



# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

December 4, 2001

Mr. Walter P. Bussells  
CEO & Managing Director  
Jacksonville Electric Authority  
21 West Church Street  
Jacksonville, Florida 32202

Re: DRAFT Title V Permit Revision No.: 0310047-011-AV  
Jacksonville Electric Authority  
Kennedy Generating Station

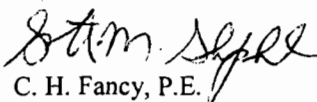
Dear Mr. Bussells:

One copy of the DRAFT Title V Air Operation Permit Revision for the Jacksonville Electric Authority Kennedy Generating Station located at 4215 Talleyrand Avenue, Jacksonville, Duval County, is enclosed. This permit revision is for the authorization to operate direct water spray fogging devices ahead of the compressors on three identical and existing Westinghouse Model W 501G combustion turbines (Nos. 3 thru 5) located at the Jacksonville Electric Authority's Kennedy Generating Station. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" are also included.

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

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Bruce Mitchell at 850/413-9198.

Sincerely,

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

CHF/BM/m

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article-Addressed to:

Mr. Walter P. Bussels  
 CEO & Managing Director  
 Jacksonville Electric  
 Authority  
 21 West Church Street  
 Jacksonville, Florida 32202

2. Article Number (Copy from service label)

7000 0520 0020 9371 1854

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

T. HEARNES DEC 10 2001

C. Signature

X *T. Hearn*

- Agent
- Addressee

D. Is delivery address different from item 1?  Yes

If YES, enter delivery address below:  No

3. Service Type

- Certified Mail  Express Mail
- Registered  Return Receipt for Merchandise
- Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service  
 CERTIFIED MAIL RECEIPT  
 (Domestic Mail Only; No Insurance Coverage Provided)**

Mr. Walter P. Bussels

7000 0520 0020 9371 1854

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$</b>

Postmark  
Here

**Recipient's Name (Please Print Clearly) (To be completed by mailer)**

Mr. Walter P. Bussels

Street, Apt. No.; or PO Box No.

21 West Church Street

City, State, ZIP+4

Jacksonville, FL 32202

PS Form 3800, February 2000

See Reverse for Instructions

## STATEMENT OF BASIS

Jacksonville Electric Authority  
Kennedy Generating Station  
Facility ID No.: 0310047  
Duval County

Title V Air Operation Permit Revision  
**DRAFT Permit No.: 0310047-011-AV**

The initial Title V Air Operation Permit, No. 0310047-001-AV, was issued December 31, 1997, and effective on January 1, 1998.

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

The purpose of the revision is for the authorization to operate direct water spray fogging devices ahead of the compressors on three identical and existing Westinghouse Model W 501G simple cycle combustion turbines (Nos. 3 thru 5) located at the Jacksonville Electric Authority's Kennedy Generating Station. The installation of the foggers was authorized in air construction permit No. 0310047-004-AC. A change in the testing requirements was addressed in air construction permit No. 0310047-005-AC; and finally, a reduction in the hours of operation and initial testing requirements were addressed in air construction permit No. 0310047-009-AC. Therefore, