may determine compliance with the sulfur dioxide standard by calculations based on the fuel analysis for sulfur content. Certified analyses by the appropriate test method from the fuel supplier is acceptable. See specific condition **A.21**.
[AC 56-141460A]

A.21. The fuel sulfur content of 0.5 percent, by weight, shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246, or latest edition. See specific condition **A.7**.
[AC 56-141460A]

A.22. 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. See specific condition **A.14**.
[40 CFR 60.335(e)]

A.23. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.
[AC 56-141460]

A.24. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C.
[AC 56-141460]

A.25. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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.
[Rule 62-297.310(2), F.A.C. and 1110003-002-AO]

A.26. 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.]

A.27. 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 three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

A.28. 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, attached to this permit.

(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.]

A.29. 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.]

A.30. 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 and/or solid 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 and/or solid 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.; and, SIP approved]

Record Keeping and Reporting Requirements

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

Nitrogen oxides. Any one-hour period during which the average steam-to-fuel ratio, as measured by the continuous monitoring system, falls below the steam-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average steam-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(c)(1)]

A.32. 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 (excess emissions are defined in applicable subparts) 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), & (4)]

A.33. 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) & (2)]

A.34. 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.]

A.35. All recorded data shall be maintained on file by the Source for a period of five years.

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

A.36. 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 Requirements.

A.37. 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.]

A.38. 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]

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6

Fossil fuel fired steam generator # 6 is a nominal 16.5 megawatt (electric) steam generator designated as H. D. King Unit # 6. The emission unit is fired on natural gas with a maximum heat input of 218.9 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel.

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #6 began commercial operation in 1958.}

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 rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
6	218.9	Natural Gas
	218.9	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.26.**

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

B.3. Methods of Operation. Fuels.

a. This emissions unit fires natural gas as the primary fuel.

b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **B.36.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

{Permitting note: 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.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

B.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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 0.4 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 1.31 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.0236 pound per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

B.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 0.15 pound per hour when firing natural gas. See specific condition E.3.

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

B.13. 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.]

B.14. 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.]

B.15. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.16. 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: 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.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **B.18.** [Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

B.18. 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.]

B.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

B.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **B.21.**

[AC 56-141460A]

B.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246, or latest edition.

[AC 56-141460A]

B.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

B.25. 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.]

B.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.27. 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.]

B.28. 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, attached to this permit.

(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.]

B.29. 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.]

B.30. 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.
- 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]

B.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

B.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

B.33. 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.]

B.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

B.35. 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.]

B.36. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7

Fossil fuel fired steam generator # 7 is a nominal 33.0 megawatt (electric) steam generator designated as H. D. King Unit # 7. The emission unit is fired on natural gas with a maximum heat input of 470.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are discharged through a multicyclone collector.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator #7 began commercial operation in 1964.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
7	470.0	Natural Gas
	470.0	No. 2 Fuel Oil

See specific condition **E.1.**

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.26.**

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

C.3. Methods of Operation. Fuels.

- a. This emissions unit fires natural gas as the primary fuel.
- b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **C.37.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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.}

C.5. Visible Emissions. Visible emissions shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one two-minute period per hour during which opacity shall not exceed 40 percent.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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.]

C.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.568 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

C.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

C.10. Nitrogen Oxides. Nitrogen Oxides emissions shall not exceed 104.35 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

C.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.266 pound per hour when firing natural gas. See specific condition **E.3.**
[OGC Case No. 91-1610: Final Order filed 7/21/92]

C.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 7.589 pounds per hour when firing natural gas. See specific condition **E.3.**
[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

C.13. 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.14. 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.15. 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.16. 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: 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.}

C.17. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **C.18.** [Rules 62-213.440 and 62-297.401, F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

C.18. 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.19. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C. [AC 56-141460A]

C.20. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **C.21.** [AC 56-141460A]

C.21. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246, or latest edition.
[AC 56-141460A]

C.22. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.23. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.24. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.
[AC 56-141460A]

C.25. 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.26. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.27. 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.28. 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, attached to this permit.

(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.29. 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.30. 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.
- 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]

C.31. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

C.32. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Record keeping and Reporting Requirements

C.33. 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.]

C.34. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

C.35. 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.36. 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.]

C.37. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase.
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-008	56.1 MW Boiler - Unit #8

H. D. King Unit #8 is a nominal 56.1 megawatt (electric) fossil fuel fired steam generator. The emission unit is fired on natural gas with a maximum heat input of 611.0 MMBtu per hour. No. 2 fuel oil is fired as a secondary/emergency fuel. Emissions are uncontrolled.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. Fossil fuel fired steam generator # 8 began commercial operation in May 1976.}

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

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	611.0	Natural Gas
	611.0	No. 2 Fuel Oil

See specific condition E.1.

