

4/26/06

**INTEROFFICE MEMORANDUM**

TO: Trina Vielhauer *TV*

THRU: Jeff Koerner *JK*

FROM: Bruce Mitchell *BM*

DATE: April 25, 2006

SUBJECT: JEA  
Northside Generating Station/St. Johns River Power Park/Separation Technologies Inc.  
PROPOSED Title V Air Operation Permit Revision  
0310045-016-AV

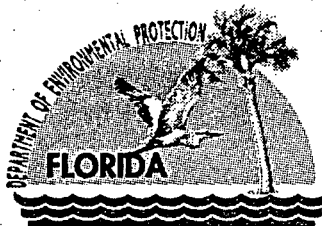
Attached is the PROPOSED Title V Permit Revision, Project No. 0310045-016-AV.

The subject of the Title V permit revision is: (1) incorporate the terms and conditions of air construction permit, No. 0310001-002-AC, for the Separation Technologies LLC's Separation Technologies, Inc. (STI) fly ash beneficiation processing operation, which is located adjacent/contiguous to SJRPP and receives the fly ash from the SJRPP operation; (2) incorporate the terms and conditions of air construction permit, No. 0310045-014-AC/PSD-FL-010E, which allowed the SJRPP's Units 1 and 2 to fire up to 30% petroleum coke; (3) incorporate the terms and conditions of air construction permit, No. 0310001-015-AC/PSD-FL-010G, which amended Table 6 - Part B, SJRPP's Materials Handling and Storage Operations; (4) modify the excess emissions terms and conditions related to startups, shutdowns, and malfunctions of JEA's NGS CFB Units 1 and 2; (5) clarify data substitution related to compliance demonstration for SO<sub>2</sub> and NO<sub>x</sub> for JEA's NGS Units Nos. 1 and 2; (6) in Appendix I-1, List of Insignificant Emissions Units and/or Activities, remove the qualifier "Not Federally Enforceable" from the listing of "VII. SJRPP Emergency Diesel Fire Pump", which was placed in the appendix through the PROPOSED Determination and PROPOSED Title V Permit Renewal permit, No. 0310045-011-AV; and, add two diesel-fired emergency generators, which are being removed and brought from the Kennedy Generating Station; (7) in Appendix U-1, List of Unregulated Emissions Units and/or Activities, add a 3,000 gallon diesel storage tank, which is being removed and brought from the Kennedy Generating Station; and, (8) add JEA's NGS CFB Boilers [EUs -026 and -027 (EPA's ID: Nos. 2A and 1A, respectively)] to the Acid Rain Permit.

A comment was received during the Public Notice period (30-day), which concluded on April 15, 2006. The comment and subsequent responses to the comment received from JEA resulted in an amendment to Specific Condition H.21. The change did not require an additional Public Notice; however, the amendment carries a flag of "Not Federally Enforceable." It is recommended that the PROPOSED permit be issued as changed.

Attachments

TLV/jk/bm



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

April 26, 2006

Mr. James M. Chansler, P.E., D.P.A.  
V.P., Operations and Maintenance and Responsible Official  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

Re: PROPOSED Title V Permit Revision No.: 0310045-016-AV  
JEA  
St. Johns River Power Park/Northside Generating Station/Separation Technologies, Inc.

Dear Mr. Chansler:

One copy of the "PROPOSED Determination" for the JEA's St. Johns River Power Park/Northside Generating Station/Separation Technologies, Inc. located at 4377 Heckscher Drive, Jacksonville, Duval 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 provided to the United States Environmental Protection Agency (USEPA) Region 4 office for their review. The web site address is:

"[http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch\\_ltd.asp](http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch_ltd.asp)"

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 the 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 Bruce Mitchell at 850/413-9198.

Sincerely,

Trina L. Vielhauer  
Chief  
Bureau of Air Regulation

TLV/sms/bm

Enclosures

Copy furnished to:  
Mr. Bert Gianazza, P.E., JEA, Application Contact (E-mail)  
Mr. Hamilton Oven, P.E., DEP-SCO (E-mail)  
Mr. Richard Robinson, P.E., ERMD-EQD (E-mail)  
U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

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## PROPOSED Determination

JEA

St. Johns River Power Park/Northside Generating Station/Separation Technologies, Inc.

Title V Air Operation Permit Revision No.: 0310045-016-AV

### I. Public Notice.

An "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT REVISION" to the JEA's St. Johns River Power Park/Northside Generating Station located at 4377 Heckscher Drive, Jacksonville, Duval County, was clerked on March 2, 2006. The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT REVISION" was published in The Florida Times-Union on March 16, 2006. The DRAFT Title V Air Operation Permit Revision was available for public inspection at the City of Jacksonville's Environmental Resource Management Department - Environmental Quality Division in Jacksonville and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT REVISION" was received on March 31, 2006.

### II. Public Comment(s).

A comment was received during the 30 (thirty) day public comment period, which concluded on April 15, 2006. A comment was received in a letter dated April 11<sup>th</sup>, from Mr. Ebenezer Gujjarlapudi, Chief of the City of Jacksonville's Environmental Resource Management Department (ERMD), via an e-mail received on April 13<sup>th</sup> from Mr. Richard Robinson, Environmental Engineering Manager, ERMD-Environmental Quality Division/Air Quality Branch. Responses to the comment were received from Mr. N. Bert Gianazza, P.E. of Record, JEA, via e-mails received on April 24<sup>th</sup> and 25<sup>th</sup>. Based on the comment and subsequent responses, an amendment to Specific Condition H.21. will be made. The change is considered to be significant and would require another Public Notice if it is to be considered as "federally enforceable"; however, and based upon the responses received from Mr. Gianazza on April 24<sup>th</sup> and 25<sup>th</sup>, the request from Mr. Gujjarlapudi is acceptable to and was requested by JEA for inclusion in the Title V permit. Therefore, an amendment to Specific Condition H.21. will be made as follows and will include a flag of "Not Federally Enforceable":

#### FROM:

H.21. Authorized Emissions. Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any calendar month per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. Startup: The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown: The cessation of the operation of an emissions unit for any purpose.
- c. Malfunction: Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions H.49. and H.51. for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

PROPOSED Determination (cont.)

JEA

St. Johns River Power Park/Northside Generating Station/Separation Technologies, Inc.

Title V Air Operation Permit Revision No.: 0310045-016-AV

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**TO:**

**H.21. Authorized Emissions.**

(1) Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any calendar month per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. **Shutdown:** The cessation of the operation of an emissions unit for any purpose.
- c. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions **H.49.** and **H.51.** for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

(2) **Not Federally Enforceable.** Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours during any 30 consecutive calendar days per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. **Shutdown:** The cessation of the operation of an emissions unit for any purpose.
- c. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions **H.49.** and **H.51.** for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; 0310045-015-AC/PSD-FL-265C; and; applicant requested]

**III. Conclusion.**

A comment was received during the 30 (thirty) day public comment period. The change made does not require another Public Notice. The permitting authority hereby issues the PROPOSED Permit, with any changes noted above.

## STATEMENT OF BASIS

JEA  
NGS/SJRPP/STI  
Facility ID No.: 0310045  
Duval County

Title V Air Operation Permit Revision  
**PROPOSED Permit No.: 0310045-016-AV**

The operations of the Northside Generating Station (NGS), the contiguous St. Johns River Power Park (SJRPP), and the adjoining Separation Technologies, Inc. (STI) are considered to be a single air emissions source for Title V air permitting purposes.

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 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 the permit.

The subject of the Title V Air Operation Permit Revision is to:

(1) Incorporate the terms and conditions of air construction permit, No. 0310001-002-AC, for the Separation Technologies LLC's Separation Technologies, Inc. (STI) fly ash beneficiation processing operation, which is located adjacent/contiguous to the JEA's SJRPP and receives the fly ash from the JEA's SJRPP operation.

See Subsection J for the terms and conditions.

STI's Facility: STI has constructed, owns and operates a new fly ash processing system on a portion of leased property at the JEA's SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the JEA's SJRPP fly ash leaving a saleable product. As a result, environmental benefits will include a 255,000 ton reduction in the fly ash currently sent to landfill by SJRPP each year and an overall reduction in the ammonia releases with the recovery and subsequent recycle of ammonia removed from the fly ash. The new fly ash processing system will include the addition of two fly ash receiving bins, a carbon separation unit, a clean-up vacuum, a fly ash surge bin, a mineral additive storage bin, and a gas-fired dryer. The particulate emissions generated from handling of the fly ash are collected from each source using pulse jet fabric filters. STI's triboelectric carbon separation technology partitions fly ash into mineral-rich and carbon-rich fractions. The mineral-rich fly ash can then be sold as a usable product. The carbon-rich fly ash is returned to the JEA's SJRPP fly ash storage silos for eventual disposal at the onsite landfill. The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using STI's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using STI's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, STI installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

The emissions units are permitted under Rule 212.400, F.A.C., Prevention of Significant Deterioration [PSD; 0310001-002-AC/PSD-FL-010(D)]; Rule 62-297.711, F.A.C., Reasonable Available Control Technology - Materials Handling, Sizing, Screening, Crushing and Grinding Operations; and, Rule 62-296.712, F.A.C., Reasonable Available Control Technology - Miscellaneous Manufacturing Process Operations.

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(2) Incorporate the terms and conditions of air construction permit, No. 0310045-014-AC/PSD-FL-010E, which allowed the JEA's SJRPP Units 1 and 2 to fire up to 30% petroleum coke:

See specific conditions D.3.a., D.66. and D.67., as they were changed as follows:

**FROM:**

**D.3. Methods of Operation.**

a. The only fuels allowed to be fired are coal, a coal blend with a maximum of 20 percent petroleum coke (by weight), new No. 2 distillate fuel oil, and "on-specification" used oil. [Rule 62-213.410, F.A.C.; PSD-FL-010; PA 81-13; PSD-FL-010(A & B); 40 CFR 761.20(e); and, requested by the applicant in the initial Title V permit application received June 14, 1996]

D.66. **Reporting and Recordkeeping.** Documentation verifying that the coal and petroleum coke fuel blends combusted in Boilers Nos. 1 and 2 have not exceeded the 20 percent maximum petroleum coke by weight limit shall be maintained and made available upon request by the Department or RESD. [Rule 62-213.440, F.A.C.; and, Part V, Rule 2.501, JEPB]

D.67. **Reporting and Recordkeeping.** Stack monitoring, fuel usage and fuel analysis data shall be reported to the RESD on a quarterly basis in accordance with 40 CFR 60.7. [PA 81-13]

**TO:**

**D.3. Methods of Operation.**

a. The only fuels allowed to be fired are coal, a coal blend with a maximum of 30 percent petroleum coke (by weight), new No. 2 distillate fuel oil, and "on-specification" used oil. See specific conditions **D.17., D.64., D.65., D.66. and D.67.** [Rule 62-213.410, F.A.C.; PSD-FL-010; 0310045-014-AC/PSD-FL-010F; PA 81-13L; PSD-FL-010(A & B); 40 CFR 761.20(e); and, requested by the applicant in the initial Title V permit application received June 14, 1996]

**D.66. Reporting and Recordkeeping.**

a. Documentation verifying that the coal and petroleum coke fuel blends combusted in Boilers Nos. 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit shall be maintained and made available upon request by the Department or the ERMD-EQD. See specific conditions **D.3., D.65. and D.67.** [Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

b. The permittee shall maintain and submit to the Department and ERMD-EQD on an annual basis for a period of five years from the date the emissions unit is co-fired with petroleum coke above 20%, by weight, information demonstrating in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) that the operational changes did not result in emissions increases of nitrogen oxides, carbon monoxide, sulfur dioxide, sulfuric acid mist, volatile organic compounds, and particulate matter. See specific conditions **D.3., D.65. and D.67.** [0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

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D.67. Reporting and Recordkeeping.

a. Stack monitoring, fuel usage and fuel analysis data shall be reported to the ERMD-EQD on a quarterly basis in accordance with 40 CFR 60.7.

[PA 81-13]

(3) Incorporate the terms and conditions of air construction permit, No. 0310001-015-AC/PSD-FL-010G, which amended Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, and associated text in the Title V permit, No. 0310045-011-AV, pursuant to PSD-FL-010. Specifically,

(a) Allow a change to the Rail Car Unloading – Rotary Dumper operation (EU 023a) within the Rotary Railcar Dumper Building (RRDB) at the JEA's SJRPP [specifically, allowed the removal of a baghouse associated with the four transfer points within the RRDB and continued the current practice of using wet suppression to control fugitive emissions of particulate matter when handling, loading and unloading materials; in addition, the RRDB is domed and mostly enclosed; and, the emissions units/points will be combined and designated as the "Rotary Railcar Dumper Building – Unloading and Transfer Points" (EU -023a)];

(b) Remove the PM/PM<sub>10</sub> limitations contained in Table 6 – Part B [PSD-FL-010C/PA-81-13, clerked on 07/29/99, which replaced Revised Tables 2 and 6, PSD-FL-010/PA-81-13, amended 10/28/1986], and assign a visible emissions limit of "5% opacity" to all operations controlled by a baghouse/fabric filter system;

(c) Establish that the "visible emissions limit" will now be used for "compliance purposes"; and,

(d) Establish the visible emissions performance testing frequency for the emissions units/points contained in Table 6 – Part B [PSD-FL-010(C)/PA-81-13, clerked on 07/29/99, which replaced Revised Tables 2 and 6, PSD-FL-010/PA-81-13, amended 10/28/1986]}:

Therefore, the following has been changed:

**FROM:**

Table 6 – Part B: SJRPP (PSD Permit: PSD-FL-010C).

**TO:**

Revised Table 6 – Part B. SJRPP: Materials Handling and Storage Operations.

Also, changes are being made to some specific conditions due to: 1) the merger of the tables [Revised Tables 2 and 6 (effective October 28, 1986)] in the amended PSD permit, No. PSD-FL-010C, clerked on July 29, 1999; and, 2) the request that the visible emission standards reflected in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, be used for compliance purposes, which included dropping the PM/PM<sub>10</sub> limits for all emission units/points and changing the opacity standard from 10% to 5% for all emission units controlled by a baghouse control system. Therefore, the following changes are made:

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**FROM:**

1. SC E.1. of 0310045-011-AV.

E.1. Revised Tables 2 and 6, PSD-FL-010, amended October 28, 1986, are incorporated by reference (attached) for emissions units 1 thru 16 and 4 thru 17, respectively.  
[PSD-FL-010, amended October 28, 1986]

2. SC E.3. of 0310045-011-AV.

E.3. Controls. The permittee shall maintain and continue to use the control systems and control techniques established to minimize particulate matter emissions from emissions units 4 thru 17 in Revised Table 2, PSD-FL-010, amended October 28, 1986.  
[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; and, PSD-FL-010, amended October 28, 1986]

3. SC E.4. of 0310045-011-AV.

E.4. Visible Emissions. An owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, visible emissions greater than 10 percent opacity, as established in Revised Table 6, PSD-FL-010, amended October 28, 1986.  
[PSD-FL-010 and BACT; PA 81-13; and, PSD-FL-010, amended October 28, 1986]

4. SC E.5. of 0310045-011-AV.

E.5. Particulate Matter. Particulate matter emissions shall not exceed the limits established in Revised Table 6, PSD-FL-010, amended October 28, 1986.  
[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; and, PSD-FL-010, amended October 28, 1986]

5. SC E.9. of 0310045-011-AV.

E.9. Visible Emissions. EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests. See specific condition E.10.  
[40 CFR 60.252(c); and, PSD-FL-010 and PA 81-13]

6. SC E.10. of 0310045-011-AV.

E.10. Particulate Matter. In accordance with Chapter 62-297, F.A.C., EPA Method 5 shall be used to determine compliance with the particulate matter emission limitations established in Revised Table 6, PSD-FL-010, for emissions units 4 thru 17 that exhaust through a stack. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests. See specific condition E.9.  
[Rules 62-4.070 and 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010, amended October 28, 1986]

7. SC F.1. of 0310045-011-AV.

F.1. Revised Tables 2 and 6, PSD-FL-010, amended October 28, 1986, are incorporated by reference (attached) for emissions unit 18 (Table 2) and emissions unit 19 (Table 6).  
[PSD-FL-010; PSD-FL-010, amended 10/28/1986; and, 0310045-012-AC/PSD-FL-010E]



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NGS/SJRPP/STI

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8. SC F.3. of 0310045-011-AV.

F.3. Controls. The permittee shall maintain and continue to use the control systems and control techniques established to minimize particulate matter emissions from emissions unit 18 in Revised Table 2, PSD-FL-010, amended October 28, 1986.

[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; PSD-FL-010, amended 10/28/1986; and, 0310045-012-AC/PSD-FL-010E]

9. SC F.4. of 0310045-011-AV.

F.4. Visible Emissions. Visible emissions shall not exceed the following:

- a. Limestone and flyash handling systems 10% opacity
- b. Limestone transfer points 10% opacity
- c. Limestone silo 10% opacity
- d. Reserved.
- e. Flyash silos 10% opacity

[PSD-FL-010 and PA 81-13; and, 0310045-012-AC/PSD-FL-010E]

10. SC F.5. of 0310045-011-AV.

F.5. Particulate Matter. Particulate matter emissions shall not exceed the following:

- a. Limestone silo 0.05 lb/hr
- b. Limestone hopper/transfer conveyors 0.65 lb/hr
- c. Limestone transfer points 0.4 lb/hr
- d. Reserved.
- e. Flyash handling system 0.2 lb/hr

[Rule 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010 and PA 81-13; and, 0310045-012-AC/PSD-FL-010E]

11. SC F.9. of 0310045-011-AV.

F.9. Visible Emissions. EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.

[Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010 and PA 81-13]

12. SC F.10. of 0310045-011-AV.

F.10. Particulate Matter. In accordance with Chapter 62-297, F.A.C., EPA Method 5 shall be used to determine compliance with the particulate matter emission limitations established in Revised Table 6, PSD-FL-010, amended October 28, 1986, for emissions unit 19 that exhaust through a stack. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests.

[Rules 62-4.070 and 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; PSD-FL-010; PSD-FL-010, amended October 28, 1986; and, 0310045-012-AC/PSD-FL-010E]

TO:

1. SC E.1. of 0310045-011-AV.

E.1. Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, is incorporated by reference (attached).

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended 10/28/1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

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JEA

NGS/SJRPP/STI

Facility ID No.: 0310045

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2. SC E.3. of 0310045-011-AV.

E.3. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions.

[Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

3. SC E.4. of 0310045-011-AV.

E.4. Visible Emissions. Visible emissions shall be used for compliance purposes and not exceed the opacity limits established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations. [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

4. SC E.5. of 0310045-011-AV.

E.5. Reserved.

[0310045-015-AC/PSD-FL-010G]

5. SC E.9. of 0310045-011-AV.

E.9. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Revised Table 6 - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.

[PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G]

6. SC E.10. of 0310045-011-AV.

E.10. Reserved.

[0310045-015-AC/PSD-FL-010G]

7. SC F.1. of 0310045-011-AV.

F.1. Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, is incorporated by reference (attached).

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

8. SC F.3. of 0310045-011-AV.

F.3. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions.

[Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

Statement of Basis

JEA

NGS/SJRPP/STI

Facility ID No.: 0310045

Title V Air Operation Permit Revision

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9. SC F.4. of 0310045-011-AV.

F.4. Visible Emissions. Visible emissions shall be used for compliance purposes and not exceed the opacity limits established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations. [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

10. SC F.5. of 0310045-011-AV.

F.5. Reserved.

[0310045-015-AC/PSD-FL-010G]

11. SC F.9. of 0310045-011-AV.

F.9. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Revised Table 6 - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.

[PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G]

12. SC F.10. of 0310045-011-AV.

F.10. Reserved.