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition D.26.

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

D.3. Methods of Operation. Fuels.

a. This emissions unit fires natural gas as the primary fuel.

b. This emissions unit fires No. 2 fuel oil as the emergency back-up fuel.

The use of No. 2 fuel oil is limited. See specific conditions **D.45.** and **E.2.**

[Rule 62-213.410, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year and shall meet the requirements of specific condition **E.1.** See specific condition **E.1.**

[Rule 62-210.200(PTE), F.A.C.; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

Emission Limitations and Standards

{Permitting note: 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 shall not exceed 5 percent opacity when firing natural gas. Visible emissions shall not exceed 20 percent opacity when firing fuel oil, except for one six-minute period per hour during which opacity shall not exceed 27 percent.

[40 CFR 60.42(a)(2); OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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.]

D.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.945 pound per hour when firing natural gas and 0.1 pound per million Btu when firing No. 2 fuel oil. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.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. See specific condition **E.3.**

[Rule 62-210.700(3), F.A.C.]

D.9. Sulfur Dioxide. Sulfur Dioxide emissions shall not exceed 2.5 pounds per hour when firing natural gas and 0.80 pound per million Btu heat input when firing No. 2 fuel oil. See specific condition **E.3.**

[AC 56-141460A; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.10. Nitrogen Oxides. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel.

See specific condition **E.3.**

[40 CFR 60.44(a)(1) & (2); and, OGC Case No. 91-1610: Final Order filed 7/21/92]

D.11. Volatile Organic Compounds. Volatile Organic Compounds emissions shall not exceed 0.441 pound per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

D.12. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 12.59 pounds per hour when firing natural gas. See specific condition **E.3.**

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Excess Emissions

D.13. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) **Opacity.** Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported

(3) **Nitrogen oxides.** Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1) & (3)]

D.14. 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.]

D.15. 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.]

D.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.]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

Monitoring of Operations

D.17. 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: 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.18. Visible emissions. The test method for visible emissions shall be EPA Method 9 when firing natural gas and DEP Method 9 when firing No. 2 fuel oil, incorporated in Chapter 62-297, F.A.C. See specific condition **D.19.**

[Rules 62-213.440 and 62-297.401, F.A.C.; OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

D.19. 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.]

D.20. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.21. Sulfur Dioxide. The test method for sulfur dioxide shall be EPA Method 6 or 6C, incorporated in Chapter 62-297, F.A.C., or by calculation based on fuel analysis for sulfur content of the oil and natural gas. Certified analyses by the appropriate test method(s) from the fuel supplier is acceptable. See specific condition **D.22.**

[AC 56-141460A]

D.22. The fuel sulfur content of the oil or natural gas shall be evaluated using ASTM D1552, ASTM D1072, ASTM D3031, ASTM D4084, or ASTM D3246, or latest edition.

[AC 56-141460A]

D.23. The test method for nitrogen oxides shall be EPA Method 7 or 7E, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.24. The test method for volatile organic compounds shall be EPA Method 25A, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.25. The test method for carbon monoxide shall be EPA Method 10, incorporated in Chapter 62-297, F.A.C.

[AC 56-141460A]

D.26. The owner or operator shall determine compliance with the particulate matter, SO₂, and NO_X standards as follows:

(1) The emission rate (E) of particulate matter, SO₂, or NO_X shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O₂ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ sample concentrations at each traverse point.

(iii) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.

(3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO₂ concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO_X concentration.

(i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.

(iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

D.27. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO₂ and NO_X may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% \text{ CO}_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO₂ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_O (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_O value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{Oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:

(A) When F_O is less than 0.97 F_{Oa}, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_O is less than 0.97 F_{Oa} and when the average difference (\bar{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{Oa}, e.g., if F_O is 0.95 F_{Oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_0 is greater than $1.03 F_{0a}$ and when \bar{d} is positive, then E shall be decreased by that proportion over $1.03 F_{0a}$. e.g., if F_0 is $1.05 F_{0a}$, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]

D.28. 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.]

D.29. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

D.30. 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.]

D.31. 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, attached to this permit.

(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.]

D.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.]

D.33. 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.

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]

D.34. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units 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.]

D.35. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units 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.

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

Continuous Monitoring Requirements

D.36. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring nitrogen oxide emissions, and oxygen or carbon dioxide.

[40 CFR 60.45(a) & (b)]

D.37. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	{1}	500
Liquid.....	1,000	500
Solid.....	1,500	1000
Combinations.....	1,000y+1,500z	500(x+y)+1,000z

{1} Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel, and

z = the fraction of total heat input derived from solid fossil fuel.