[0310045-015-AC/PSD-FL-010G]

(4) Revise the excess emissions terms and conditions related to startups, shutdowns, and malfunctions of the JEA's NGS CFB Units 1 and 2 established in the AC permit No. 0310045-003-AC/PSD-FL-265 {see condition No. 26 [affects specific conditions (SCs) H.19. and H.21., 0310045-011-AV]}:

Therefore, the following are changed:

**FROM:**

H.19. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

H.21. Authorized Emissions. Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed twelve (12) hours in any 24-hour period for a startup on CFB Boilers Nos. 1 and 2 (which shall not be started up at the same time) or two (2) hours in any 24-hour period for other reasons unless specifically authorized by DEP or RESD for longer duration. The permittee shall submit a written procedure summarizing the current best operational practices to be followed and the anticipated emissions for startup and shutdown conditions within one year after initial startup of CFB Boiler No. 2, and shall update this document every 5 years (at operating permit renewal). The twelve (12) hours duration of excess emissions may be reduced through a permit revision based on the operating experience on CFB Boilers Nos. 1 and 2.

[Rule 62-210.700, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Statement of Basis

JEA

NGS/SJRPP/STI

Facility ID No.: 0310045

Title V Air Operation Permit Revision

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**TO:**

H.19. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed the limitations established in Specific Condition **H.21**.

[Rule 62-210.700(1), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

H.21. Authorized Emissions.

(1) Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any calendar month per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. Startup: The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown: The cessation of the operation of an emissions unit for any purpose.
- c. Malfunction: Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions **H.49**. and **H.51**. for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

(2) **Not Federally Enforceable**. Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours during any 30 consecutive calendar days per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. Startup: The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown: The cessation of the operation of an emissions unit for any purpose.

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c. Malfunction: Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions H.49. and H.51. for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; 0310045-015-AC/PSD-FL-265C; and, applicant requested]

(5) Change the specific conditions related to compliance demonstration for SO<sub>2</sub> and NO<sub>x</sub> for the JEA's NGS Units Nos. 1 and 2, specifically remove the use of missing data substitution, which is acceptable for purposes for Acid Rain allowances, to avoid the conflict when determining the compliance average with the emission limit and the associated timeframe that was established in AC permit, No. 0310045-003-AC/PSD-FL-265 [see SCs Nos. 31.(a) and 32(a), respectively (affects SCs H.28.a. and H.29.a., respectively, 0310045-011-AV)]:

Therefore, the following are changed:

**FROM:**

H.28. Sulfur Dioxide.

a. Compliance with sulfur dioxide (SO<sub>2</sub>) emissions limits in Specific Condition H.10.a. shall be demonstrated with Continuous Emissions Monitoring Systems (CEMS's) installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on 24-hour block and 30-day rolling averages, as applicable, and excluding periods of startup, shutdown, and malfunction. When monitoring data are not available, substitution for missing data shall be handled as required by the federal Acid Rain Program. Emissions recorded in parts per million shall be converted to lb/MMBtu using an appropriate F-factor for purposes of determining compliance with the emission limits in Specific Condition H.10.a.

{Permitting Note: At least three (3) hours of data are required to establish a 24-hour average for CEMS data.}

[0310045-003-AC/PSD-FL-265]

H.29. Oxides of Nitrogen.

a. Compliance with the oxides of nitrogen (NO<sub>x</sub>) emissions limit in Specific Condition H.11.a. shall be demonstrated with a CEMS's installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on a 30-day rolling average and excluding periods of startup, shutdown and malfunction. When monitoring data are not available, substitution for missing data shall be handled as required by the federal Acid Rain Program to calculate the 30-day rolling average.

[0310045-003-AC/PSD-FL-265]

Statement of Basis  
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**TO:**

**H.28. Sulfur Dioxide.**

a. Compliance with sulfur dioxide (SO<sub>2</sub>) emissions limits in Specific Condition **H.10.a.** shall be demonstrated with Continuous Emissions Monitoring Systems (CEMS's) installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on 24-hour block and 30-day rolling averages, as applicable, and excluding periods of startup, shutdown, and malfunction. Emissions recorded in parts per million shall be converted to lb/MMBtu using an appropriate F-factor for purposes of determining compliance with the emission limits in Specific Condition **H.10.a.**

{Permitting Note: At least three (3) hours of data are required to establish a 24-hour average for CEMS data.}

[Applicant's request; 0310045-012-AC/PSD-FL-265B; and, 0310045-015-AC/PSD-FL-265C]

**H.29. Oxides of Nitrogen.**

a. Compliance with the oxides of nitrogen (NO<sub>x</sub>) emissions limit in Specific Condition **H.11.a.** shall be demonstrated with a CEMS's installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on a 30-day rolling average and excluding periods of startup, shutdown and malfunction. The 30-day rolling averages will be determined based on hourly values calculated in accordance with Appendix F of 40 CFR Part 75.

[Applicant's request; and, 0310045-015-AC/PSD-FL-265C]

(6) In Appendix I-1, List of Insignificant Emissions Units and/or Activities: removed the qualifier "**Not Federally Enforceable**" from the listing of "**VII. SJRPP Emergency Diesel Fire Pump**", which was placed in the appendix through the PROPOSED Determination and PROPOSED Title V Permit Renewal, No. 0310045-011-AV; added the "NGS By-Product Reclamation" operation; at JEA's NGS, added an "emergency" generator; in addition and for JEA's NGS, added two (2) black start diesel-fired 2,307 hp emergency generators (existing emissions units being removed and brought from the JEA's Kennedy Generating Station).

(7) In Appendix U-1, List of Unregulated Emissions Units and/or Activities: added a 3,000 gallon diesel storage tank (an existing emissions unit being removed and brought from the JEA's Kennedy Generating Station).

(8) Added the NGS's CFB Boilers [EUs -026 and -027 (EPA's ID: Nos. 2A and 1A, respectively)] to the Acid Rain Permit.

(9) Specific Condition I.40. will become "Reserved" since the emissions unit -035 has been compliance tested (Unit 1 on 09/04/03 and Unit 2 on 09/16/03) and the Compliance Plan, Appendix CP-1, is no longer needed.

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

A Compliance Assurance Monitoring (**CAM**) Plan has been included for the JEA's SJRPP Boilers Nos. 1 and 2 and the JEA's NGS CFB Boilers Nos. 1 and 2.

Based on the initial Title V permit application received June 20, 2003, this facility is a major source of hazardous air pollutants (HAPs).

JEA's Northside Generating Station and St. Johns River Power Park (NGS/SJRPP)  
Separation Technologies LLC's Separation Technologies, Inc. (STI)  
**Facility ID No.:** 0310045  
Duval County

Title V Air Operation Permit Revision  
**PROPOSED Permit No.:** 0310045-016-AV

Permitting Authority:

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
Title V Section  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-0114  
Fax: 850/921-9523

Compliance Authority:

City of Jacksonville  
Environmental Resource Management Department  
Environmental Quality Division  
Air Pollution Source Permitting Section  
117 West Duval Street, Suite 225  
Jacksonville, Florida 32202  
Telephone: 904/630-4900  
Fax: 904/630-3638

Title V Air Operation Permit Revision  
**PROPOSED Permit No.: 0310045-016-AV**

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**Permittee:**  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

**PROPOSED Permit No.:** 0310045-016-AV  
**Facility ID No.:** 0310045  
**SIC No.:** 49; 4911  
**Project:** Title V Air Operation Permit Revision

The subject of this permit is for the revision of the Title V Air Operation Permit, which includes the following changes:

- (1) Incorporation of air construction permit, No. 0310001-002-AC, for the Separation Technologies LLC's Separation Technologies, Inc. (STI) fly ash beneficiation processing operation, which is located adjacent/contiguous to the JEA's SJRPP and receives the fly ash from the JEA's SJRPP operation;
- (2) Incorporation of air construction permit, No. 0310045-014-AC/PSD-FL-010E, which allowed the JEA's SJRPP Units 1 and 2 to fire up to 30% petroleum coke;
- (3) Incorporation of air construction permit, No. 0310001-015-AC/PSD-FL-010G, which amended Table 6 – Part B, SJRPP: Materials Handling and Storage Operations. Specifically,
  - (a) Allow a change to the Rail Car Unloading – Rotary Dumper operation (EU 023a) within the Rotary Railcar Dumper Building (RRDB) at the JEA's SJRPP [specifically, allowed the removal of a baghouse associated with the four transfer points within the RRDB and continued the current practice of using wet suppression to control fugitive emissions of particulate matter when handling, loading and unloading materials; in addition, the RRDB is domed and mostly enclosed; and, the emissions units/points will be combined and designated as the “Rotary Railcar Dumper Building – Unloading and Transfer Points” (EU -023a)];
  - (b) Remove the PM/PM<sub>10</sub> limitations contained in Table 6 – Part B [PSD-FL-010C/PA-81-13, clerked on 07/29/99, which replaced Revised Tables 2 and 6, PSD-FL-010/PA-81-13, amended 10/28/1986], and assign a visible emissions limit of “5% opacity” to all operations controlled by a baghouse/fabric filter system;
  - (c) Establish that the “visible emissions limit” will now be used for “compliance purposes”; and,
  - (d) Establish the visible emissions performance testing frequency for the emissions units/points contained in Table 6 – Part B [PSD-FL-010(C)/PA-81-13, clerked on 07/29/99, which replaced Revised Tables 2 and 6, PSD-FL-010/PA-81-13, amended 10/28/1986];
- (4) Revise the excess emissions terms and conditions related to startups, shutdowns, and upsets/malfunctions of the JEA's NGS CFB Units 1 and 2 established in the AC permit No. 0310045-003-AC/PSD-FL-265 {see condition No. 26 [affects specific conditions (SCs) H.19. and H.21., 0310045-011-AV]};
- (5) Change the specific conditions related to compliance demonstration for SO<sub>2</sub> and NO<sub>x</sub> for the JEA's NGS Units Nos. 1 and 2, specifically remove the use of missing data substitution, which is acceptable for purposes for Acid Rain allowances, to avoid the conflict when determining the compliance average with the emission limit and the associated timeframe that was established in AC permit, No. 0310045-003-AC/PSD-FL-265 [see SCs Nos. 31.(a) and 32(a), respectively (affects SCs H.28.a. and H.29.a., respectively, 0310045-011-AV)];
- (6) In Appendix I-1, List of Insignificant Emissions Units and/or Activities: remove the qualifier “**Not Federally Enforceable**” from the listing of “VII. SJRPP Emergency Diesel Fire Pump”, which was placed in the appendix through the PROPOSED Determination and PROPOSED Title V Permit Renewal, No. 0310045-011-AV; add the “NGS By-Product Reclamation” operation; at JEA's NGS, add an “emergency” generator; in addition and for JEA's NGS, add two (2) black start diesel-fired 2,307 hp emergency generators (existing emissions units being removed and brought from the JEA's Kennedy Generating Station);
- (7) In Appendix U-1, List of Unregulated Emissions Units and/or Activities: add a 3,000 gallon diesel storage tank (an existing emissions unit being removed and brought from the JEA's Kennedy Generating Station); and,
- (8) Add the NGS's CFB Boilers [EUs -026 and -027 (EPA's ID: Nos. 2A and 1A, respectively)] to the Acid Rain Permit.
- (9) Specific Condition I.40. will become “Reserved” since the emissions unit -035 has been compliance tested (Unit 1 on 09/04/03 and Unit 2 on 09/16/03) and the Compliance Plan, Appendix CP-1, is no longer needed.

This facility is located at 4377 Heckshire Drive, Jacksonville, Duval County; UTM Coordinates: Zone 17, 446.90 km East and 3359.150 km North; Latitude: 30° 21' 52” North and Longitude: 81° 37' 25” West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.); Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214; the City of Jacksonville Ordinance Code (JOC), Title X, Chapter 376; and, the Jacksonville Environmental Protection Board (JEPB) Rule 2, Parts I thru VII and Parts IX thru XII. 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-5, TITLE V CONDITIONS (version dated 03/28/05)  
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**Renewal Effective Date:** January 1, 2004  
**Revision Effective Date:** (day 55 of EPA's review date)  
**Renewal Application Due Date:** July 5, 2008  
**Expiration Date:** December 31, 2008

---

Michael G. Cooke, Director  
Division of Air Resource Management

## **Section I. Facility Information.**

### **Subsection A. Facility Description.**

The JEA's Northside Generating Station (NGS) and St. Johns River Power Park (SJRPP) facilities and the Separation Technologies LLC's Separation Technologies, Inc. (STI) facility are considered to be a single air emission "facility" for air permitting purposes.

#### JEA's NGS and SJRPP:

These operations consist of 5 boilers, NGS existing Boiler No. 3, which is a pre-NSPS boiler with a nominal rating of 564 MW and fired by natural gas, landfill gas, No. 6 residual fuel oil, and used oil; Boilers Nos. 1 and 2 and Auxiliary Boiler No. 1 have been permanently shutdown; NGS CFB Boilers Nos. 1 and 2, which are two new coal, coal coated with latex, and petroleum coke fired circulating fluidized bed (CFB) boilers; SJRPP Boilers Nos. 1 and 2, which are two fossil fuel-fired steam generators (boilers) fired with pulverized coal, a blend of petroleum coke and coal, new No. 2 distillate fuel oil (startup and low-load operation), and "on-specification" used oil; and, four pre-NSPS distillate fuel oil fired combustion turbines with a nominal rating of 52.5 MWs each, NGS Nos. 3, 4, 5 and 6. Emissions from the NGS Boiler No. 3 are uncontrolled. Emissions from the NGS CTs Nos. 3, 4, 5 and 6, are controlled firing low sulfur fuel oil. Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce NO<sub>x</sub> emissions, limestone injection to reduce SO<sub>2</sub> emissions, fabric filter to reduce particulate matter (PM & PM<sub>10</sub>) emissions, while maximizing combustion efficiency and minimizing NO<sub>x</sub> formation to limit CO and VOC emissions. Emissions from the SJRPP Boilers Nos. 1 and 2 are controlled with an electrostatic precipitator, a limestone scrubber, and low-NO<sub>x</sub> burners. The SJRPP and NGS facilities also include coal, petroleum coke, limestone and fly ash handling activities, of which various control devices, control strategies, and control techniques are required.

The material handling and storage operations will process ash, limestone, coal, coal coated with latex, and petroleum coke to support the operation of CFB Boilers Nos. 1 and 2. Each materials handling and storage operation will employ one or more control strategies to limit emissions of particulate matter to meet specific emission limitations and/or visible emissions limits. The control strategies include the use of best operating/design practices, total or partial enclosures, conditioned materials, wet suppression, water sprays, and dust collection systems.

#### STI:

STI has constructed, owns and operates a new fly ash processing system on a portion of leased property at the JEA's SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the JEA's SJRPP fly ash leaving a saleable product. As a result, environmental benefits will include a 255,000 ton reduction in the fly ash currently sent to landfill by the JEA's SJRPP each year and an overall reduction in the ammonia releases with the recovery and subsequent recycle of ammonia removed from the fly ash.

The new fly ash processing system will include the addition of two fly ash receiving bins, a carbon separation unit, a clean-up vacuum, a fly ash surge bin, a mineral additive storage bin, and a gas-fired dryer. The particulate emissions generated from handling of the fly ash are collected from each source using pulse jet fabric filters. STI's triboelectric carbon separation technology partitions fly ash into mineral-rich and carbon-rich fractions. The mineral-rich fly ash can then be sold as a usable product. The carbon-rich fly ash is returned to the JEA's SJRPP fly ash storage silos for eventual disposal at the onsite landfill.

The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using STI's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using STI's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, STI installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

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

Based on the Title V Air Operation Permit Renewal application received June 20, 2003, this facility is a major source of hazardous air pollutants (HAPs).

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

| <b>E.U. ID No.</b> | <b>Brief Description</b>   |
|--------------------|--|
| -003               | NGS: Boiler No. 3  |
| -006               | NGS: Combustion Turbine No. 3  |
| -007               | NGS: Combustion Turbine No. 4  |
| -008               | NGS: Combustion Turbine No. 5  |
| -009               | NGS: Combustion Turbine No. 6  |
| -016               | SJRPP: Boiler No. 1  |
| -017               | SJRPP: Boiler No. 2  |
| -022               | SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations    |
| -022a              | Gypsum Dewatering Building   |
| -022a              | Gypsum Storage Enclosure   |
| -022j              | Gypsum Truck Loadout   |
| -022j              | Fly Ash Loadout for Silo 1A (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 1B (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 2A (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 2B (metal structure)                            |
| -022k              | Solid Waste Disposal Area  |
| -022l              | Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)         |
| -022l              | Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure) |
| -022l              | Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure) |
| -022m              | Wet Fly Ash Loadout 1A/1B  |
| -022m              | Bottom Ash Loadout 1A/1B   |
| -022m              | Wet Fly Ash Loadout 2A/2B  |
| -022m              | Bottom Ash Loadout 2A/2B   |
| -022n              | Unpaved Road, By-Product Transport                                       |
| -023               | SJRPP: Fuel and Limestone Handling and Storage Operations                |
| -023a              | Rotary Railcar Dumper Building – Unloader and Transfer Points            |
| -023b              | Conveyor C-3 Tunnel Ventilation (6,400 cfm)                              |

|       |   |
|-------|---|
| -023b | Conveyor C-3 Tunnel Ventilation (6,400 cfm)                   |
| -023b | Conveyor C-3 Tunnel Ventilation (21,600 cfm)                  |
| -023c | Shiphold Operations   |
| -023d | Ship Unloader Hopper and Spillage Collector Transfers         |
| -023d | Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor      |
| -023e | Fuel Transfer Building (DC-2)                                 |
| -023e | Transfer Stations Nos. 1 thru 7                               |
| -023e | Transfer Point 9GC-04 to 9GC-05                               |
| -023f | Stacker/Reclaimer (Stacker Mode)                              |
| -023f | Stacker   |
| -023f | Reclaimer   |
| -023g | Petroleum Coke Reclaimer System (PC-1)                        |
| -023g | Emergency Reclaim Hoppers - Loadout                           |
| -023j | Limestone Truck Load Out & Transfer                           |
| -023k | Limestone Storage Pile #1 - Existing                          |
| -023k | Limestone Storage Pile #2 - Fuel Yard                         |
| -023k | Limestone Loadout   |
| -023k | Coal Pile   |
| -023k | Petroleum Coke Pile   |
| -023l | Limestone Reclaim Hopper with Fabric Filter (3DC-01)          |
| -023l | Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)    |
| -023l | Quick Lime Silo with Fabric Filter (used for water treatment) |
| -023l | Fuel Handling Building with Fabric Filter (DC-3)              |
| -023l | Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)           |
| -023l | Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)           |
| -024  | SJRPP: Cooling Towers (2)                                     |
| -026  | NGS: Circulating Fluidized Bed Boiler No. 2                   |
| -027  | NGS: Circulating Fluidized Bed Boiler No. 1                   |
| -028  | NGS: Materials Handling and Storage Operations                |
| -028  | Belt Conveyor No. 1   |
| -028a | Vessel Hold, Vessel Unloader and Spillage Conveyor            |
| -028c | Transfer Building 1   |
| -028d | Transfer Building 5 and Limestone Loadout Chute               |
| -028g | Transfer Building 2   |
| -028h | Fuel Storage Domes A & B (includes Fuel Stackers/Reclaimers)  |
| -028i | Transfer Building 3   |
| -028o | Plant Transfer Building                                       |
| -028p | Limestone Storage Pile and Limestone Reclaim Hoppers          |
| -028q | Transfer Building 4   |
| -028v | Transfer Building 6   |
| -029  | NGS: Crusher House Building Baghouse Exhaust                  |
| -031  | NGS: Fuel Silos Dust Collectors                               |
| -033  | NGS: Limestone Dryer/Mill Building                            |
| -034  | NGS: Limestone Prep Building Dust Collectors                  |
| -035  | NGS: Limestone Silos Bin Vent Filters                         |
| -036  | NGS: Fly Ash Transport Blower Discharge                       |

|      |   |
|------|---|
| -037 | NGS: Fly Ash Silos Bin Vents            |
| -038 | NGS: Bed Ash Silos Bin Vents            |
| -042 | NGS: AQCS Pebble Lime Silo              |
| -044 | STI: Separator A Filter - Receiver Vent |
| -045 | STI: Separator B Filter - Receiver Vent |
| -046 | STI: Separator Dust Collector Vent      |
| -047 | STI: Clean-up Vacuum Vent               |
| -048 | STI: Fly Ash Surge Bin Vent             |
| -049 | STI: Mineral Additive Storage Bin Vent  |
| -050 | STI: Gas-Fired Dryer Stack              |
| -052 | NGS: Fly Ash Slurry Mix System Vents    |
| -052 | NGS: Bed Ash Slurry Mix System Vents    |
| -053 | NGS: Bed Ash Surge Hopper Bin Vents     |

Notes:

NGS: JEA's Northside Generating Station

SJRPP: JEA's St. Johns River Power Park

STI: Separation Technologies LLC's Separation Technologies, Inc.