[40 CFR 60.45(c)(2) & (3)]

{Permitting note: The Stationary Source Compliance Division has determined that continuous emissions monitor (CEMs) requirements of 40 CFR Part 75 (Acid Rain) are equivalent to or more stringent than the requirements of 40 CFR Part 60 (NSPS). EPA and the Department do accept Acid Rain CEMs as NSPS CEMs provided that the utility demonstrates compliance with all applicable NSPS regulations. (Memorandum from John B. Rasnic, Director)}

D.38. For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis

(wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9 - \text{percent } O_2)]$$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)(1)]

D.39. The values used in the equations under 40 CFR 60.45(e) (1) are derived as follows:

- (1) E = pollutant emissions, ng/J (lb/million Btu).
- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O₂, % CO₂ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_C = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_C), respectively. Values of F and F_C are given as follows:
 - (iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/million Btu) and $F_C = 0.384 \times 10^{-7}$ scm CO₂ /J (1,430 scf CO₂ /million Btu).
 - (iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_C = 0.279 \times 10^{-7}$ scm CO₂ /J (1,040 scf CO₂ /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂ /million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_C factor (scm CO₂ /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_C factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_C = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV}}$$

(SI units)

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV}}$$

(English units)

$$F_c = \frac{321 \times 10^3 (\%C)}{GCV}$$

(English units)

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)

(ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable.

(These two methods are incorporated by reference-see 40 CFR 60.17.)

(6) For affected facilities firing combinations of fossil fuels, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)(1), (2), (3), (4), (5), & (6)]

Recordkeeping and Reporting Requirements

D.40. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and monitoring systems performance report shall include the information required in 40 CFR 60.7(c). The summary report form shall contain the information and be in the format shown in figure 1 (attached to this permit) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

[40 CFR 60.7(d) & 60.45(g)]

D.41. 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.42. All recorded data shall be maintained on file by the Source for a period of five years.
[Rule 62-213.440, F.A.C.]

D.43. 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.]

D.44. 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.]

D.45. The permittee must notify the DEP within 24 hours after commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event, which shall include:
 - (1) Availability of power for purchase
 - (2) Availability of electric transmission capacity relating to power purchases
 - (3) Availability of natural gas
 - (4) Availability of the permittee's generation sources

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Miscellaneous Requirements.

D.46. 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.]

D.47. 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]

Subsection E. Common Conditions.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	16.5 MW Boiler - Unit #6
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

The following conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

E.1. The total combined heat input for Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed 4,534,930 million Btu per year.

[AC 56-141460, amended 11/9/90; and, OGC Case No. 91-1610: Final Order filed 7/21/92]

E.2. No. 2 fuel oil can be fired as a standby fuel for up to a combined total of 400 hours per year, when necessary in order to avoid curtailing electric power to its customers.

[OGC Case No. 91-1610: Final Order filed 7/21/92; and, applicant request dated 11/30/99]

Emission Limitations and Standards

E.3. The total combined emissions from Emissions Units -004, -007 and -008 (Units #6, #7, and #8) shall not exceed:

PARAMETER	TONS PER YEAR
Particulate Matter	16.0
Sulfur Dioxide	101.6
Nitrogen Oxides	622.0
Volatile Organic Compounds	2.3
Carbon Monoxide	45.3

[OGC Case No. 91-1610: Final Order filed 7/21/92]

Section IV. This section is the Acid Rain Part.

Operated by: Fort Pierce Utilities Authority
ORIS code: 658

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	33.0 MW Boiler - Unit #7
-008	56.1 MW Boiler - Unit #8

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

- a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit is as follows:

<u>E.U. ID</u>	<u>EPA ID</u>	<u>Year</u>	2000	2001	2002
-007	ID No. 07	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	63*	63*	63*
-008	ID No. 08	SO ₂ allowances, under Table 2 or 3 of 40 CFR Part 73	26*	26*	26*

* 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), F.A.C.]

A.4. 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, F.A.C., Fast-Track Revisions of Acid Rain Parts.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. 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, F.A.C.

[40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

A.7. Comments, notes, and justifications: None.

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

Ft. Pierce Utilities Authority **FINAL Title V Permit Revision No.:** 1110003-004-AV
H. D. King Power Plant **Facility ID No.:** 1110003

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 'emissions units'.

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or 'insignificant'

E.U. ID

<u>No.</u>	<u>Brief Description of Emissions Units and/or Activities</u>
-001	2.75 MW West Diesel #1
-002	2.75 MW East Diesel #2
-009	Cooling Tower
-010	General Purpose Internal Combustion Engines

[electronic file name: 1110003u.doc]

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

Ft. Pierce Utilities Authority **FINAL Title V Permit Revision No.:** 1110003-004-AV
H. D. King Power Plant **Facility ID No.:** 1110003

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. as a Title V source; however, such emissions units and activities shall be exempt for the purposes provided they also meet the criteria of Rule 62-213.430(6)(b), exemption from permitting under Rule 62.210.300(3), entitled to an combination with the emissions of other units and activities at the facility, have the potential to emit any pollutant in such amount as to make the f

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

Brief Description of Emissions Units and/or Activities

1. No. 2 Fuel Oil Storage Tank #5
2. Diesel Fuel Storage Tank
3. No. 6 Fuel Oil Storage Tank #6
4. No. 6 Fuel Oil Storage Tank #7
5. Waste Oil Storage Tank
6. Compressed Nitrogen Bottles
7. Storage and Use of Water Treatment Chemicals
8. 55 Gallon Drum of Trichloroethylene and Perchloroethylene
9. Lube Oil Storage
10. Parts Washer
11. Miscellaneous Painting Activities
12. Miscellaneous Welding Activities
13. Oil/Water Separator

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

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
NO _x	All	8,760	STD = 0.0075(14.4)/Y + F (Max 84 ppm)			135.63	592.53	40 CFR 60.332(a)(1) & AC 56-141460	A.5.
SO ₂	All	8,760	0.015% vol. @ 15% Oxygen			319.51	1,395.52	40 CFR 60.332(a)(1) & AC 56-141460	A.6.
SO ₂	Oil	8,760	0.5% S by weight			319.51	1,395.52	AC 56-141460	A.7.
VE	All	8,760	Not to exceed 15%					AC 56-141460	A.8.
CO	All	8,760		32.85	110.4			AC 56-141460	A.9.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

[electronic file name: 11100031.xls]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	B.5.
VE	Oil	8,760	20% except 40% 2 min/hr					OGC Case#91-1610	B.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	B.6.
PM	Gas	8,760		0.4	16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil	400	0.1 lb/MMBtu		16.0**			OGC Case#91-1610	B.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	B.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	B.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	B.9. & E.3.
NO _x	Gas	8,760		1.31	622.0**			OGC Case#91-1610	B.10. & E.3.
VOC	Gas	8,760		0.0236	2.3**			OGC Case#91-1610	B.11. & E.3.
CO	Gas	8,760		0.15	45.3**			OGC Case#91-1610	B.12. & E.3.

Notes:

* The "Equivalent Emissions" listed are for informational purposes only.

** The total combined emissions from EU [-004], [-007], and [-008]

[electronic file name: 11100031.xls]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-007] 33.0 MW Boiler - Unit #7

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions		Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour		
VE	Gas	8,760	Not Exceed 5%				OGC Case#91-1610	C.5.
VE	Oil	8,760	20% except 40% 2 min/hr				OGC Case#91-1610	C.5.
VE	All	8,760	60% 3 hrs/24 hrs				62-210.700(3), FAC	C.6.
PM	Gas	8,760		0.568	16.0**		OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0**		OGC Case#91-1610	C.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**		62-210.700(3), FAC	C.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**		OGC Case#91-1610	C.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**		OGC Case#91-1610	C.9. & E.3.
NO _x	Gas	8,760		104.35	622.0**		OGC Case#91-1610	C.10. & E.3.
VOC	Gas	8,760		0.266	2.3**		OGC Case#91-1610	C.11. & E.3.
CO	Gas	8,760		7.589	45.3**		OGC Case#91-1610	C.12. & E.3.

Notes:
 * The "Equivalent Emissions" listed are for informational purposes only.
 ** The total combined emissions from EU [-004], [-007], and [-008]

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

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-008] 56.1 MW Boiler - Unit #8

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		
VE	Gas	8,760	Not Exceed 5%					OGC Case#91-1610	D.5.
VE	Oil	8,760	20% except 27% 6 min/hr					OGC Case#91-1610	D.5.
VE	All	8,760	60% 3 hrs/24 hrs					62-210.700(3), FAC	D.6.
PM	Gas	8,760		0.945	16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.1 lb/MMBtu		16.0**			OGC Case#91-1610	D.7. & E.3.
PM	Oil		0.3 lb/MMBtu 3hrs/24 hrs		16.0**			62-210.700(3), FAC	D.8. & E.3.
SO ₂	Gas	8,760		2.5	101.6**			OGC Case#91-1610	D.9. & E.3.
SO ₂	Oil	8,760	0.80 lb/MMBtu		101.6**			OGC Case#91-1610	D.9. & E.3.
NO _x	Gas	8,760	0.20 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(1)	D.10. & E.3.
NO _x	Oil	8,760	0.30 lb/MMBtu		622.0**			OGC Case#91-1610 & 40 CFR 60.44(a)(2)	D.10. & E.3.
VOC	Gas	8,760		0.441	2.3**			OGC Case#91-1610	D.11. & E.3.
CO	Gas	8,760		12.59	45.3**			OGC Case#91-1610	D.12. & E.3.