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

***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:

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

Appendix H-1: Permit History

Statement of Basis

These documents are on file with the permitting authority:

PSD-FL-010(C)/PA-81-13 issued 07/29/1999.

AC Permit , No. 0310001-002-AC, issued 06/15/2000.

AC Permit, No. 0310045-007-AC/PSD-FL-265A, issued 05/23/2001.

Title V Permit Renewal issued 12/29/2003, and effective 01/01/2004 (0310045-011-AV).

Application for an AC Permit received 03/18/2005 (0310045-015-AC/PSD-FL-010(G)/PSD-FL-265(C)).

Application for Title V Permit Revision received 03/18/2005 (0310045-016-AV).

Supplemental request from Mr. Bert Gianazza received on 04/08/2005.

E-mail from Mr. Bert Gianazza received 04/25/2005.

E-mail with attachment from Mr. Bruce Kofler received 04/21/2005.

FINAL Order Modifying Conditions of Certification dated September 29, 2005 (PA 81-13L)

Supplemental request from Mr. James M. Chansler received on 08/29/2005.

Supplemental information received 10/14/2005.

E-mail from Mr. Bert Gianazza received 10/28/2005.

Supplemental request from Mr. Bert Gianazza received 12/01/2005.

Supplemental request from Mr. Bert Gianazza received 02/24/2006.

E-mail from Mr. Richard Robinson received 04/13/2006, with an accompanying letter from Mr. Ebenezer Gujjarlapudi, dated April 11, 2006.

E-mail from Mr. Bert Gianazza received 04/24/2006.

E-mail from Mr. Bert Gianazza received 04/25/2006.

E-mail from Mr. Bert Gianazza received 04/25/2006.



## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
  2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.; and, Jacksonville Environmental Protection Board (JEPB) Rule 2, Part IX]
  3. **Not federally enforceable.** Odor Nuisance. Pursuant to JOC Chapter 376, any facility that causes or contributes to the emission of objectionable odors which results in the City of Jacksonville Environmental Resource Management Department's (ERMD) Environmental Quality Division (EQD) receiving and validating complaints from five (5) or more different households within a 90 day period and can be cited for objectionable odors.  
[JOC Chapter 376]
  4. 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 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.; and, Part X, Rule 2.1001, JEPB]
  5. Prevention of Accidental Releases (Section 112(r) of CAA).
    - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:  

RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, MD 20703-1515  
Telephone: 301/429-5018
- and,
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]
6. 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.]

7. 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.]

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

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

[Rule 62-296.320(1)(a), F.A.C.; and, Part X, Rule 2.1001, JEPB]

9. Unconfined Particulate Emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: chemical or water application to unpaved roads or unpaved yard areas; paving and maintenance of roads, parking areas and plant grounds; landscaping and planting of vegetation; regular mowing of grass and care of vegetation; limiting access to plant property by unnecessary vehicles; storage of bagged chemical products in weather-tight buildings (except for fertilizer); prompt cleanup of spilled powdered chemical products; confining abrasive blasting where possible; and other techniques, as necessary. Also, for the solid waste disposal area, wetting agents shall be applied.

[Rule 62-296.320(4)(c)2., F.A.C.; PSD-FL-010 and PA 81-13; and, 0310045-003-AC/PSD-FL-265]

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. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No: 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-5, TITLE V CONDITIONS)}

12. The permittee shall submit all compliance related notifications and reports required of this permit to the ERMD-EQD office at the following address:

City of Jacksonville  
Environmental Resource Management Department  
Environmental Quality Division  
Air Pollution Source Permitting Section  
117 West Duval Street, Suite 225  
Jacksonville, Florida 32202  
Telephone: 904/630-4900  
Fax: 904/630-3638

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

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

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.  
[Rule 62-213.420(4), F.A.C.]

**Section III. Emissions Units.**

**Subsection A. This section addresses the following emissions unit.**

| E.U. ID No. | Brief Description |
|-------------|-------------------|
| -003        | NGS Boiler No. 3  |

NGS Boiler No. 3 is a fossil fuel-fired steam generator with a nominal nameplate rating of 563.7 megawatts (electric). The emissions unit will be allowed to fire new No. 6 residual fuel oil, natural gas, LP gas, “on-specification” used oil, landfill gas, and a blend of fuel oil and natural gas and/or landfill gas. The maximum heat inputs are (1) 5033 MMBtu per hour when firing fuel oil; (2) 5260 MMBtu per hour when firing natural gas or natural/landfill gases; or (3) 5033 - 5260 MMBtu per hour when firing a combination of fuel oil and natural gas or natural/landfill gases, respectively. LP gas is used as the igniter fuel when natural gas is not available. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity. Pollutant emissions from this emissions unit are uncontrolled. The combustion gases exhaust through two stacks of 300 feet. NGS Boiler No. 3 began commercial operation in 1977.

{Permitting Note(s): This emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; Rule 62-296.702, F.A.C., Fossil Fuel Steam Generators; AC16-85951; and, 0310045-012-AC.}

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

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

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

| EU ID No.        | MMBtu/hr Heat Input | Fuel Type                           |
|------------------|---------------------|-------------------------------------|
| NGS Boiler No. 3 | 5260                | Natural Gas                         |
|                  | 5260                | Landfill Gas                        |
|                  | 5033                | New No. 6 Fuel Oil                  |
|                  | 5033                | “On-specification” Used Oil         |
|                  | 5033-5260           | Fuel Oil and Natural Gas            |
|                  | 5033-5260           | Fuel Oil and Natural/Landfill Gases |

Note: When a blend of fuel oil and natural and/or landfill gas is fired, the heat input is prorated based on the percent heat input of each fuel.

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; and, AO16-194743, AO16-178094 and AO16-207528]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific conditions A.26. and A.27. [Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation – Fuels.**

- a. The only fuels allowed to be burned are natural gas, LP gas, landfill gas, new No. 6 fuel oil, “on-specification” used oil, and a blend of fuel oil and natural gas and/or landfill gas. “On-specification” used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures. LP gas is used as the igniter fuel when natural gas is not available.
- b. Reserved.

[Rule 62-213.410, F.A.C.; 40 CFR 271.20(e)(3); AO16-194743, AO16-178094 and AO16-207528; AC16-85951 and BACT; applicant request dated June 14, 1996; and, 0310045-012-AC]

- A.4. Hours of Operation.** The emissions units may operate continuously, i.e., 8,760 hours/year.  
[Rule 62-210.200(PTE), F.A.C.; and, AO16-194743, AO16-178094 and AO16-207528]

**Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. A.5., A.7. thru A.10., and A.12, are based on the specified averaging time of the applicable test method.}

- A.5. Visible Emissions.** For Boiler No. 3, visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions limit shall compliance test for visible emissions annually and as otherwise required by Chapter 62-297, F.A.C.  
[Rules 62-296.405(1)(a) and 62-296.702(2)(b), F.A.C.; Part X, Rule 2.1001, JEPB; and, AO16-194743 and AO16-207528]

- A.6. Reserved.

- A.7. 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.; and, Part III, Rule 2.301, JEPB]

- A.8. Particulate Matter.** Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input , as measured by applicable compliance methods. See specific condition **A.22**.  
[Rules 62-296.405(1)(b) and 62-296.702(2)(a), F.A.C.; and, Part X, Rule 2.1001, JEPB]

- A.9. Particulate Matter – Soot Blowing and Load Change.** Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.  
[Rule 62-210.700(3), F.A.C.; and, Part III, Rule 2.301, JEPB]

- A.10. Sulfur Dioxide.** SO<sub>2</sub> emissions shall not exceed 1.98 pounds per million Btu heat input , as measured by applicable compliance methods. Any calculations or methods used to demonstrate compliance shall be based on the total heat input from all fossil fuels, including natural gas, and the sulfur from all fuels fired. See specific conditions **A.17.**, **A.23.** and **A.24**.  
[Rules 62-213.440 and 62-296.405(1)(c)1.a., F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.11. Sulfur Dioxide – Sulfur Content. For Boiler No. 3, the sulfur content of the as-fired No. 6 fuel oil shall not exceed 1.8 percent, by weight, if the SO<sub>2</sub> continuous emissions monitor system is temporarily inoperative. See specific conditions A.17. and A.24.

[Rule 62-296.405(1)(e)3., F.A.C.; Part X, Rule 2.1001, JEPB; and, AO16-178094 and AO16-207528]

A.12. Nitrogen Oxides (expressed as NO<sub>2</sub>). For Boiler No. 3, nitrogen oxides shall not exceed 0.30 lb/MMBtu heat input, as measured by applicable compliance methods. See specific condition A.18.

[Rule 62-296.405(1)(d)1., F.A.C.; Part X, Rule 2.1001, JEPB; and, AO16-207528]

A.13. “On-Specification” Used Oil. The burning of “on-specification” used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only “on-specification” used oil generated by the JEA in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired in these emissions units shall not exceed 1,000,000 gallons per calendar year. “On-specification” used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered “off-specification” oil and shall not be fired. See specific conditions A.34., A.38. and A.39.

| <u>CONSTITUENT / PROPERTY</u> * | <u>ALLOWABLE LEVEL</u> |
|---------------------------------|------------------------|
| Arsenic                         | 5 ppm maximum          |
| Cadmium                         | 2 ppm maximum          |
| Chromium                        | 10 ppm maximum         |
| Lead                            | 100 ppm maximum        |
| Total Halogens                  | 1000 ppm maximum       |
| Flash Point                     | 100 °F minimum         |
| PCBs                            | less than 50 ppm       |

\* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11]

### Excess Emissions

A.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.; and, Part III, Rule 2.301, JEPB]

A.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.; and, Part III, Rule 2.301, JEPB]

A.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.; and, Part III, Rule 2.301, JEPB]

### Monitoring of Operations

#### A.17. Sulfur Dioxide.

- a. For Boiler No. 3, the permittee elected to monitor emissions using a SO<sub>2</sub> continuous emissions monitoring system (CEMS). This procedure is allowed because the emissions units do not have an operating flue gas desulfurization device. See specific conditions **A.10.**, **A.11.**, **A.23.** and **A.24.**
- b. Reserved.
- c. The CEMS shall be calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and demonstrated based on a 24-hour daily average. A Relative Accuracy Testing Audit (RATA) shall be performed no less than annually.
- d. In the event the CEMS becomes temporarily inoperable or interrupted, the fuels and the maximum fuel oil to natural gas firing ratio that can be used is that which was last used to demonstrate compliance prior to the loss of the CEMS, or the emissions units shall fuel switch and be fired with a fuel oil containing a maximum sulfur content of 1.8%, by weight, or less.
- e. In the event of natural gas disruption and the emissions units have to fire 100% fuel oil, the emissions units shall be fired with a fuel oil containing a maximum sulfur content of 1.8%, by weight, or less. [Rules 62-213.440, 62-204.800, 62-296.405(1)(c)3., and 62-296.405(1)(f)1.b., F.A.C.; and, AO16-194743 and AO16-207528]

#### A.18. Nitrogen Oxides. For Boiler No. 3, compliance with the nitrogen oxides (expressed as NO<sub>2</sub>) limit of 0.30 lb/MMBtu shall be demonstrated by the following:

- a. Through the use of a CEMS installed, calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 60, Appendix F, and 40 CFR 75, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and demonstrated based on a 30-day rolling average.
- b. The performance specifications, location of the monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR 51, Appendix P, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and 40 CFR 60, Appendix B, adopted by reference in Rule 62-204.800, F.A.C. [Rules 62-296.405(1)(e)4. and 62-296.405(1)(f), F.A.C.; Part X, Rule 2.1001, JEPB; and, 40 CFR 60 & 75]

#### A.19. 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**

#### **A.20. Visible emissions.**

a. For Boiler No. 3, the test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C.

b. Reserved.

c. The visible emissions test(s) required shall be conducted simultaneously with particulate matter testing and soot blowing and non-soot blowing operating modes.

d. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.405(1)(e)1. & 5., F.A.C.; Part X, Rule 2.1001, JEPB; and, AO16-194743, AO16-178094 and AO16-207528]

A.21. 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.; and, Part XI, Rule 2.1101, JEPB]

#### **A.22. Particulate Matter.**

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

b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rules 62-213.440, 62-296.405(1)(e)2. & 5., and 62-297.401, F.A.C.; Part X, Rule 2.1001, JEPB and, Part XI, Rule 2.1101, JEPB]



A.23. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards.

a. For Boiler No. 3, the permittee shall demonstrate compliance with the 1.98 lbs/MMBtu heat input standard by either using the above referenced EPA test methods, including if used during a RATA for the SO<sub>2</sub> CEMS, or, as an alternate sampling procedure authorized by permit, a sulfur analyses of the as-fired fuel oils and gaseous fuels while compliance testing for particulate matter and visible emissions. See specific conditions **A.10., A.11. and A.24.**

b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

c. For monitoring purposes and in lieu of fuel sampling and analysis, the permittee shall operate an SO<sub>2</sub> CEMs. A RATA shall be conducted at least annually in accordance with 40 CFR 75.

[Rules 62-213.440, 62-296.405(1)(e)3. & 5., 62-296.405(1)(f)1.b. and 62-297.401, F.A.C.; Part V, Rule 2.501, JEPB; Part X, Rule 2.1001, JEPB; Part XI, Rule 2.1101, JEPB; and, AO16-194743, AO16-178094 and AO16-207528]

A.24. For Boiler No. 3, the following fuel sampling and analysis protocol shall be used if the permittee opts to demonstrate compliance with the sulfur dioxide standard using an alternate sampling procedure authorized by permit and conducted while performing a compliance test for particulate matter and visible emissions:

a. Determine and record the as-fired fuel sulfur content, percent by weight, (1) for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, to analyze a representative sample of the blended fuel oil following each fuel delivery, (2) for gaseous fuels using ASTM D 1072-80, or the latest edition (the permittee can default to the maximum sulfur content guaranteed by the supplier).

b. Record hourly fuel totalizer readings with calculated hourly feed rates for each fuel fired, the ratio of fuel oil to gas if co-fired, the density of each fuel, and the percent sulfur content, by weight, of each fuel.

c. The analyses of the No. 6 fuel oil, as received from the supplier, shall include the following:

(1). Density (ASTM D 1298-80 or the latest edition).

(2). Calorific heat value in Btu per pound (ASTM D 240-76 or the latest edition).

d. The analyses of the gaseous fuels, as received from the supplier, shall include the following:

(1). Density (ASTM D1137-53, ASTM D1945-64, or the latest edition).

(2). Calorific heat value in Btu per cubic foot (ASTM D1137-53, ASTM D1945-64, ASTM D1826-77, or the latest edition).

e. Utilize the above information in a., b., c. and d. to calculate the SO<sub>2</sub> emission rate.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; AO16-194743, AO16-178094 and AO16-207528; and, 40 CFR 60. Appendix A]

A.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.; and, Part XI, Rule 2.1101, JEPB]

A.26. Operating Rate During Testing. Testing of emissions shall be conducted with each 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.; and, Part XI, Rule 2.1101, JEPB]

A.27. Operating Conditions During Testing – Particulate Matter and Visible Emissions. Compliance tests for particulate matter and visible emissions during soot blowing and steady-state (non-soot blowing) operations shall be conducted at least once, annually, if liquid fuel is fired for more than 400 hours. All visible emissions tests shall be conducted concurrently with the particulate matter emissions tests. Testing shall be conducted as follows:

a. 100% Fuel Oil Firing. Particulate matter and visible emissions tests during soot blowing and steady-state operations shall be performed on each emissions unit while firing fuel oil containing a sulfur content equal to or less than 1.8%, by weight, except that such test shall not be required to be performed during any federal fiscal year that testing is performed in accordance with specific condition A.27.b.

b. Co-firing Fuel Oil with Gases. If fuel oil containing a sulfur content greater than 1.8%, by weight, is co-fired with gases (i.e., natural gas, landfill gas, LP gas), then particulate matter and visible emissions tests during soot blowing and steady-state operations shall be performed as soon as practicable, but in no event more than 60 days from the day of first firing the higher percent sulfur fuel oil, while co-firing such fuel oil with the proportion of gas required to maintain SO<sub>2</sub> emissions between 90 to 100% of the SO<sub>2</sub> emissions limitation (1.62 to 1.98 lbs/MMBtu heat input, respectively). Following successful completion of such particulate matter and visible emissions testing, further particulate matter and visible emissions testing shall not be required during the remaining federal fiscal year unless fuel oil is fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests. If fuel oil is co-fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests for particulate matter and visible emissions, then additional particulate matter and visible emissions tests shall be performed as described above and as soon as practicable, but in no event more than 60 days from the day of first firing the higher sulfur

percent fuel oil. Following successful completion of such particulate matter and visible emissions testing, further particulate matter and visible emissions testing shall not be required during the remaining federal fiscal year unless fuel oil is fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests. If any additional particulate matter and visible emissions tests are imposed after completion of any required annual compliance tests, then the frequency testing base date shall be reset to 12-months after the date of completion of the last tests.

[Rules 62-4.070(3), 62-213.440, 62-296.405(1)(c)3. and 62-297.310(7)(a)9., F.A.C.; and, Part XI, Rule 2.1101, JEPB]

**A.28. 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.; and, Part XI, Rule 2.1101, JEPB]

**A.29. 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).

(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.; and, Part XI, Rule 2.1101, JEPB]

**A.30. 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, and Part XI, Rule 2.1101, JEPB.

[Rule 62-297.310(6), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

A.31. 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 ERMD-EQD, 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 ERMD-EQD, 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 ERMD-EQD.

(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.; Part XI, Rule 2.1101, JEPB; AO16-194743, AO16-178094 and AO16-207528; and, SIP approved]

A.32. 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.; and, Part XI, Rule 2.1101, JEPB]

A.33. 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.; Part XI, Rule 2.1101, JEPB; and, ASP Number 97-B-01.]

A.34. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch delivered for firing. See specific conditions A.13., A.38. and A.39.

[Rules 62-4.070 and 62-213.440; and, 40 CFR 279]

### **Recordkeeping and Reporting Requirements**

A.35. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

[Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.36. For each calendar quarter, submit to the ERMD-EQD a written report of emissions in excess of emission limiting standards, as set forth in Rule 62-296.405(1), F.A.C., and any continuous emissions monitoring system outages. The nature and cause of the excess emissions shall be explained. The report shall be submitted within 30 calendar days following the last day of the quarterly period. 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.; Part X, Rule 2.1001, JEPB; and, AO16-207528]

A.37. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
- (b) The required test report shall be filed with the ERMD-EQD 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 ERMD-EQD 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.; Part XI, Rule 2.1101, JEPB; and, AO16-214193, AO16-214194 and AO16-214195]

A.38. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See specific conditions A.13., A.34. and A.39.

[Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 279.61 and 761.20(e)]

A.39. The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Boiler No. 3 during the calendar year. See specific conditions A.13., A.34. and A.38.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

A.40. When the NGS boiler No. 3 is shut down, it shall be recorded in the boiler's operating log book.

[Rule 62-213.440, F.A.C.; and, AC16-85951]

A.41. Reserved.

[0310045-012-AC]

A.42. Fuel Consumption Records. The owner or operator shall create and maintain for each emissions unit hourly records of the amount of each fuel fired, the ratio of fuel oil to gas if co-fired, and the heating value and sulfur content, percent by weight, of each fuel fired. These records must be of sufficient detail to be able to identify when additional particulate matter and visible emissions testing is required pursuant to specific condition A.27.b., and, when applicable, demonstrate compliance with the requirements of specific condition A.24.e.

[Rules 62-4.070(3), 62-213.410, 62-213.440 and 62-296.405(1)(c)3., F.A.C.]

### Miscellaneous

A.43. For Boiler No. 3, an Operation and Maintenance Plan is attached and a part of this permit pursuant to Rule 62-296.700(6), F.A.C. All activities shall be performed as scheduled and recorded data made available to the ERMD-EQD upon request. Records shall be maintained on file for a minimum of five (5) years.

[Rule 62-296.700(6), F.A.C.; and, Part X, Rule 2.1001, JEPB]

**Section III. Emissions Units.**

**Subsection B. Reserved.**



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

#### Subsection C. This section addresses the following emissions units.

| E.U. ID No. | Brief Description             |
|-------------|-------------------------------|
| -006        | NGS: Combustion Turbine No. 3 |
| -007        | NGS: Combustion Turbine No. 4 |
| -008        | NGS: Combustion Turbine No. 5 |
| -009        | NGS: Combustion Turbine No. 6 |

Emissions units numbers 003, 004, 005 and 006 are combustion turbines (CTs) manufactured by General Electric (Model MS 7000) and are designated as CTs No. 3, No. 4, No. 5 and No. 6, respectively. Each CT has a maximum heat input from new No. 2 distillate fuel oil of 901.0 MMBtu (LHV: lower heating value). The No. 2 fuel oil has a maximum sulfur content of 0.5%, by weight. These CTs are used as peaking units during peak demand times, during emergencies, and during controls testing, to run a nominal 56.2 MW generator (each). Emissions from the CTs are uncontrolled. Direct water spray fogger devices were installed in the inlet ducts of each CT to provide adiabatic inlet air cooling that increases turbine output and decreases heat rate. A group of exhaust stacks serve the CTs. CT No. 3 began commercial service in February 1975, No. 4 in January 1975, No. 5 in February 1974, and, No. 6 in December 1974.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

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

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

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

| EU ID No. | MMBtu/hr Heat Input | Fuel Type          |
|-----------|---------------------|--------------------|
| -006      | 901.0 (LHV)         | New No. 2 Fuel Oil |
| -007      | 901.0 (LHV)         | New No. 2 Fuel Oil |
| -008      | 901.0 (LHV)         | New No. 2 Fuel Oil |
| -009      | 901.0 (LHV)         | New No. 2 Fuel Oil |

{Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO16-173886]

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.13.

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

C.3. Methods of Operation – Fuels. Only new No. 2 distillate fuel oil shall be fired in the combustion turbines.

[Rule 62-213.410(1), F.A.C.; and, AO16-173886]

C.4. Hours of Operation.

a. These CTs may operate continuously, i.e., 8,760 hours/year.

b. Each CT shall not exceed 399 hrs/yr operation while using foggers.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO16-173886; and, 0310045-006-AC]

### **Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging time for Specific Condition No. C.5. is based on the specified averaging time of the applicable test method.}

C.5. Visible Emissions. Visible emissions from each combustion turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO16-173886]

C.6. Sulfur Dioxide – Sulfur Content. The sulfur content of the new No. 2 distillate fuel oil shall not exceed 0.5 percent, by weight. See specific conditions C.9. and C.12.

[Requested in initial Title V permit application dated June 14, 1996; and, AO16-173886]

### **Excess Emissions**

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

[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

### **Monitoring of Operations**

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis for each fuel delivery. See specific conditions C.6. and C.12.

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

**C.10. Determination of Process Variables.**

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

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

[Rule 62-297.310(5), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

**Test Methods and Procedures**

C.11. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

C.12. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.

[Rules 62-213.440 and 62-297.440, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

C.13. **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.

{Permitting Note: Attached (see "Attachment NGS: CT Heat Input Nominal Values") is a chart of the "Base Load MW" vs. "Temperature" to aid in defining "full load" for visible emissions testing purposes, since the manufacturer's curves are not available. The heat input numbers are only nominal values.}

[Rules 62-297.310(2), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

C.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

[Rule 62-297.310(4)(a)2.c., F.A.C.; and, Part XI, Rule 2.1101, JEPB]

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

(a) General Compliance Testing.

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

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

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

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

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

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

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

C.16. Visible Emissions Testing – Biennial. By this permit, biennial (odd years) emissions compliance testing for visible emissions is required for each emissions unit, but is not required for those emissions units burning No. 2 fuel oil for less than 400 hours during the previous even year or the current odd year in question.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.; Part XI, Rule 2.1101, JEPB; and, AO16-173880]

**Recordkeeping and Reporting Requirements**

C.17. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

[Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.18. Test Reports.

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

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

[Rule 62-297.310(8), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

C.19. Records of No. 2 fuel oil consumption shall be maintained and made available to the ERMD-EQD upon request.

[Rule 62-213.440, F.A.C.; and, AO16-173886]

C.20. Foggers. A log book shall be maintained to show when each CT is using a fogger device and shall provide the beginning and ending times (hour and minute) of its use. See Specific Condition **C.4.b**.

[Rule 62-4.070(3), F.A.C.]

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

**Subsection D. This section addresses the following emissions units.**

| <b>E.U. ID No.</b> | <b>Brief Description</b> |
|--------------------|--------------------------|
| -016               | SJRPP Boiler No. 1       |
| -017               | SJRPP Boiler No. 2       |

SJRPP Boilers Nos. 1 and 2 are fossil fuel-fired steam generators, each having a nominal nameplate rating of 679.6 megawatts (electric). The emissions units are allowed to fire pulverized coal, a blend of petroleum coke and coal, new No. 2 distillate fuel oil (startup and low-load operation), and “on-specification” used oil. The maximum heat input to each emissions unit is 6,144 million Btu per hour. SJRPP Boilers Nos. 1 and 2 are dry bottom wall-fired boilers and will use an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulfurization (FGD) unit to control sulfur dioxide, low NO<sub>x</sub> burners and low excess-air firing to control nitrogen oxides, and good combustion to control carbon monoxide. Each boiler exhausts through its own stack (640 feet above grade). SJRPP Boiler No. 1 began commercial operation in December 1986. SJRPP Boiler No. 2 began commercial operation in March 1988.

{Permitting Note(s): The emissions units are regulated under Acid Rain, Phase II and Phase I; NSPS – 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-010; PSD-FL-010, amendment dated 10/28/1986; PSD-FL-010(A, B, C & D); 0310045-012-AC/PSD-FL-010E; and, 0310045-014-AC/PSD-FL-010F]; Siting’s PA 81-13: Conditions of Certification; PA 81-13L; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated May 7, 1981; and, Compliance Assurance Monitoring (CAM), adopted and incorporated in Rule 62-204.800, F.A.C.}

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

{Permitting Note: In addition to the requirements below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

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

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

| <b>Emissions Unit No.</b> | <b>MMBtu/hr Heat Input</b> |
|---------------------------|----------------------------|
| -016                      | 6,144                      |
| -017                      | 6,144                      |

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; PSD-FL-010; Part III, Rule 2.301, JEPB; and, PA 81-13]

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition D.46.

[Rule 62-297.310(2), F.A.C.; and, Part XI, Rule 2.1001, JEPB]

**D.3. Methods of Operation.**

- a. The only fuels allowed to be fired are coal, a coal blend with a maximum of 30 percent petroleum coke (by weight), new No. 2 distillate fuel oil, and "on-specification" used oil. See specific conditions **D.17., D.64., D.65., D.66. and D.67.**
- b. The new No. 2 fuel oil shall be used for startup and low load operation.
- c. The maximum weight of petroleum coke burned shall not exceed 150,000 pounds per hour, based on a 30-day rolling average using production information for the amount of coal and petcoke metered from the coal storage bins to the boilers. See specific conditions **D.65., D.66. and D.67.**
- d. "On-specification" used oil will be generally fired as a blend with the No. 2 fuel oil. "On-specification" used oil containing PCBs above the detectable level of 2 ppm shall not be used for startup or shutdown. "On-specification" used oil containing PCBs between 2 and 49 ppm can only be fired when the emissions unit is at normal operating temperatures.
- e. Either coal, a blend of coal and petroleum coke, or fuel oil shall not be fired in the emissions units unless both electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR 60, Subpart Da.
- f. No fraction of the flue gas shall be allowed to bypass the limestone flue gas desulfurization (FGD) system to reheat the gasses exiting from the FGD system, if the bypass will cause overall SO<sub>2</sub> removal efficiency less than 90 percent or as otherwise provided in 40 CFR 60, Subpart Da. The percentage and amount of flue gas bypassing the FGD system shall be documented.
- g. The permittee shall not operate its Southside, Northside, or Kennedy Generating Station in such a manner as to cause violation of ambient air quality standards for SO<sub>2</sub> when SJRPP is operating. [Rule 62-213.410, F.A.C.; PSD-FL-010; 0310045-014-AC/PSD-FL-010F; PA 81-13L; PSD-FL-010(A & B); 40 CFR 761.20(e); and, requested by the applicant in the initial Title V permit application received June 14, 1996]

**D.4. Hours of Operation.** These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), F.A.C.; Part III, Rule 2.301, JEPB; PSD-FL-010; and, PA 81-13]

**Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. D.5., D.6., D.9. thru D.12., and D.14 thru D.16., are based on the specified averaging time of the applicable test method.}

**D.5.** Revised Table 6 - Part C, SJRPP, is incorporated by reference (attached) for SJRPP Boilers 1 and 2 (EU-016 and EU-017, respectively).

[PSD-FL-010, amendment dated October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

D.6. Particulate Matter. No owner or operator shall cause to be discharged into the atmosphere from any emissions unit any gases which contain particulate matter in excess of:

- (1) 0.03 lb/million Btu heat input derived from the combustion of solid or liquid fuels (coal, a blend of coal and petroleum coke, or fuel oil);
  - (2) 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel (coal or a blend of coal and petroleum coke), and
  - (3) 30 percent of potential combustion concentration (70 percent reduction) when combusting liquid fuel.
- (4) Particulate matter emissions shall be controlled with an electrostatic precipitator.

[40 CFR 60.42a(a)(1), (2) & (3); PSD-FL-010 and BACT; PA 81-13; and, PSD-FL-010(A & B)]

D.7. Ash Content.

- a. The maximum ash content of the coal is 18%, by weight.
  - b. The maximum ash content of the No. 2 fuel oil is 0.01%, by weight.
- [PSD-FL-010; and, PA 81-13]

D.8. Visible Emissions. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42a(b); and, PA 81-13]

D.9. Sulfur Dioxide – Coal Only. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts solid fuel or solid-derived fuel any gases which contain sulfur dioxide in excess of:

- (1) 1.20 lb/million Btu heat input, maximum two-hour average, and 0.76 lb/MMBtu heat input (90% reduction of the potential combustion concentration), 30-day rolling average; or
- (2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/million Btu heat input.
- (3) 100 percent of the potential combustion concentration (zero percent reduction), when emissions are less than 0.20 lb/million Btu heat input.
- (4) SO<sub>2</sub> emissions shall be controlled with a lime/limestone flue gas desulfurization system on each boiler.

[40 CFR 60.43a(a)(1), (2) & (3); PSD-FL-010 and BACT; and, PA 81-13]



**D.10. Sulfur Dioxide – Coal and Petroleum Coke Blends.**

- a. When coals with a sulfur content up to or equal to 2%, by weight, are co-fired with petroleum coke, the SO<sub>2</sub> emissions shall not exceed 0.53 lb/MMBtu heat input and a minimum of 79% reduction shall be achieved in the flue gas desulfurization system.
- b. When coals with a sulfur content between 2 and 3.63%, by weight, are co-fired with petroleum coke, the SO<sub>2</sub> emission limitation shall be based on the following formula:

$$\text{SO}_2 \text{ emission limit (lb/MMBtu)} = (0.2 \times C/100) + 0.4$$

where: C = percent of coal co-fired on a heat input basis.

Please note that C is on a heat input basis and not on a weight input basis, so appropriate conversions should be used.

- c. When coals with a sulfur content greater than 3.63%, by weight, are co-fired with petroleum coke, the SO<sub>2</sub> emissions shall not exceed the following formula:

$$\text{SO}_2 \text{ (lb/MMBtu)} = (0.1653 \times C \times S - 0.4 \times C + 40) \times 1/100$$

where: C = percent of coal co-fired on a heat input basis; and,  
S = weight percent sulfur in coal.

- d. The maximum SO<sub>2</sub> emission rate when co-firing petroleum coke and coal shall not exceed 0.676 lb/MMBtu heat input.
- e. Compliance with the SO<sub>2</sub> emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the Standards of Performance for New Stationary Sources (NSPS) codified in 40 CFR 60, Subpart Da, except as noted above.  
[PSD-FL-010; PSD-FL-010(A & B); 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

**D.11. Sulfur Dioxide – Liquid Fuel Only.** No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts liquid fuel any gases which contain sulfur dioxide in excess of:

- (1) 340 ng/J (0.80 lb/million Btu) heat input and 90 percent reduction, or  
(2) 100 percent of the potential combustion concentration (zero percent reduction), when emissions are less than 86 ng/J (0.20 lb/million Btu) heat input.  
[40 CFR 60.43a(b)(1) & (2)]

**D.12. Sulfur Dioxide.** Compliance with the emission limitation and percent reduction requirements are both determined on a 30-day rolling average basis.  
[40 CFR 60.43a(g); PSD-FL-010; and, PA 81-13]

**D.13. Sulfur Dioxide – Sulfur Content.**

- a. The maximum coal sulfur content shall not exceed 4.0 percent, by weight.
- b. The maximum sulfur content of the petroleum coke - coal blend shall not exceed 4 percent, by weight.
- c. The maximum sulfur content of the No. 2 fuel oil is 0.76%, by weight.  
[PSD-FL-010; PA 81-13; PSD-FL-010(A & B); 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

D.14. Sulfur Dioxide. When fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously, the applicable standard is determined by proration using the following formulas:

(1) If emissions of SO<sub>2</sub> to the atmosphere are greater than 260 ng/J (0.60 lb/MMBtu) heat input:

$$PS_{SO_2} = (340X + 520Y)/100 \text{ and} \\ \%P_S = 10$$

(2) If emissions of SO<sub>2</sub> to the atmosphere are equal to or less than 260 ng/J (0.60 lb/MMBtu) heat input:

$$PS_{SO_2} = (340X + 520Y)/100 \text{ and} \\ \%P_S = (10X + 30Y)/100$$

where:

PS<sub>SO<sub>2</sub></sub> = the prorated standard for sulfur dioxide when combusting fuel oil and coal (or a blend of coal and petroleum coke) simultaneously (ng/J heat input).

%P<sub>S</sub> = percentage of potential SO<sub>2</sub> emissions allowed.

X = the percentage of total heat input derived from the combustion of fuel oil (excluding solid-derived fuels).

Y = the percentage of total heat input derived from the combustion of coal or a blend of coal and petroleum coke (including solid-derived fuels).

[40 CFR 60.43a(h)(1) & (2)]

D.15. Nitrogen Oxides. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of the following emission limits, based on a 30-day rolling average.

(1) NO<sub>x</sub> emissions limits.

a. Coal or coal-petroleum coke blend: 0.60 lb/million Btu (260 ng/J) heat input;

b. Fuel oil: 130 ng/J (0.30 lb/million Btu) heat input.

(2) NO<sub>x</sub> reduction requirement.

a. Solid fuels: 65 percent reduction of potential combustion concentration;

b. Liquid fuels: 30 percent reduction of potential combustion concentration.

[40 CFR 60.44a(a)(1) & (2)]

D.16. Nitrogen Oxides. When fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$$PS_{NOX} = (130X + 260Y)/100$$

where:

PS<sub>NOX</sub> is the prorated standard for nitrogen oxides when combusting coal (or a blend of coal and petroleum coke) and fuel oil simultaneously (ng/J heat input).

X = the percentage of total heat input derived from the combustion of fuel oil.

Y = the percentage of total heat input derived from the combustion of coal or a blend of coal and petroleum coke.

[40 CFR 60.44a(c); and, PSD-FL-010]

D.17. “On-Specification” Used Oil. The burning of “on-specification” used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only “on-specification” used oil generated by the JEA in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired in these emissions units shall not exceed 1,000,000 gallons per calendar year. “On-specification” used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered “off-specification” oil and shall not be fired. See specific conditions **D.44.**, **D.63.**, **D.64.** and **D.66.**

| <u>CONSTITUENT / PROPERTY</u> * | <u>ALLOWABLE LEVEL</u> |
|---------------------------------|------------------------|
| Arsenic                         | 5 ppm maximum          |
| Cadmium                         | 2 ppm maximum          |
| Chromium                        | 10 ppm maximum         |
| Lead                            | 100 ppm maximum        |
| Total Halogens                  | 1000 ppm maximum       |
| Flash Point                     | 100 °F minimum         |
| PCBs                            | less than 50 ppm       |

\* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).  
[40 CFR 279.11]

### Excess Emissions

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

D.18. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. See Attachment SJRPP: Protocol for Startup and Shutdown.

[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

{Permitting note: Once a written agreement between JEA and the ERMD-EQD has been acquired approving a “Protocol for Startup and Shutdown”, the protocol is automatically incorporated by reference and is a part of the permit. The protocol shall be used where applicable and where there is/are conflict with the rule.}

D.19. 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.; and, Part III, Rule 2.301, JEPB]

### **Monitoring of Operations**

#### D.20. 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.; and, Part XI, Rule 2.1001, JEPB]

### **Compliance Provisions**

D.21. Compliance with the particulate matter emission limitation under 40 CFR 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under 40 CFR 60.42a(a)(2) and (3).

[40 CFR 60.46a(a)]

D.22. Compliance with the nitrogen oxides emission limitation under 40 CFR 60.44a(a)(1) constitutes compliance with the percent reduction requirements under 40 CFR 60.44a(a)(2).

[40 CFR 60.46a(b)]

D.23. The particulate matter emission standards under 40 CFR 60.42a and the nitrogen oxide standards under 40 CFR 60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under 40 CFR 60.43a apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.

[40 CFR 60.46a(c)]

D.24. During emergency conditions in the principle company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulfurization modules, and bringing back into operation any malfunctioned module as soon as repairs are completed.

(2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation.

[40 CFR 60.46a(d)(1) & (2)]

D.25. Compliance with the sulfur dioxide emission limitations and the percentage reduction requirements under 40 CFR 60.43a and the nitrogen oxides emissions limitations under 40 CFR 60.44a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.

[40 CFR 60.46a(e)]

D.26. Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO<sub>2</sub> and NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction (NO<sub>x</sub> only), or emergency conditions (SO<sub>2</sub> only). Compliance with the percentage reduction requirement for SO<sub>2</sub> is determined based on the average inlet and average outlet SO<sub>2</sub> emissions rates for the 30 successive boiler operating days.