Notes:

* The "Equivalent Emissions" listed are for informational purposes only.

** The total combined emissions from EU [-004], [-007], and [-008]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-003] 23.4 MW Combined Cycle Gas Turbine with 8.2 MW HRSG - Unit #9

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	Monitoring	
						CMS**	See permit condition(s)
NO _x	All	EPA Method 20	Annual	9/30/1990	1 hr	Yes	A.14., A.18, A.19., & A.22.
SO ₂	All	EPA Method 20	Annual	9/30/1990	1 hr		A.14., A.18, A.19., & A.22.
SO ₂	Oil	Fuel Analysis		9/30/1990			A.21.
VE	All	EPA Method 9	Annual	9/30/1990	60 min		A.23.
CO	All	EPA Method 10	Annual	9/30/1990	1 hr		A.24.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
[-004] 16.5 MW Boiler - Unit #6

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
VE	Oil	DEP Method 9	Annual	6/24/1983	60 min		B.17. & B.18.
PM	All	EPA Method 5	Renewal	6/24/1983	60 min		B.18., B.30. & B.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	6/24/1983	60 min		B.20., B.21. & B.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	6/24/1983	60 min		B.22. & B.30.
VOC	Gas	EPA Method 25A	Renewal	6/24/1983	60 min		B.23. & B.30.
CO	Gas	EPA Method 10	Renewal	6/24/1983	60 min		B.24. & B.30.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

Electronic file name: 11100032.xls

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
I-0071 33.0 MW Boiler - Unit #7

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency	Min. Compliance Test	CMS **	See permit condition(s)
			Frequency	Base Date *	Duration		
VE	Gas	EPA Method 9	Annual	9/30/1991	30 min		C.17. & C.31.
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		C.17. & C.18.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		C.19., C.30. & C.32.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		C.20., C.21. & C.30.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min		C.22. & C.30.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		C.23. & C.30.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		C.24. & C.30.

Notes:

- * The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.
- ** CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Table 2-1, Summary of Compliance Requirements

Ft. Pierce Utilities Authority
H. D. King Power Plant

FINAL Title V Permit Revision No.: 1110003-004-AV
Facility ID No.: 1110003

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**
I-008I 56.1 MW Boiler - Unit #8

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
			Frequency				
VE	Gas	EPA Method 9	Annual	9/30/1991	30 min		D.18.. & D.34.
VE	Oil	DEP Method 9	Annual	9/30/1991	60 min		D.18.. & D.19.
PM	All	EPA Method 5	Renewal	9/30/1991	60 min		D.20., D.33. & D.35.
SO ₂	All	EPA Method 6 or 6C or Fuel Analysis	Annual	9/30/1991	60 min		D.21., D.22. & D.33.
NO _x	Gas	EPA Method 7 or 7E	Annual	9/30/1991	60 min	Yes	D.23. & D.33.
VOC	Gas	EPA Method 25A	Renewal	9/30/1991	60 min		D.24. & D.33.
CO	Gas	EPA Method 10	Renewal	9/30/1991	60 min		D.25. & D.33.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

[electronic file name: 11100032.xls]

Appendix H-1, Permit History/ID Number Changes

Ft. Pierce Utilities Authority

FINAL Title V Permit Revision No.: 1110003-004-AV

Facility ID No.: 1110003

Permit History (for tracking purposes):

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> ^{1,2,3}	<u>Revised Date(s)</u>
-001	Diesel Generator #1	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-002	Diesel Generator #2	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
-003	Combined Cycle Gas Turbine	AC56-141460A		07/01/96		04/18/90, 11/09/90, 06/28/91
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-004	Boiler #6 (Backup Only)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-007	Boiler (Unit #7)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		
-008	Boiler (Unit #8)	AO56-190275	05/23/91	02/28/96	08/14/96	06/27/96
		1110003-002-AO	06/21/96	08/15/96		
		1110003-003-AV	12/31/97	12/31/02		

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 50WPB560003

To: Facility ID No.: 1110003

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.

3 - ORDER EXTENDING PERMIT EXPIRATION DATE dated 11/13/97.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}