[40 CFR 60.46a(g)]

D.27. If the owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR 60.47a, compliance of the affected facility with the emission requirements under 40 CFR 60.43a and 60.44a for the day on which the 30-day period ends may be determined by the Administrator following the applicable procedures in section 7 of Method 19.

[40 CFR 60.46a(h)]

### **Continuous Monitoring Requirements**

D.28. Opacity. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharges to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).

[40 CFR 60.47a(a)]

D.29. Sulfur Dioxide. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions as follows:

(1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.

[40 CFR 60.47a(b)(1)]

D.30. Nitrogen Oxides. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.

[40 CFR 60.47a(c)]

D.31. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored.

[40 CFR 60.47a(d)]

D.32. The continuous monitoring systems are operated and data recorded during all periods of operation at the affected facility including periods of startup, shutdown, malfunction, or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

[40 CFR 60.47a(e)]

D.33. The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.47a(h).

[40 CFR 60.47a(f)]

D.34. The 1-hour averages required under 40 CFR 60.13(h) are expressed in ng/J (lb/million Btu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate the 1-hour averages.

[40 CFR 60.47a(g)]

D.35. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a(f), the owner or operator shall use the reference methods and procedures as specified in this paragraph. Acceptable alternative methods are given in 40 CFR 60.47a(j).

(1) Method 6 shall be used to determine the SO<sub>2</sub> concentration at the same location as the SO<sub>2</sub> monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.

(2) Method 7 shall be used to determine the NO<sub>x</sub> concentration at the same location as the NO<sub>x</sub> monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.

(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O<sub>2</sub> or CO<sub>2</sub> concentration at the same location as the O<sub>2</sub> or CO<sub>2</sub> monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.

(4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million Btu) heat input.

[40 CFR 60.47a(h)(1), (2), (3) & (4)]

D.36. The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d). Acceptable alternative methods and procedures are given in 40 CFR 60.47a(j).

(1) Methods 6, 7, and 3B, as applicable, shall be used to determine O<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> concentrations.

(2) SO<sub>2</sub> or NO<sub>x</sub> (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N<sub>2</sub>, as applicable) under Performance Specification 2 of appendix B of 40 CFR 60.

(3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides firing solid fuel is 1,000 ppm.

(5) For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

[40 CFR 60.47a(i)(1), (2), (3), & (5)]

D.37. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.47a.

- (1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under 40 CFR 60.47a(i), the conditions under 40 CFR 60.46(d)(1) apply (see specific condition **D.73.**); these conditions do not apply under 40 CFR 60.47a(h).
  - (2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time is 1 hour.
  - (3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
  - (4) For Method 3B, Method 3A may be used.
- [40 CFR 60.47a(j)]

### **Test Methods and Procedures**

D.38. In conducting performance tests, the owner or operator shall use as reference methods and procedures the methods in Appendix A of 40 CFR 60 or the methods and procedures as specified in 40 CFR 60.48a, except as provided in 40 CFR 60.8(b). 40 CFR 60.8(f) does not apply to this section for SO<sub>2</sub> and NO<sub>x</sub>. Acceptable alternative methods are given in 40 CFR 60.48a(e).  
[40 CFR 60.48a(a)]

D.39. Particulate Matter. The owner or operator shall determine compliance with the particulate matter standard as follows

- (1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
  - (2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.
    - (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (320 ± 25 °F).
    - (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same transverse points as, the particulate run. If the particulate run has more than 12 transverse points, the O<sub>2</sub> transverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> transverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of all the individual O<sub>2</sub> concentrations at each transverse point.
  - (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- [40 CFR 60.48a(b)(1), (2) & (3)]

D.40. Sulfur Dioxide. The owner or operator shall determine compliance with the sulfur dioxide standards as follows:

(1) The percent of potential SO<sub>2</sub> emissions (%P<sub>S</sub>) to the atmosphere shall be computed using the following equation:

$$\%P_S = [(100 - \%R_F)(100 - \%R_S)]/100$$

where:

%P<sub>S</sub> = percent of potential SO<sub>2</sub> emissions, percent.

%R<sub>F</sub> = percent reduction from fuel pretreatment, percent.

%R<sub>S</sub> = percent reduction by SO<sub>2</sub> control system, percent.

(2) The procedures in Method 19 may be used to determine percent reduction (%R<sub>F</sub>) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and fly ash interactions. This determination is optional.

(3) The procedures in Method 19 shall be used to determine the percent SO<sub>2</sub> reduction (%R<sub>S</sub>) of any SO<sub>2</sub> control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO<sub>2</sub> control device and the average SO<sub>2</sub> input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.

(4) The appropriate procedures in Method 19 shall be used to determine the emission rate.

(5) The continuous monitoring system in 40 CFR 60.47a(b) and (d) shall be used to determine the concentrations of SO<sub>2</sub> and CO<sub>2</sub> or O<sub>2</sub>.

[40 CFR 60.48a(c)(1), (2), (3), (4) & (5)]

D.41. Nitrogen Oxides. The owner or operator shall determine compliance with the NO<sub>x</sub> standard as follows:

(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO<sub>x</sub>.

(2) The continuous monitoring system in 40 CFR 60.47a(c) and (d) shall be used to determine the concentrations of NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>.

[40 CFR 60.48a(d)(1) & (2)]

D.42. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a:

(1) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed the average temperature of 160 °C (320 °F). Procedures 2.1 and 2.3 of Method 5B in 40 CFR 60, Appendix A may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

(2) The F<sub>C</sub> factor (CO<sub>2</sub>) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of 40 CFR 60.46(d)(1). The CO<sub>2</sub> shall be determined in the same manner as the O<sub>2</sub> concentration.

[40 CFR 60.48a(e)(1) & (2)]



D.43. Compliance with the "on-specification" used oil requirements will be determined as follows:

- (a) Analysis of a sample collected from each batch delivered for firing; or,
- (b) The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.
- (c) For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil.

See specific conditions **D.17.**, **D.64.**, **D.65.** and **D.66.**

[Rules 62-4.070 and 62-213.440(1)(b)2.b., F.A.C.; Part V, Rule 2.501, JEPB; and, 40 CFR 279]

D.44. If the permittee wants the CEMs RATA tests for SO<sub>2</sub> and NO<sub>x</sub> to be considered as formal compliance tests, then the permittee must satisfy all of the requirements (i.e., prior notification, submittal requirements, etc.) of Rule 62-297.310, F.A.C.

[Rules 62-297.310(7) and 62-213.440, F.A.C.]

D.45. 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.; and, Part XI, Rule 2.1001, JEPB]

D.46. 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.; and, Part XI, Rule 2.1001, JEPB]

D.47. 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.; and, Part XI, Rule 2.1001, JEPB]

**D.48. 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:
  - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
  - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
  - 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 as part of 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.; and, Part XI, Rule 2.1001, JEPB]

**D.49. 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.; and, Part XI, Rule 2.1001, JEPB]

D.50. 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 and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the ERMD-EQD, 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 ERMD-EQD, 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 ERMD-EQD.

(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.; Part XI, Rule 2.1101, JEPB; PA 81-13; and, SIP approved]

D.51. Stack tests for particulate matter, nitrogen oxides, sulfur dioxide, and visible emissions shall be performed annually. See specific condition **D.44.**

[PA 81-13]

#### **Recordkeeping and Reporting Requirements**

D.52. For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.

[40 CFR 60.49a(a)]

D.53. For sulfur dioxide and nitrogen oxides the following information is reported to the Administrator for each 24-hour period.

(1) Calendar date.

(2) The average sulfur dioxide and nitrogen oxides emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standards; and, description of corrective actions taken.

(3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.

(4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and, description of corrective actions taken.

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO<sub>x</sub> only), emergency conditions (SO<sub>2</sub> only), or other reasons, and justification for excluding data other than startup, shutdown, malfunction, or emergency conditions.

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(7) Identification of the times when hourly averages have been obtained based on manual sampling methods.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

[40 CFR 60.49a(b)(1), (2), (3), (4), (5), (6), (7), (8) & (9)]

D.54. If the required quantity of emission data as required by 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR 60.46a(h) is reported to the Administrator for that 30-day period:

- (1) The number of hourly averages available for outlet emission rates ( $n_o$ ) and inlet emission rates ( $n_i$ ) as applicable.
- (2) The standard deviation of hourly averages for outlet emission rates ( $s_o$ ) and inlet emission rates ( $s_i$ ) as applicable.
- (3) The lower confidence limit for the mean outlet emission rate ( $E_o^*$ ) and the upper confidence limit for the mean inlet emission rate ( $E_i^*$ ) as applicable.
- (4) The applicable potential combustion concentration.
- (5) The ratio of the upper confidence limit for the mean outlet emission rate ( $E_o^*$ ) and the allowable emission rate ( $E_{std}$ ) as applicable.

[40 CFR 60.49a(c)(1), (2), (3), (4) & (5)]

D.55. If any standards under 40 CFR 60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating if emergency conditions existed and requirements under 40 CFR 60.46a(d) were met during each period, and
- (2) Listing the following information:
  - (i) Time periods the emergency condition existed;
  - (ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
  - (iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
  - (iv) Percent reduction in emissions achieved;
  - (v) Atmospheric emission rate (ng/J) of the pollutant discharged; and
  - (vi) Actions taken to correct control system malfunction.

[40 CFR 60.49a(d)(1) & (2)]

D.56. If fuel pretreatment credit toward the sulfur dioxide emission standard under 40 CFR 60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19 (appendix A); and
- (2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

[40 CFR 60.49a(e)(1) & (2)]

D.57. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and the affected facility during periods of data unavailability are to be compared with operation of the control system and the affected facility before and following the period of data unavailability.

[40 CFR 60.49a(f)]

D.58. The owner or operator of the affected facility shall submit a signed statement indicating whether:

- (1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
- (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (4) Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.49a(g)(1), (2), (3) & (4)]

D.59. For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.

[40 CFR 60.49a(h)]

D.60. The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60.49(a) and 40 CFR 60, Subpart A, to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.

[40 CFR 60.49a(i)]

D.61. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

[Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

D.62. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
- (b) The required test report shall be filed with the ERMD-EQD 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 ERMD-EQD 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.

[Rule 62-297.310(8), F.A.C.; Part XI, Rule 2.1101, JEPB]

D.63. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units; or, hourly if fired unblended. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See specific conditions **D.17.**, **D.44.**, **D.64.** and **D.65.**

[Rule 62-213.440(1)(b)2.b., F.A.C.; Part V, Rule 2.501, JEPB; and, 40 CFR 279.61 and 761.20(e)]

D.64. The permittee shall include in the "Annual Operating Report (AOR) for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Boilers Nos. 1 and 2 and the auxiliary boilers during the calendar year. See specific conditions **D.17.**, **D.44.**, **D.63.** and **D.65.**

[Rule 62-213.440(1)(b)2.b., F.A.C.; and, Part V, Rule 2.501, JEPB]

D.65. **Fuel Consumption Records.** The owner or operator shall maintain, for each emissions unit, a daily log of the amounts and types of fuels fired and copies of fuel analyses containing information on the sulfur and ash content, percent by weight, and heating values. See specific conditions **D.3.**, **D.17.**, **D.44.**, **D.63.**, **D.64.**, **D.66.** and **D.67.**

[Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010 and PA 81-13]

**D.66. Reporting and Recordkeeping.**

a. Documentation verifying that the coal and petroleum coke fuel blends combusted in Boilers Nos. 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit shall be maintained and made available upon request by the Department or the ERMD-EQD. See specific conditions **D.3., D.65. and D.67.**

[Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

b. The permittee shall maintain and submit to the Department and ERMD-EQD on an annual basis for a period of five years from the date the emissions unit is co-fired with petroleum coke above 20%, by weight, information demonstrating in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) that the operational changes did not result in emissions increases of nitrogen oxides, carbon monoxide, sulfur dioxide, sulfuric acid mist, volatile organic compounds, and particulate matter. See specific conditions **D.3., D.65. and D.67.**

[0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

**D.67. Reporting and Recordkeeping.**

a. Stack monitoring, fuel usage and fuel analysis data shall be reported to the ERMD-EQD on a quarterly basis in accordance with 40 CFR 60.7.

[PA 81-13]

D.68. Reserved.

[0310045-012-AC/PSD-FL-010E]

D.69. Reserved.

[0310045-012-AC/PSD-FL-010E]

D.70. Reserved.

[0310045-012-AC/PSD-FL-010E]

**Miscellaneous**

D.71. Stack Height. The height of each boiler's exhaust stack for SJRPP Boiler No. 1 and No. 2 shall not be less than 640 feet above grade.

[PSD-FL-010 and PA 81-13]

D.72. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]



D.73. 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, SO<sub>2</sub> and NO<sub>x</sub> may be determined by using the F<sub>c</sub> factor, provided that the following procedure is used (see specific condition D.42.):

(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).

% CO<sub>2</sub> = carbon dioxide concentration, percent dry basis.

F<sub>c</sub> = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F<sub>c</sub> 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 O<sub>2</sub> and CO<sub>2</sub> concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F<sub>o</sub> (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F<sub>o</sub> value, as determined from the average values of F<sub>d</sub> and F<sub>c</sub> in Method 19, i.e., F<sub>oa</sub> = 0.209 (F<sub>da</sub> / F<sub>ca</sub>), then the following procedure shall be followed:

(A) When F<sub>o</sub> is less than 0.97 F<sub>oa</sub>, then E shall be increased by that proportion under 0.97 F<sub>oa</sub>, e.g., if F<sub>o</sub> is 0.95 F<sub>oa</sub>, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F<sub>o</sub> is less than 0.97 F<sub>oa</sub> 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<sub>oa</sub>, e.g., if F<sub>o</sub> is 0.95 F<sub>oa</sub>, E shall be increased by 2 percent.

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

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

[40 CFR 60.46(d)(1)]

### **Compliance Assurance Monitoring (CAM) Requirements**

D.74. The emissions units are subject to the CAM requirements contained in the attached Appendix CAM: SJRPP Boilers Nos. 1 and 2. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedence of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

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

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

| <b><u>E.U. ID No.</u></b> | <b><u>Brief Description</u></b>                               |
|---------------------------|---|
| -023                      | SJRPP: Fuel and Limestone Handling and Storage Operations     |
| -023a                     | Rotary Railcar Dumper Building – Unloader and Transfer Points |
| -023b                     | Conveyor C-3 Tunnel Ventilation (6,400 cfm)                   |
| -023b                     | Conveyor C-3 Tunnel Ventilation (6,400 cfm)                   |
| -023b                     | Conveyor C-3 Tunnel Ventilation (21,600 cfm)                  |
| -023c                     | Shiphold Operations   |
| -023d                     | Ship Unloader Hopper and Spillage Collector Transfers         |
| -023d                     | Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor      |
| -023e                     | Fuel Transfer Building (DC-2)                                 |
| -023e                     | Transfer Stations Nos. 1 thru 7                               |
| -023e                     | Transfer Point 9GC-04 to 9GC-05                               |
| -023f                     | Stacker/Reclaimer (Stacker Mode)                              |
| -023f                     | Stacker   |
| -023f                     | Reclaimer   |
| -023g                     | Petroleum Coke Reclaimer System (PC-1)                        |
| -023g                     | Emergency Reclaim Hoppers - Load Out                          |
| -023j                     | Limestone Truck Loadout & Transfer                            |
| -023k                     | Limestone Storage Pile #1 - Existing                          |
| -023k                     | Limestone Storage Pile #2 - Fuel Yard                         |
| -023k                     | Limestone Loadout   |
| -023k                     | Coal Pile   |
| -023k                     | Petroleum Coke Pile   |
| -023l                     | Limestone Reclaim Hopper with Fabric Filter (3DC-01)          |
| -023l                     | Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)    |
| -023l                     | Quick Lime Silo with Fabric Filter (used for water treatment) |
| -023l                     | Fuel Handling Building with Fabric Filter (DC-3)              |
| -023l                     | Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)           |
| -023l                     | Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)           |

The coal receiving, storage and transfer systems at the coal and petroleum coke storage yard support the operation of the two power boilers. Fugitive particulate matter emissions will be generated from limestone handling and storage systems. The emissions units/points are as depicted in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations [PSD-FL-010, and as amended (was originally Tables 2 and 6)]. Particulate matter emissions and visible emissions are controlled using fabric filter systems, water sprays, wetting agents, and full enclosures or partial enclosures, covers and wind screens, where appropriate and required by permit. Visible emissions limits will be used for compliance purposes.

{Permitting notes: The emissions units are regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) New Source Review: PSD-FL-010, and as amended (A) thru (E); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated 07/07/1981; PPSA: PA 81-13, and as amended; and, 0310045-015-AC/PSD-FL-010(G).}

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

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

E.1. The emissions units/points are subject to Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, and it is attached.

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended 10/28/1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

E.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Part III, Rule 2.301, JEPB; and, PSD-FL-010]

E.3. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions.

[Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

**Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging times for Specific Condition No. E.4. is based on the specified averaging time of the applicable test method.}

E.4. Visible Emissions. Visible emissions shall be used for compliance purposes and not exceed the opacity limits established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations.

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

E.5. Reserved.

[0310045-015-AC/PSD-FL-010G]

### **Excess Emissions**

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

E.6. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

E.7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

### **Monitoring of Operations**

E.8. 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.; Part XI, Rule 2.1101, JEPB]

### **Test Methods and Procedures**

E.9. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Revised Table 6 - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C.

[PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G]

E.10. Reserved.

[0310045-015-AC/PSD-FL-010G]

E.11. 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.

{Permitting Note: When any visible emissions test is being conducted, the emissions point/activity being evaluated should be operating at or near its maximum potential throughput rate.}

[Rules 62-297.310(2) & (2)(b), 62-213.440(1) and 62-4.070(3), F.A.C.; Part XI, Rule 2.1101, JEPB]

E.12. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

[Rule 62-297.310(4)(a)2.c., F.A.C.; Part XI, Rule 2.1101, JEPB]

E.13. 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;

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

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

9. The owner or operator shall notify the 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.; Part XI, Rule 2.1101, JEPB; and, SIP approved]

#### **Recordkeeping and Reporting Requirements**

E.14. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

[Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

#### **E.15. Test Reports.**

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

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

[Rule 62-297.310(8), F.A.C.; Part XI, Rule 2.1101, JEPB]

#### **Miscellaneous Requirements.**

E.16. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

**Section III. Emissions Units.**

**Subsection F. This section addresses the following emissions unit.**

| <u>E.U. ID No.</u> | <u>Brief Description</u>   |
|--------------------|--|
| -022               | SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations    |
| -022a              | Gypsum Dewatering Building   |
| -022a              | Gypsum Storage Enclosure   |
| -022j              | Gypsum Truck Loadout   |
| -022j              | Fly Ash Loadout for Silo 1A (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 1B (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 2A (metal structure)                            |
| -022j              | Fly Ash Loadout for Silo 2B (metal structure)                            |
| -022k              | Solid Waste Disposal Area  |
| -022l              | Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)         |
| -022l              | Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)         |
| -022l              | Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure) |
| -022l              | Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure) |
| -022m              | Wet Fly Ash Loadout 1A/1B  |
| -022m              | Bottom Ash Loadout 1A/1B   |
| -022m              | Wet Fly Ash Loadout 2A/2B  |
| -022m              | Bottom Ash Loadout 2A/2B   |
| -022n              | Unpaved Road, By-Product Transport                                       |

Fugitive particulate matter emissions will be generated from bottom ash, fly ash and gypsum materials handling and storage operations. The emissions units/points are as depicted in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations [PSD-FL-010, and as amended (was originally Tables 2 and 6)]. Particulate matter emissions and visible emissions are controlled using fabric filter systems, water sprays, wetting agents, and full enclosures or partial enclosures, covers and wind screens, where appropriate and required by permit. Visible emissions limits will be used for compliance purposes.

{Permitting Note(s): The emissions units/points are regulated under Rule 62-212.400(5), PSD NSR Review, which includes BACT [dated 05/07/81; PSD-FL-010, and as amended ((A) thru (E))]; PA 81-13, and as amended); and, 0310045-012-AC/PSD-FL-010(G).}

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

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

F.1. The emissions units/points are subject to Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, and it is attached.  
 [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

F.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Part III, Rule 2.301, JEPB]

F.3. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions. [Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

### **Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging time for Specific Condition No. F.4. is based on the specified averaging time of the applicable test method.}

F.4. Visible Emissions. Visible emissions shall be used for compliance purposes and not exceed the opacity limits established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations. [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

F.5. Reserved.  
[0310045-015-AC/PSD-FL-010G]

### **Excess Emissions**

F.6. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

F.7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

### **Monitoring of Operations**

F.8. 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.; and, Part XI, Rule 2.1101, JEPB]

### **Test Methods and Procedures**

F.9. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Revised Table 6 - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. [PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G]

F.10. Reserved.  
[0310045-015-AC/PSD-FL-010G]

F.11. 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.

{Permitting Note: When any visible emissions test is being conducted, the emissions point/activity being evaluated should be operating at or near its maximum potential throughput rate.}

[Rules 62-297.310(2) & (2)(b), 62-213.440(1) and 62-4.070(3), F.A.C.; Part XI, Rule 2.1101, JEPB; PSD-FL-010; and, PSD-FL-010, amended October 28, 1986]

### F.12. Applicable Test Procedures.

#### (a) Required Sampling Time.

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

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

[Rule 62-297.310(4)(a)2.c., F.A.C.; and, Part XI, Rule 2.1101, JEPB]

F.13. 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;

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

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

9. The owner or operator shall notify the 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 ERMD-EQD, 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, Part XI, Rule 2.1101, JEPB and, SIP approved]

**Recordkeeping and Reporting Requirements**

F.14. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

[Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

F.15. Test Reports.

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

**Section III. Emissions Units.**

**Subsection G. This section addresses the following emissions unit.**

| <b>E.U. ID No.</b> | <b>Brief Description</b>  |
|--------------------|---------------------------|
| -024               | SJRPP: Cooling Towers (2) |

Fugitive particulate matter emissions from the cooling towers will be controlled with drift eliminators. No mass testing requirement will be imposed due to the physical layout.

{Permitting Note: The emissions units were regulated under Rule 62-212.400(5), PSD NSR Review (see PSD-FL-010 issued March 12, 1982, and amended October 28, 1986); PSD-FL-010C, clerked July 29, 1999.}

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

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

G.1. The emissions units/points are subject to Revised Table 6 – Part A, SJRPP, amended July 29, 1999, and it is attached.

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

G.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; Part III, Rule 2.301, JEPB; PSD-FL-010 and PA 81-13]

G.3. Controls. The permittee shall maintain and continue to use drift elimination to minimize particulate matter emissions.

[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

**Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging time for Specific Condition No. G.4. is based on the specified averaging time of the applicable test method.}

G.4. Particulate Matter. Particulate matter emissions from each cooling tower shall not exceed 67 lbs/hr. No mass testing requirement will be imposed due to the physical layout.

[PSD-FL-010 and PA 81-13]

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

**Subsection H. This section addresses the following emissions units.**

| <b>E.U. ID No.</b> | <b>Brief Description</b>                   |
|--------------------|--|
| -026               | NGC Circulating Fluidized Bed Boiler No. 2 |
| -027               | NGC Circulating Fluidized Bed Boiler No. 1 |

These emissions units are two new coal, coal coated with latex, and petroleum coke fired circulating fluidized bed (CFB) boilers. These new boilers are connected to the existing steam turbines of the retired Boilers Nos. 1 and 2 (297.5 MW each) as part of the repowering project authorized under air construction permit, No. 0310045-003-AC/PSD-FL-265. A new dual-flued 495-foot stack will be added to the facility for Repowered Units 1 and 2, along with solid fuel delivery and storage facilities, limestone preparation and storage facilities (including three limestone dryers), a lime silo, aqueous ammonia storage, polishing scrubbers, precipitators or baghouses, ash removal and storage facilities, and an electrical substation.

Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce NO<sub>x</sub> emissions, limestone injection to reduce SO<sub>2</sub> emissions, fabric filter to reduce particulate matter (PM & PM<sub>10</sub>) emissions, while maximizing combustion efficiency and minimizing NO<sub>x</sub> formation to limit CO and VOC emissions.

The design of the CFB boilers allow operation over a large load range even though Repowered Units Nos. 1 and 2 are anticipated to be base loaded units. The CFB boiler vendor (Foster Wheeler USA) has guaranteed emissions down to 50% load and, based upon initial demonstrations, operation at loads as low as 25% may be achievable while still meeting performance and emission requirements.

{Permitting Note(s): The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; PSD-FL-265(A, B & C)]; and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Compliance Assurance Monitoring (CAM), adopted and incorporated in Rule 62-204.800, F.A.C.}

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

{Permitting Note: In addition to the requirements below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

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

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

| Description (EU No.)    | MMBtu/hr Heat Input |
|-------------------------|---------------------|
| CFB Boiler No. 2 (-026) | 2,764               |
| CFB Boiler No. 1 (-027) | 2,764               |

These rates are included only for purposes of determining capacity during compliance stack tests. Continuous compliance with these rates is not required; and, capacity during compliance testing shall be determined based on fuel flow data and the as-fired heat content of the fuel.

{Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. The permittee and the Department agree that the CEMS used for the federal Acid Rain Program (40 CFR Part 75) conservatively overestimates heat input ratings. The monitoring data for heat input is, therefore, not appropriate for purposes of compliance, including annual compliance certifications.}

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **H.42**.

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

H.3. Methods of Operation. Only coal, coal treated with a latex binder, petroleum coke, No. 2 fuel oil (maximum sulfur content of 0.05 percent, by weight), and natural gas, shall be fired in Units 1 and 2.

[Rule 62-213.410, F.A.C.; 0310045-003-AC/PSD-FL-265; and 0310045-012-AC]

H.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

**Control Technology**

H.5. Sulfur Dioxide Control. Sulfur dioxide (SO<sub>2</sub>) and acid gases shall be controlled by the injection of limestone into the CFB boiler beds. Residual sulfur dioxide and acid gases shall be further controlled by the use of add-on air quality control systems to meet limits of 0.2 lb/MMBtu, 24-hr block average, and 0.15 lb/MMBtu, 30-day rolling average.

[Applicant Request; and, 0310045-003-AC/PSD-FL-265]

H.6. Oxides of Nitrogen Control. A selective non-catalytic reduction (SNCR) system designed to meet a limit of 0.09 lb/MMBtu, 30-day rolling average, shall be used for control of oxides of nitrogen (NO<sub>x</sub>) emissions.

[Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.7. Particulate Matter Control. Particulate matter (PM and PM<sub>10</sub>) shall be controlled by the use of high efficiency, add-on air quality control devices (either fabric filters or electrostatic precipitators) that are designed to meet a limit of 0.011 lb/MMBtu.

[Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

### Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. H.8. thru H.18 are based on the specified averaging time of the applicable test method.}

H.8. Best Available Control Technology. The following Table 1 is a summary of the BACT determinations by the Department and other limits requested by the applicant, as noted:

**Table 1: Emission Limits for CFB Units 1 and 2**

| Pollutant                                   | Emission Limits – Per Unit   |
|---|--|
| Visible emissions                           | 10 percent opacity, 6-minute block average   |
| SO <sub>2</sub> <sup>2</sup>                | 0.2 lb/MMBtu, 24-hour block average <sup>2,3</sup><br>0.15 lb/MMBtu, 30-day rolling average <sup>2</sup> |
| NO <sub>x</sub> <sup>1</sup>                | 0.09 lb/MMBtu, 30-day rolling average <sup>4</sup>   |
| PM/PM <sub>10</sub> <sup>1</sup>            | 0.011 lb/MMBtu, 3-hour average <sup>1</sup>  |
| CO <sup>1</sup>                             | 350 lbs/hour, 24-hour block average <sup>1,3</sup>   |
| VOCs <sup>1</sup>                           | 14 lbs/hour, 3-hour average <sup>1</sup>   |
| Pb <sup>2</sup>                             | 0.07 lb/hour, 3-hour average <sup>2</sup>  |
| H <sub>2</sub> SO <sub>4</sub> <sup>2</sup> | 1.1 lbs/hour, 3-hour average <sup>2</sup>  |
| HF <sup>1</sup>                             | 0.43 lb/hour, 3-hour average <sup>1</sup>  |
| Hg <sup>1</sup>                             | 0.03 lb/hour, 6-hour average <sup>1</sup>  |

<sup>1</sup>BACT determination.

<sup>2</sup>Requested by applicant.

<sup>3</sup>24-hour block averages are calculated from midnight to midnight.

<sup>4</sup>Equivalent to approximately 0.8-0.9 lb/MW-hr (gross energy output).

[Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.9. Visible Emissions. Visible emissions shall not exceed 10 percent opacity, 6-minute block average, excluding periods of startup, shutdown, and malfunction.

[Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.10. Sulfur Dioxide.

- a. Sulfur dioxide (SO<sub>2</sub>) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.20 lb/MMBtu (24-hour block average) nor 0.15 lb/MMBtu (30-day rolling average).
- b. Sulfur dioxide from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 12,284 tons during any consecutive 12-month period on a rolling basis. This condition shall become effective on the first day of the month following successful completion of the initial performance testing of Repowered Unit 2, and compliance shall be based upon at least 12 months of operation after the effective date.

[Applicant Request; and, 0310045-003-AC/PSD-FL-265]

H.11. Oxides of Nitrogen.

- a. Oxides of nitrogen (NO<sub>x</sub>) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.09 lb/MMBtu on a 30-day rolling average basis.
- b. Oxides of nitrogen emissions from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 3,600 tons during any consecutive 12-month period on a rolling basis. This condition shall become effective on the first day of the month following successful completion of the initial performance testing of Repowered Unit 2, and compliance shall be based upon at least 12 months of operation after the effective date.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.12. Particulate Matter (PM and PM<sub>10</sub>).

- a. Particulate matter (PM) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.011 lb/MMBtu (3-hour average).
- b. Particulate matter-10 microns or smaller (PM<sub>10</sub>) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.011 lb/MMBtu (3-hour average).
- c. Stack emissions of particulate matter (PM) from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 881 tons during any consecutive 12-month period on a rolling basis. This condition shall become effective on the first day of the month following successful completion of the initial performance testing of Repowered Unit 2, and compliance shall be based upon at least 12 months of operation after the effective date.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.13. Carbon Monoxide. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hour, 24-hour block average, nor 1533 tons per year from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.14. Volatile Organic Compounds. Volatile organic compound (VOC) emissions shall not exceed 14 lbs/hour (3-hour average), nor 61.5 tons per year from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.15. Lead. Lead (Pb) emissions shall not exceed 0.07 lb/hour (3-hour average), from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]



H.16. Sulfuric Acid Mist. Sulfuric acid mist ( $H_2SO_4$ ) emissions shall not exceed 1.1 lbs/hour (3-hour average), from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.17. Hydrogen Fluoride. Hydrogen fluoride (HF) emissions shall not exceed 0.43 lb/hour (3-hour average), from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.18. Mercury. Mercury (Hg) emissions shall not exceed 0.03 lb/hour (6-hour average), from either CFB Boiler No. 1 or No. 2.

[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

### Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

H.19. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed the limitations established in Specific Condition **H.21**.

[Rule 62-210.700(1), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

H.20. 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.]

### H.21. Authorized Emissions.

(1) Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any calendar month per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

a. Startup: The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.

b. Shutdown: The cessation of the operation of an emissions unit for any purpose.

c. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions **H.49.** and **H.51.** for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

(2) **Not Federally Enforceable.** Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours during any 30 consecutive calendar days per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal).

Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

- a. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. **Shutdown:** The cessation of the operation of an emissions unit for any purpose.
- c. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

{Permitting Note: See Specific Conditions **H.49.** and **H.51.** for reporting of excess emissions.}

[Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; 0310045-015-AC/PSD-FL-265C; and, applicant requested]

### **Monitoring of Operations**

#### **H.22. 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.]

H.23. 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)]

### **Monitoring Requirements**

H.24. Continuous Emissions Monitoring Systems. The permittee shall install, calibrate, operate, and maintain Continuous Emission Monitoring Systems (CEMS's) in the stack to measure and record the sulfur dioxide, oxides of nitrogen, carbon monoxide, and visible emissions from CFB Boilers Nos. 1 and 2. An emission level above a BACT limit, considering the 6-minute, 24-hour and 30-day rolling average periods, as applicable, shall be reported to the ERMD-EQD pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems shall comply with the certification, performance specifications, and quality assurance, and other applicable requirements of 40 CFR Part 75 and 40 CFR Part 60 (Appendix B), as indicated above. Periods of startup, shutdown, and malfunction shall be monitored, recorded, and reported as excess emissions when emission levels exceed the limits in Table 1 following the format of 40 CFR 60.7 (As revised, 64 Fed Reg. 7458 (Feb. 12, 1999)).

[0310045-003-AC/PSD-FL-265]

### **Compliance Determination – Test Methods and Procedures**

#### **H.25. Performance Tests**

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

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

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[Rule 62-204.800(7), F.A.C.; and, 40 CFR 60.8(a), (b), (c), (e) and (f)]

H.26. Initial Performance Tests and CEMS Certifications. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate at which each unit will be operated, but not later than 180 days of initial operation, and periodically thereafter as indicated in this permit. Initial compliance tests shall be performed on CFB Boilers Nos. 1 and 2 while firing either coal or petroleum coke as indicated below. Annual compliance tests shall be performed during every federal fiscal year (October 1 – September 30) pursuant to Rule 62-297.340, F.A.C., on CFB Boilers Nos. 1 and 2 while firing either coal or petroleum coke as indicated below. No stack tests are required if continuous emissions monitoring systems are used to demonstrate compliance pending EPA approval, otherwise initial performance tests shall be conducted as described above. Certification tests (or performance evaluations, as applicable) for all Continuous Emissions Monitoring System (CEMS) required by this permit must be completed within 60 days after achieving the maximum production rate at which each unit will be operated but not later than 90 days of initial operation, and prior to the initial stack tests for that unit.

Note: No methods other than the ones identified below may be used for compliance testing unless prior DEP or the ERMD-EQD approval is received in writing. DEP or the ERMD-EQD may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

[0310045-003-AC/PSD-FL-265]

H.27. Visible Emissions (Opacity). Compliance with the visible emissions limit in Specific Condition H.9. shall be demonstrated with continuous opacity monitors installed, certified, operated, and maintained in accordance with 40 CFR Part 75, based on 6-minute block averages and excluding periods of startup, shutdown, and malfunction.

[0310045-003-AC/PSD-FL-265]

H.28. Sulfur Dioxide.

a. Compliance with sulfur dioxide (SO<sub>2</sub>) emissions limits in Specific Condition **H.10.a.** shall be demonstrated with Continuous Emissions Monitoring Systems (CEMS's) installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on 24-hour block and 30-day rolling averages, as applicable, and excluding periods of startup, shutdown, and malfunction. Emissions recorded in parts per million shall be converted to lb/MMBtu using an appropriate F-factor for purposes of determining compliance with the emission limits in Specific Condition **H.10.a.**

b. Compliance with the annual SO<sub>2</sub> emission limit in Specific Condition **H.10.b.** shall be determined based on SO<sub>2</sub> data from the CEMS's. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total annual emissions.

{Permitting Note: At least three (3) hours of data are required to establish a 24-hour average for CEMS data.}

[Applicant's request; 0310045-012-AC/PSD-FL-265B; and, 0310045-015-AC/PSD-FL-265C]

H.29. Oxides of Nitrogen.

a. Compliance with the oxides of nitrogen (NO<sub>x</sub>) emissions limit in Specific Condition **H.11.a.** shall be demonstrated with a CEMS's installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on a 30-day rolling average and excluding periods of startup, shutdown and malfunction. The 30-day rolling averages will be determined based on hourly values calculated in accordance with Appendix F of 40 CFR Part 75.

b. Compliance with the annual NO<sub>x</sub> emissions limit in Specific Condition **H.11.b.** shall be determined by summing the products of hourly NO<sub>x</sub> emission rate and heat input rate data from the CEMS's. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total emissions.

[Applicant's request; and, 0310045-015-AC/PSD-FL-265C]

H.30. Particulate Matter.

a. Initial compliance tests only shall be performed on CFB Boilers Nos. 1 and 2 using EPA Methods 5, 5B, 8, 17, or 29 to determine compliance with the particulate matter (PM) limits in Specific Condition **H.12.a.** while firing petroleum coke, and an additional initial compliance test shall be performed on CFB Boiler No. 2 while firing coal. Quarterly tests shall be conducted for the first two years (eight quarters), then annually thereafter while firing petroleum coke. If petroleum coke has been fired for less than 100 hours during the previous quarter or less than 400 hours during the previous federal fiscal year, the testing may be performed while firing coal.

b. Initial and annual compliance tests shall be performed on CFB Boilers Nos. 1 and 2 using EPA Methods 201 or 201A, to determine compliance with the particulate matter-10 microns or smaller (PM<sub>10</sub>) limits in Specific Condition **H.12.b.** while firing petroleum coke, and an additional initial test shall be performed on CFB Boiler No. 2 while firing coal. If petroleum coke has been fired for less than 400 hours during the previous federal fiscal year, the annual testing may be performed while firing coal.

c. Compliance with the annual particulate matter (PM) emissions limit in Specific Condition **H.12.c.** shall be determined using the following formula. This formula shall be used for each fuel consumed by each of CFB Boilers Nos. 1 and 2 and existing Boiler No. 3, and the resulting PM emissions summed to obtain a 12-month total for CFB Boilers Nos. 1 and 2 and existing Boiler No. 3.

$$\text{PM Emissions} = (\text{Fuel Usage}^a) \times (\text{Emission Factor}^b) \times \text{unit conversion factors}$$

<sup>a</sup> The "Fuel Usage" shall be measured by calibrated fuel flow meters ( $\pm 5$  percent accuracy) and recorded daily when a unit is operated.

<sup>b</sup> An "Emissions Factor" of  $[(9.19 \times \text{weight percent sulfur content}) + 3.22]$  pounds per thousand gallons (lbs/10<sup>3</sup> gal) shall be used for fuel oil burned in existing Boiler No. 3. The weight percent sulfur content shall be determined based on an analysis of a representative sample of the fuel oil being consumed. The analysis shall be performed using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. An "Emissions Factor" of 5 pounds per million cubic feet (lb/MCF) shall be used for natural gas burned in existing Boiler No. 3. For Repowered Units 1 and 2, the "Emissions Factor" shall be based on particulate matter stack test results using EPA Methods 5, 5B, 8, 17, or 29 for the individual units, and shall apply to the quantities of fuel consumed in the individual units during the period immediately following the stack tests for the respective units until subsequent stack tests are completed.

[0310045-003-AC/PSD-FL-265]

#### H.31. Carbon Monoxide.

a. Compliance with the short-term carbon monoxide (CO) limit in Specific Condition **H.13.** shall be demonstrated with CEMS's installed, calibrated, operated, and maintained in accordance with 40 CFR Part 60, Appendix B based on a 24-hour block average and excluding periods of startup, shutdown, and malfunction.

b. Compliance with the annual CO limit in Specific Condition **H.13.** shall be demonstrated by summing the products of hourly CO emission rate and heat input rate data from the CEMS's. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total emissions.

[0310045-003-AC/PSD-FL-265]

H.32. Valid Data. For the continuous monitoring systems required under Specific Conditions **H.28.a.**, **H.29.a.**, and **H.31.a.**, the permittee shall determine compliance based on CEMS data at the end of each operating day (midnight to midnight), new 24-hour block and 30-day average emission rates shall be calculated from the arithmetic average of all valid hourly emission rates during the previous 24-hours or 30 operating days, as appropriate. Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 62-210.200, F.A.C., where emissions exceed the standards in Table 1 (See Specific Condition **H.8.**). These excess emission periods shall be reported as required in Specific Conditions **H.48.** and **H.49.** A valid hourly emission rate shall be calculated for each hour in which at least two concentrations are obtained at least fifteen (15) minutes apart.

[0310045-003-AC/PSD-FL-265]

H.33. Volatile Organic Compounds. Initial compliance tests shall be performed on Units 1 and 2 using EPA Method 18, 25, or 25A to determine compliance with the volatile organic compound (VOC) emission limit in Specific Condition **H.14**, while firing petroleum coke, and an additional initial test shall be performed on Unit 2 while firing coal. Compliance testing shall also be conducted once within every five years thereafter while petroleum coke or coal. Compliance with the CO limits based on CEMS data shall be used as surrogates to indicate compliance with the VOC limits.

[0310045-003-AC/PSD-FL-265]

H.34. Lead. Initial compliance tests only shall be performed on Unit 2 using EPA Method 12 or 29 to determine compliance with the lead emission limit in Specific Condition **H.15**, while firing coal and while firing petroleum coke.

[0310045-003-AC/PSD-FL-265]

H.35. Sulfuric Acid Mist. Initial compliance tests only shall be performed on Unit 2 using EPA Method 8 to determine compliance with the sulfuric acid mist emission limit in Specific Condition **H.16**, while firing petroleum coke and while firing coal. In addition, compliance with the SO<sub>2</sub> limits based on CEMS data shall be used as a surrogate to indicate compliance with the sulfuric acid mist limit.

[0310045-003-AC/PSD-FL-265]

H.36. Hydrogen Fluoride. Initial compliance tests only shall be performed on CFB Boiler No. 2 using EPA Method 13A or 13B to determine compliance with the hydrogen fluoride emission limit in Specific Condition **H.17**, while firing coal and while firing petroleum coke.

[0310045-003-AC/PSD-FL-265]

H.37. Mercury. Initial compliance tests only shall be performed on CFB Boiler No. 2 using EPA Methods 29, 101, or 101A to determine compliance with the mercury emission limit in Specific Condition **H.18**, while firing coal and while firing petroleum coke.

[0310045-003-AC/PSD-FL-265]

H.38. Distillate No. 2 Fuel Oil – Sulfur Content. Vendor or other fuel sampling and analysis data (using applicable ASTM methods) shall be used to determine that the sulfur content of the No. 2 fuel oil used in CFB Boilers Nos. 1 and 2 does not exceed 0.05%, by weight. See Specific Condition **H.3**.

[Rule 62-210.200, Definitions – PTE, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.39. Compliance with Standards and Maintenance Requirements.

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

(b) Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

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

(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of Appendix B of 40 CFR 60. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.



- (3) The owner or operator of an affected facility to which an opacity standard in 40 CFR 60 applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 40 CFR 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of 40 CFR 60.7(e)(1) shall apply.
- (4) The owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by 40 CFR 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and 40 CFR 60.8 performance test results.
- (5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.
- (6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by 40 CFR 60.8, the opacity observation results and observer certification required by 40 CFR 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by 40 CFR 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 40 CFR 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.11.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(a), (b), (c), (d), (e), (f) and (g)]

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

[40 CFR 60.8(c)]

H.41. 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.]

H.42. 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.  
[Rule 62-297.310(2), F.A.C.]

H.43. 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.]

H.44. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

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

H.45. 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.; and, 40 CFR 60.8(e)]

H.46. 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;

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

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

9. The owner or operator shall notify the 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 ERMD-EQD, 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.

[Permitting Note: For all EUs subject to a NSPS pursuant to 40 CFR 60, the ERMD-EQD shall be notified, in writing, at least 30 days prior to the initial compliance test, pursuant to 40 CFR 60.8., or at least 7 days prior notice if a compliance test was postponed due to a delay or otherwise by mutual agreement between the permittee and ERMD-EQD.]

[Rule 62-297.310(7), F.A.C.; 40 CFR 60.8; 0310045-003-AC/PSD-FL-265; and, SIP approved]

### **Recordkeeping and Reporting Requirements**

H.47. Plant Operation - Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, JEA shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations.

[Rule 62-4.130, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.48. Pursuant to the Standards of Performance for New Stationary Sources, all excess emissions shall also be reported in accordance with 40 CFR 60.7. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition **H.8**.  
[40 CFR 60.7]

**H.49. Notification and Recordkeeping**

(a) The owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

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

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of 40 CFR 60. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

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

(c) 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 30<sup>th</sup> 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.
- (d) The summary report form shall contain the information and be in the format shown in Figure 1 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.

*[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]*

- (e) The owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records.
- (f) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
- (g) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.
- [Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 60.7(a)(1) thru (6), (b), (c)(1) thru (4), (d)(1) & (2), (e), (f) and (g)]

H.50. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

H.51. Excess Emissions Report.

a. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

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

b. If excess emissions occur due to malfunctions for a period of more than two hours, the owner or operator shall notify ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may require a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A.

[0310045-003-AC/PSD-FL-265]

H.52. Test Reports.

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

(b) The required test report shall be filed with the ERMD-EQD 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 ERMD-EQD 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.

[Rule 62-297.310(8), F.A.C.]

H.53. Records. All measurements, records, and other data required to be maintained by JEA shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and ERMD-EQD representatives upon request. [Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.54. Certification Testing of Monitors. As required under the federal Acid Rain Program, the Acid Rain Monitoring Plan for NGS shall be revised to address the new Continuous Emissions Monitoring Systems (CEMS's) for sulfur dioxide, oxides of nitrogen, and visible emissions (opacity) for Repowered NGS Units 1 and 2. The permittee shall provide a copy of this revised plan, as well as model and serial numbers for each of the monitors, to ERMD-EQD within 45 days after completion of all certification tests. In addition, the permittee shall provide notification that the carbon monoxide CEMS's meet the performance specifications in 40 CFR Part 60, Appendix B (as applicable), and also provide model and serial numbers to ERMD-EQD within 45 days after completion of the performance specification tests. [0310045-003-AC/PSD-FL-265]



H.55. Quarterly Compliance Reports for Annual Limits. The permittee shall provide reports quarterly to the ERMD-EQD certifying compliance with the 12-month rolling limits on SO<sub>2</sub>, NO<sub>x</sub> and PM (TSP) for NGS CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 set forth in Specific Conditions **H.10.b.**, **H.11.b.**, and **H.12.c**. The reports shall be submitted within 45 days after the last day of each calendar quarter.

[0310045-003-AC/PSD-FL-265]

### **General Operation Requirements**

H.56. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment.

[Rule 62-4.070(3), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

### **Miscellaneous**

H.57. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

H.58. Circumvention. No owner or operator subject to the provisions of this part 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]

H.59. Modification.

(a) Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr (lbs/hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

- (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.
- (c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.
- (d) [Reserved]
- (e) The following shall not, by themselves, be considered modifications under this part:
- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
  - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
  - (3) An increase in the hours of operation.
  - (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
  - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
  - (6) The relocation or change in ownership of an existing facility.
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.
- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.  
[40 CFR 60.14(a) thru (g)]

H.60. Reconstruction.

- (a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.
- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
  - (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
- (1) Name and address of the owner or operator.
  - (2) The location of the existing facility.
  - (3) A brief description of the existing facility and the components which are to be replaced.
  - (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
  - (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
  - (6) The estimated life of the existing facility after the replacements.
  - (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
- (f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:
- (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
  - (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
  - (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
  - (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
- (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.
- [40 CFR 60.15(a) thru (g)]

**Compliance Assurance Monitoring (CAM) Requirements**

H.61. The emissions units are subject to the CAM requirements contained in the attached Appendix CAM: NGS CFB Boilers Nos. 1 and 2. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedence of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

**Compliance Plan**

H.62. Appendix CP-1, Compliance Plan, is a part of this permit. The NGS CFB Boilers Nos. 1 and 2 are subject to the compliance requirements contained in the attached Appendix CP-1, Compliance Plan. [Rule 62-213.440(2)(a), F.A.C.]

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

**Subsection I. This section addresses the following emissions units.**

| <b>E.U. ID No.</b>                          | <b>Brief Description</b>                                     |
|---|--|
| <b>NGS: Materials Processing Operations</b> |  |
| -028  | NGS: Materials Handling and Storage Operations               |
| -028  | Belt Conveyor No. 1  |
| -028a                                       | Vessel Hold, Vessel Unloader and Spillage Conveyor           |
| -028c                                       | Transfer Building 1  |
| -028d                                       | Transfer Building 5 and limestone loadout chute              |
| -028g                                       | Transfer Building 2  |
| -028h                                       | Fuel Storage Domes A & B (includes fuel stackers/reclaimers) |
| -028i                                       | Transfer Building 3  |
| -028o                                       | Plant Transfer Building                                      |
| -028p                                       | Limestone Storage Pile and Limestone Reclaim Hoppers         |
| -028q                                       | Transfer Building 4  |
| -028v                                       | Transfer Building 6  |
| -029  | NGS: Crusher House Building Baghouse Exhaust                 |
| -031  | NGS: Fuel Silos Dust Collectors                              |
| -033  | NGS: Limestone Dryers/Mills Building                         |
| -034  | NGS: Limestone Prep Building Dust Collectors                 |
| -035  | NGS: Limestone Silos Bin Vent Filters                        |
| -036  | NGS: Fly Ash Transport Blower Discharge                      |
| -037  | NGS: Fly Ash Silos Bin Vents                                 |
| -038  | NGS: Bed Ash Silos Bin Vents                                 |
| -042  | NGS: AQCS Pebble Lime Silo                                   |
| -051  | NGS: Fly Ash Slurry Mix System Vents                         |
| -052  | NGS: Bed Ash Slurry Mix System Vents                         |
| -053  | NGS: Bed Ash Surge Hopper Bin Vents                          |

The material handling and storage operations will process ash, limestone, coal, coal coated with latex, and petroleum coke to support the operation of CFB Boilers Nos. 1 and 2. Each materials handling and storage operation at NGS will employ one or more control strategies to limit emissions of particulate matter to meet specific emission limitations and/or visible emissions limits. The control strategies include the use of best operating/design practices, total or partial enclosures, conditioned materials, wet suppression, water sprays, and dust collection systems. Except for the Belt Conveyor 1, all conveyors are enclosed.

{Permitting Note(s): Some of the emissions units are regulated under 40 CFR 60, Subpart A, General Provisions, Subpart Y, Standards of Performance for Coal Preparation Plants (coal handling at NGS, excluding open storage piles), and Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants (limestone handling at NGS, except for open storage piles and truck unloading), adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; 0310045-007-AC/PSD-FL-265A; and, 0310045-012-AC/PSD-FL-265B]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Rule 62-297.711, F.A.C.,

Reasonable Available Control Technology - Materials Handling, Sizing, Screening, Crushing and Grinding Operations.}

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

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

I.0. The emissions units/points are subject to Revised Table 6 – Part C, SJRPP, amended July 29, 1999, and it is attached.  
[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

I.1. Permitted Capacity

a. Throughput Rates. The materials handling and usage rates for coal, coal coated with latex, petroleum coke, and limestone at NGS shall not exceed the following (for NGS CFB Boilers Nos. 1 and 2 combined), assuming a moisture content of 5.5% or less:

| <u>Material</u>                            | <u>Handling/Usage Rate<br/>Tons Per Year</u> |
|--|--|
| Coal/Coal coated with latex/Petroleum Coke | 2.42 million                                 |
| Limestone                                  | 1.45 million                                 |

b. Heat Input Rates. The maximum heat input rates to the three limestone dryers shall not exceed 57.9 MMBtu/hr, for all three units combined. These rates are included only for purposes of determining capacity during compliance stack tests. Continuous compliance with these rates is not required; capacity during compliance testing shall be determined based on fuel flow data and the as-fired heat content of the fuel.

[Rule 62-210.200(228), F.A.C.; 0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

I.2. Hours of Operation. The Materials Processing Operations are allowed to operate continuously, i.e., 8,760 hours/year.

I.3. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition I.22.

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

I.4. Method of Operation.

a. Material Processing Operations. The emissions units either process or transfer materials used in the operations of NGS's CFBs Boilers Nos. 1 and 2. The transfer buildings (TBs) are numbered sequentially as they occur in the process with TB 1 being the TB nearest the vessel unloading operations and TB 5 being the TB immediately upstream of the fuel storage buildings and the limestone storage pile. TBs 1 thru 5 are associated with the transfer of raw coal, pet coke and limestone, while TB 6 is associated with the transfer of raw coal and pet coke and the Plant TB is associated with the transfer of crushed coal and pet coke. Limestone loadout via telescopic chute is included with TB 5. Except for the Belt Conveyor 1, all conveyors are enclosed.

b. Fuels.

(1) Limestone Dryers (3)(EU -033). Each limestone dryer is allowed to fire distillate fuel oil and Natural/Landfill Gases. The distillate fuel oil has a maximum sulfur content limit of 0.05%, by weight.

[Rule 62-213.410, F.A.C.; 0310045-003-AC/PSD-FL-265; and, 0310045-016-AV]

**Emission Limitations**

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. I.5. and I.6. are based on the specified averaging time of the applicable test method.}

I.5. Particulate Matter. The maximum particulate matter emissions from the following operations shall not exceed 0.01 grains per dry standard cubic foot:

- a. Limestone dryers - each (3) (EU-033)
- b. Limestone prep building dust collectors (EU-034)
- c. Limestone silos bin vent filters (EU-035)

[0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

I.6. Visible Emissions. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the emissions units or activities.

a. The following materials handling sources shall be equipped with fabric filter controls and visible emissions shall not exceed 5 percent opacity:

- (1) Crusher house building baghouse exhaust (EU-029)
- (2) Fuel silos dust collectors (EU-031)
- (3) Limestone dryers - each (3) (EU-033)
- (4) Limestone prep building dust collectors (EU-034)
- (5) Limestone silos bin vent filters (EU-035)
- (6) Fly ash transport blower discharge (EU-036)
- (7) Fly ash silos bin vents (EU-037)
- (8) Bed ash silos bin vents (EU-038)
- (9) AQCS pebble lime silo (EU-042)
- (10) Fly ash slurry mix system vents (EU-051)
- (11) Bed ash slurry mix system vents (EU-052)
- (12) Bed ash surge hopper bin vents (EU-053)

b. The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o, EU-028q and EU-028v)
- (2) Coal, coal coated with latex and petroleum coke storage building (EU-028h)
- (3) Transfer Building 5 and limestone loadout chute (EU-028d)
- (4) Belt Conveyor No. 1 (EU-028)

c. The following materials handling sources shall use wet suppression, water spray, partial enclosures, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 10 percent opacity:

- (1) NGS dock vessel unloading operations - vessel hold (EU-028a)
- (2) NGS dock vessel unloading operations - vessel unloader and spillage conveyor (EU-028a)
- (3) Limestone storage pile (EU-028p)
- (4) Limestone reclaim hopper (EU-028p)

d. The limestone dryer/mill building shall have no visible emissions (other than from a baghouse vent).  
[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; and, 0310045-012-AC/PSD-FL-265B]

I.7. Distillate Fuel Oil Sulfur Content. The maximum sulfur content of the distillate No. 2 fuel oil that is allowed to be fired in each of the three (3) limestone dryers (EU-033) is 0.05%, by weight.  
[0310045-003-AC/PSD-FL-265]

### **Excess Emissions**

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

I.8. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.  
[Rule 62-210.700(1), F.A.C.]

I.9. 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**

I.10. Determination of Process Variables.

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

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.  
[Rule 62-297.310(5), F.A.C.]

I.11. For EUs -029, -031, -033, -034 and -035, and 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)]



**Compliance Determination - Test Methods and Procedures**

1.12. Performance Tests (for EUs -029, -031, -033, -034 and -035).

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

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

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(a), (b), (c), (e) and (f)]

I.13. Limestone Dryers (3): Distillate No. 2 Fuel Oil - Sulfur Content. Vendor or other fuel sampling and analysis data (using applicable ASTM methods) shall be used to determine that the sulfur content of the No. 2 fuel oil used in the three (3) limestone dryers does not exceed 0.05%, by weight. See Specific Condition I.7.

[Rule 62-210.200, Definitions - PTE, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

I.14. Limestone Dryers (3) - Visible Emissions (EU-033). Compliance with the visible emissions limit in Specific Condition I.6. for the limestone dryers (each) shall be demonstrated using EPA Method 9 initially and once within every five years thereafter. The limestone dryers shall fire fuel oil during the initial compliance tests. In subsequent years, the testing shall be conducted annually if fuel oil has been fired for more than 400 hours during the previous federal fiscal year; otherwise, the testing shall be conducted once within every five years, even if the testing is conducted while firing natural gas.

[0310045-003-AC/PSD-FL-265]

I.15. Limestone Dryers (3) - Particulate Matter (EU-033). Initial compliance tests only shall be performed on the limestone dryers (3) to determine compliance with the particulate matter limit in Specific Condition I.5.b. using EPA Method 5.

[0310045-003-AC/PSD-FL-265]

I.16. Compliance with Standards and Maintenance Requirements (for EUs -029, -031, -033, -034 and -035):

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

(b) Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

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

- (e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9 of Appendix B of 40 CFR 60. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.
- (2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
- (3) The owner or operator of an affected facility to which an opacity standard in 40 CFR 60 applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 40 CFR 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of 40 CFR 60.7(e)(1) shall apply.

(4) The owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by 40 CFR 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and 40 CFR 60.8 performance test results.

(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by 40 CFR 60.8, the opacity observation results and observer certification required by 40 CFR 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by 40 CFR 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 40 CFR 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.11.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(a), (b), (c), (d), (e), (f) and (g)]

I.17. For EUs -029, -031, -033, -034 and -035, performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

I.18. Particulate Matter. **Initial** compliance tests only shall be performed on the limestone prep building dust collectors (EU-034) and the limestone silos bin vent filters (EU-035) to determine compliance with their particulate matter limit specified in Specific Condition **I.5**, using EPA Method 5, 40 CFR 60, Appendix A. The minimum sample volume shall be 30 dry standard cubic feet.

[0310045-003-AC/PSD-FL-265; 40 CFR 60, Appendix A; and, Rule 62-297.711(3)(b), F.A.C.]

I.19. Visible Emissions (VE). VE tests shall be conducted on the following emissions units to determine compliance with their applicable limits, as follows:

| Emissions Units at NGS  | EPA Method(s) | Duration of VE Test          | Frequency                       | Material |
|---|---------------|------------------------------|---------------------------------|----------|
| Vessel Hold (EU-028a)   | 9             | 30 min                       | I only                          | C or PC  |
| Vessel Unloader & Spillage Conveyors (EU-028a)                      | 9             | 3 hr                         | I only                          | C & LS   |
| Belt Conveyor No. 1 (EU-028)  | 9             | 3 hr                         | I only                          | C & LS   |
| Transfer Towers (EU-028c, -028g, -028i, -028o, -028q & -028v)       | 9             | 3 hr                         | I only                          | C & LS   |
| Fuel Storage Building (EU-028h)                                     | 9             | 30 min                       | I only                          | C or PC  |
| Limestone Storage Pile (EU-028p)                                    | 9             | 30 min                       | I only                          | LS       |
| <b><u>NSPS - OOO</u></b>  |               |                              |                                 |          |
| Limestone Prep Building Dust Collectors - Baghouse Exhaust (EU-034) | 9-VE<br>5-PM  | IVE - 60 min<br>RVE - 30 min | Meth 9: I & R<br>Meth 5: I only | LS       |
| Limestone Silos Bin Vent Filters - Baghouse Exhaust (EU-035)        | 9-VE<br>5-PM  | IVE - 60 min<br>RVE - 30 min | Meth 9: I & R<br>Meth 5: I only | LS       |
| Limestone Dryer/Mill Building (EU-033)                              | 22            | IVE - 75 min                 | I only                          | LS       |
| <b><u>NSPS - Y</u></b>  |               |                              |                                 |          |
| Crusher House Building Baghouse Exhaust (EU-029)                    | 9             | IVE - 3 hr<br>RVE - 30 min   | I & R                           | C        |
| Fuel Silos Dust Collectors - Baghouse Exhaust (EU-031)              | 9             | IVE - 3 hr<br>RVE - 30 min   | I & R                           | C        |
| <b><u>Other</u></b>   |               |                              |                                 |          |
| Fly Ash Transport Blower Discharge - Baghouse Exhaust (EU-036)      | 9             | IVE - 30 min<br>RVE - 30 min | I & R                           | Ash      |
| Fly Ash Silos Bin Vents - Baghouse Exhaust (EU-037)                 | 9             | IVE - 30 min<br>RVE - 30 min | I & R                           | Ash      |
| Bed Ash Silos Bin Vents - Baghouse Exhaust (EU-038)                 | 9             | IVE - 30 min<br>RVE - 30 min | I & R                           | Ash      |
| AQCS Pebble Lime Silo - Baghouse Exhaust (EU-042)                   | 9             | IVE - 30 min<br>RVE - 30 min | I & R                           | Ash      |
| Fly Ash Slurry Mix System Vents - Baghouse Exhaust (EU-051)         | 9             | IVE - 60 min<br>RVE - 60 min | I & R                           | Ash      |
| Bed Ash Slurry Mix System Vents - Baghouse Exhaust (EU-052)         | 9             | IVE - 30 min<br>RVE - 30 min | I & R                           | Ash      |
| Bed Ash Surge Hopper Bin Vents - Baghouse Exhaust (EU-053)          | 9             | IVE - 60 min<br>RVE - 60 min | I & R                           | Ash      |

C – Coal and/or Coal coated with latex

I – Initial R - Renewal (once every 5 years)

IVE – Initial Visible Emissions Test, RVE - Renewal Visible Emissions Test

LS – Limestone; PC-Petroleum Coke

Note: No methods other than the ones identified above may be used for compliance testing unless prior DEP or the ERMD-AQD approval is received in writing.

[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; 0310045-012-AC/PSD-FL-265B; 40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

I.20. For EUs -029, -031, -033, -034 and -035, the opacity standards shall apply at all times except during startup, shutdown, malfunction, and as otherwise provided in the applicable standard.  
[40 CFR 60.11(c)]

I.21. 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.]

I.22. 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.

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

I.23. 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.]

I.24. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

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

I.25. 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.; and, 40 CFR 60.8(e)]

I.26. 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;

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

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

9. The owner or operator shall notify the 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 ERMD-EQD, 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.

{Permitting Note: For all EUs subject to a NSPS pursuant to 40 CFR 60, the ERMD-EQD shall be notified, in writing, at least 30 days prior to the initial compliance test, pursuant to 40 CFR 60.8., or at least 7 days prior notice if a compliance test was postponed due to a delay or otherwise by mutual agreement between the permittee and the ERMD-EQD.]

[Rule 62-297.310(7), F.A.C.; 40 CFR 60.8; 0310045-003-AC/PSD-FL-265; and, SIP approved]

### **Recordkeeping and Reporting Requirements**

I.27. **Plant Operation - Problems**. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, JEA shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations.

[Rule 62-4.130, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

I.28. For EUs -029, -031, -033, -034 and -035, and pursuant to the Standards of Performance for New Stationary Sources, all excess emissions shall also be reported in accordance with 40 CFR 60.7. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions I.5. and I.6.

[40 CFR 60.7]

I.29. **Notification and Recordkeeping** (for EUs -029, -031, -033, -034 and -035).

(a) The owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

- (1) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
- (2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.
- (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
- (5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
- (6) A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of 40 CFR 60. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- (b) The owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- (e) The owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records.
- (f) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
- (g) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.
- [Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 60.7(a)(1) thru (6), (b), (e), (f) and (g)]

I.30. For EUs -029, -031, -033, -034 and -035, the owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

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

[40 CFR 60.7(a)(4)]

I.31. For EUs -029, -031, -033, -034 and -035, the owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.  
[40 CFR 60.7(b)]

I.32. Excess Emissions Report. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.  
[Rule 62-210.700(6), F.A.C.]

b. If excess emissions occur due to malfunctions for a period of more than two hours, the owner or operator shall notify ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may require a written summary report of the incident. For EUs -029, -031, -033, -034 and -035, and pursuant to the Standards of Performance for New Stationary Sources at 40 CFR 60, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A.  
[0310045-003-AC/PSD-FL-265]

I.33. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
- (b) The required test report shall be filed with the ERMD-EQD 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 ERMD-EQD 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.

[Rule 62-297.310(8), F.A.C.]

I.34. Records. All measurements, records, and other data required to be maintained by JEA shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and the ERMD-EQD representatives upon request.

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, 0310045-003-AC/PSD-FL-265]

### **General Operation Requirements**

I.35. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment.

[Rule 62-4.070(3), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

**Miscellaneous**

I.36. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

I.37. Circumvention. For EUs -029, -031, -033, -034 and -035, no owner or operator subject to the provisions of this part 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]

I.38. Modification (for EUs -029, -031, -033, -034 and -035).

(a) Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr (lbs/hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

- (e) The following shall not, by themselves, be considered modifications under this part:
- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
  - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
  - (3) An increase in the hours of operation.
  - (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
  - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
  - (6) The relocation or change in ownership of an existing facility.
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.
- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [40 CFR 60.14(a) thru (g)]

I.39. Reconstruction (for EUs -029, -031, -033, -034 and -035).

- (a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.
- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
  - (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
- (1) Name and address of the owner or operator.
  - (2) The location of the existing facility.
  - (3) A brief description of the existing facility and the components which are to be replaced.
  - (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
  - (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

- (6) The estimated life of the existing facility after the replacements.
  - (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
  - (e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
  - (f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:
    - (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
    - (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
    - (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
    - (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
  - (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.
- [40 CFR 60.15(a) thru (g)]

**Compliance Plan**

I.40. Reserved.

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

**Subsection J. This section addresses the following emissions units.**

| <b>E.U. ID No.</b>                          | <b>Brief Description</b>           |
|---|------------------------------------|
| <b>STI: Materials Processing Operations</b> |                                    |
| -044  | Separator A Filter - Receiver Vent |
| -045  | Separator B Filter - Receiver Vent |
| -046  | Separator Dust Collector Vent      |
| -047  | Clean-up Vacuum Vent               |
| -048  | Fly Ash Surge Bin Vent             |
| -049  | Mineral Additive Storage Bin Vent  |
| -050  | Gas-Fired Dryer Stack              |

STI (Separation Technologies LLC's Separation Technologies, Inc.) has constructed, owns and operates a new fly ash processing system on a portion of leased property at the JEA's SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the SJRPP fly ash leaving a saleable product. As a result, environmental benefits will include a 255,000 ton reduction in the fly ash currently sent to landfill by the JEA's SJRPP each year and an overall reduction in the ammonia releases with the recovery and subsequent recycle of ammonia removed from the fly ash.

The new fly ash processing system will include the addition of two fly ash receiving bins, a carbon separation unit, a clean-up vacuum, a fly ash surge bin, a mineral additive storage bin, and a gas-fired dryer. The particulate emissions generated from handling of the fly ash are collected from each source using pulse jet fabric filters. STI's triboelectric carbon separation technology partitions fly ash into mineral-rich and carbon-rich fractions. The mineral-rich fly ash can then be sold as a usable product. The carbon-rich fly ash is returned to the JEA's SJRPP fly ash storage silos for eventual disposal at the onsite landfill.

The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using STI's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using STI's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, STI installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

{Permitting Note(s): The emissions units are permitted under Rule 212.400, F.A.C., Prevention of Significant Deterioration [PSD; 0310001-002-AC/PSD-FL-010(D)]; Rule 62-297.711, F.A.C., Reasonable Available Control Technology - Materials Handling, Sizing, Screening, Crushing and Grinding Operations; and, Rule 62-296.712, F.A.C., Reasonable Available Control Technology - Miscellaneous Manufacturing Process Operations.}



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

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

J.1. Equipment Design Capacity. The equipment design of the fly ash processing operation is based on a maximum fly ash delivery rate from JEA's SJRPP of 300,000 tons per year.  
[Rule 62-210.200 (PTE), F.A.C.]

J.2. Hours of Operation. The operations are allowed to operate continuously, i.e., 8,760 hours/year.  
[Rule 62-210.200(PTE), F.A.C.; 0310001-002-AC/PSD-FL-010(D)]

J.3. Emissions Unit Operating Rate Limitation After Testing. Reserved.  
[Rule 62-297.310(2), F.A.C.]

J.4. Method of Operation.

a. Fly Ash Processing Operations. The operation processes fly ash from the JEA's SJRPP facility. The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using STI's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using STI's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, STI installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

b. Fuel: For the boiler, the only fuel allowed to be fired is natural gas.  
[Rule 62-213.410, F.A.C.; and, 0310001-002-AC/PSD-FL-010(D)]

**Emission Limitations**

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions Nos. J.5. and J.6. are based on the specified averaging time of the applicable test method.}

J.5. Particulate Matter. The maximum particulate matter emissions from the following operations shall not exceed:

a. 0.015 grains per dry standard cubic foot:

1. Separator A Filter - Receiver Vent (EU-044)
2. Separator B Filter - Receiver Vent (EU-045)
3. Separator Dust Collector Vent (EU-046)
4. Clean-up Vacuum Vent (-047)
5. Fly Ash Surge Bin Vent (-048)
6. Mineral Additive Storage Bin Vent (-049)

b. 1.60 lbs/hr:

1. Gas-Fired Dryer Stack (EU-050)

c. Visible Emissions. Visible emissions less than or equal to 5 percent opacity shall be considered in compliance with the particulate matter emissions limits established above.

[0310001-002-AC/PSD-FL-010(D)]

**J.6. Visible Emissions.**

- a. Visible emissions shall not exceed 5 percent opacity for EU-044 thru EU-050.
- b. Annual compliance certification shall be conducted to measure opacity.  
[0310001-002-AC/PSD-FL-010(D)]

**Excess Emissions**

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

J.7. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.  
[Rule 62-210.700(1), F.A.C.]

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

**Monitoring of Operations**

**J.9. Determination of Process Variables.**

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

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.  
[Rule 62-297.310(5), F.A.C.]

**Test Methods**

**J.10. Particulate Matter.**

a. **Initial** compliance with the applicable particulate emission limits of EU-044 through EU-049 listed in specific condition **J.5.a.** shall be demonstrated by performing a visible emissions test using EPA Method 9, or other methods determined to be suitable by the Department (ref. Rules 62-296.711(3) and 62-296.712(3), F.A.C.). Visible emissions less than or equal to 5 percent opacity shall be considered in compliance. Annual compliance certification shall be achieved on emission units 44 through 49 using EPA Method 9 tests to measure opacity.

b. **Initial** compliance with the applicable particulate emission limit of EU-050 listed in specific condition **J.5.b.** shall be demonstrated by performing a particulate emissions test using EPA Method 5, or other methods determined to be suitable by the Department (ref. Rules 62-296.711(3) and 62-296.712(3), F.A.C.). Particulate emissions less than or equal to 1.60 lbs/hr shall be considered in compliance. If the initial compliance test shows the emissions unit to be in compliance with the particulate emission limit of 1.60 lbs/hr, then future annual compliance certification shall be achieved using EPA Method 9. Visible emissions of less than or equal to 5 percent opacity shall be considered in compliance. The minimum sample volume shall be 30 dry standard cubic feet.

[0310001-002-AC/PSD-FL-010(D); and, 40 CFR 60, Appendix A; and, Rules 62-296.711(3)(b) and 62-296.712(3)(b), F.A.C.]

J.11. Visible Emissions (VE). **Annual** compliance certification shall be conducted using EPA Method 9 tests to measure opacity.

[0310001-002-AC/PSD-FL-010(D); and, 40 CFR 60, Appendix A; and, Rules 62-296.711(3)(a) and 62-296.712(3)(a), F.A.C.]

J.12. 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.]

J.13. 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.

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

J.14. 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.]

**J.15. Applicable Test Procedures.**

**(a) Required Sampling Time.**

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

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

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

**J.16. 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.; and, 40 CFR 60.8(e)]

**J.17. 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;

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

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

9. The owner or operator shall notify the 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 ERMD-EQD, 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]

### **Recordkeeping and Reporting Requirements**

J.18. Plant Operation - Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, STI shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations.

[Rule 62-4.130, F.A.C.]

J.19. Excess Emissions Report. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD 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 ERMD-EQD.

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

### **J.20. Test Reports**

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

(b) The required test report shall be filed with the ERMD-EQD 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 ERMD-EQD 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.

[Rule 62-297.310(8), F.A.C.]

J.21. Records. All measurements, records, and other data required to be maintained by STI shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and the ERMD-EQD representatives upon request.

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

### Miscellaneous

J.22. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

**Section IV. This section is the Acid Rain Part.**

**Operated by:** JEA  
**ORIS codes:** 0667: Northside Generating Station  
 0207: St. Johns River Power Park

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

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

| ARMS E.U. ID No. | Description  |
|------------------|--|
| -001             | NGS Boiler No. 1 (retired/dismantled)                  |
| -002             | NGS Boiler No. 2 (retired/dismantled)                  |
| -003             | NGS Boiler No. 3                                       |
| -016             | SJRPP Boiler No. 1                                     |
| -017             | SJRPP Boiler No. 2                                     |
| -026             | NGS Circulating Fluidized Bed Boiler No. 2A (297.5 MW) |
| -027             | NGS Circulating Fluidized Bed Boiler No. 1A (297.5 MW) |

A.1. The Acid Rain Phase II Part 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), effective 06/16/2003, dated 06/17/2003 .  
 [Chapter 62-213 and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are as follows:

| E.U. ID No.       | U.S. EPA ID | Year  | 2004               | 2005               | 2006               | 2007               | 2008               |
|-------------------|-------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| -027 <sup>1</sup> | 1A          | SO <sub>2</sub> allowances to be determined by U.S. EPA     | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    |
| -026 <sup>1</sup> | 2A          | SO <sub>2</sub> allowances to be determined by U.S. EPA     | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    | () <sup>4</sup>    |
| -003 <sup>1</sup> | 3           | SO <sub>2</sub> allowances, under Table 2 of 40 CFR Part 73 | 11061 <sup>3</sup> | 11061 <sup>3</sup> | 11061 <sup>3</sup> | 11061 <sup>3</sup> | 11061 <sup>3</sup> |

| E.U. ID No.       | U.S. EPA ID | Year  | 2004               | 2005               | 2006               | 2007               | 2008               |
|-------------------|-------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| -016 <sup>2</sup> | 1           | SO <sub>2</sub> allowances, under Table 2 of 40 CFR Part 73 | 11486 <sup>3</sup> | 11486 <sup>3</sup> | 11486 <sup>3</sup> | 11486 <sup>3</sup> | 11486 <sup>3</sup> |
| -017 <sup>2</sup> | 2           | SO <sub>2</sub> allowances, under Table 2 of 40 CFR Part 73 | 11279 <sup>3</sup> | 11279 <sup>3</sup> | 11279 <sup>3</sup> | 11279 <sup>3</sup> | 11279 <sup>3</sup> |

<sup>1</sup> Northside Generating Station

<sup>2</sup> St. Johns River Power Park

<sup>3</sup> 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 of 40 CFR 73.

<sup>4</sup> SO<sub>2</sub> allowances to be determined by U.S. EPA.

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.

a. 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.

b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

c. Allowances shall be accounted for under the Federal Acid Rain Program.

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

A.4. Comments, notes, and justifications:

a. For Title IV purposes, Mr. James Chansler is the primary designated representative.

b. A Certificate of Authorization was signed on June 17, 2003, designating Ms. Susan N. Hughes as an alternate designated representative for the NGS; in addition, a Certificate of Authorization was signed on June 17, 2003, designating Ms. Susan N. Hughes as an alternate designated representative for the SJRPP.

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

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



**Subsection B. This subsection addresses Acid Rain, Phase I/II.**

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I/II, for:

JEA  
St. Johns River Power Park  
**Facility ID No.:** 0310045  
**ORIS Code:** 0207

| <b>E.U. ID No.</b> | <b>Brief Description</b> |
|--------------------|--------------------------|
| -016               | SJRPP Boiler No. 1       |
| -017               | SJRPP Boiler No. 2       |

B.1. The owners and operators of these Phase I/II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:

a. Phase I permit issued 3/27/97.

[Chapter 62-213, F.A.C.]

B.2. Nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain unit are as follows:

| E.U. ID No. | EPA ID | NO <sub>x</sub> limit <sup>1</sup>   |
|-------------|--------|--|
| -016        | 1      | <p>Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO<sub>x</sub> early election compliance plan for unit U1. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and the requirements covering excess emissions.</p> |
| -017        | 2      | <p>Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO<sub>x</sub> early election compliance plan for unit U2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO<sub>x</sub> emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and the requirements covering excess emissions.</p> |

<sup>1</sup> Based on the Phase I/II NO<sub>x</sub> Compliance Plan dated December 19, 1997.

B.3. Comments, notes, and justifications: none

## Friday, Barbara

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**From:** Exchange Administrator  
**Sent:** Thursday, April 27, 2006 7:16 AM  
**To:** Friday, Barbara  
**Subject:** Delivery Status Notification (Relay)

**Attachments:** ATT570761.txt; PROPOSED Title V Permit Revision No.: 0310045-016-AV - JEA-Northside  
Generating Station/St. Johns River Power Park



ATT570761.txt  
(281 B)



PROPOSED Title V  
Permit Revisi...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

GianNB@jea.com

**Friday, Barbara**

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**From:** Friday, Barbara  
**Sent:** Thursday, April 27, 2006 7:15 AM  
**To:** 'Gianazza, N. Bert'  
**Cc:** Mitchell, Bruce  
**Subject:** PROPOSED Title V Permit Revision No.: 0310045-016-AV - JEA-Northside Generating Station/St. Johns River Power Park

**Attachments:** JEA.Operation.and.Maintenance.Plan.pdf;  
SJRPP.material.handling.operations.Revised.Table6-PartB.2.xls; SJRPP.Table6-  
PartA.and.PartC.pdf; 0310045.016.AV.Appendix.CAM.SJRPP.NGS.doc;  
0310045.016.AV.PD.Revision.pdf; 0310045.016.AV.Revision.PROPOSED.SOB.doc;  
0310045G.016.AV.Revision.doc; 0310045H.016.AV.Revision.PROPOSED.doc;  
0310045p.016.AV.Revision.JEA.SJRPP.NGS.STI.doc; 0310045U.016.AV.Revision.doc;  
Attachment.Q.Procedures.for.Startup.and.Shutdown.O&M.Procedures.pdf;  
JEA.NGS.CT.Heat.Input.Nominal.Values.pdf

**Friday, Barbara**

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**To:** Oven, Hamilton; robinson@coj.net  
**Cc:** Mitchell, Bruce  
**Subject:** PROPOSED Title V Permit Revision No.: 0310045-016-AV - JEA-Northside Generating Station/St. Johns River Power Park

**Attachments:** 0310045.016.AV.P[1].zip

Attached for your records is a zip file for the subject PROPOSED Title V Permit Revision.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday  
Planner II  
Bureau of Air Regulation  
(850)921-9524  
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4/27/2006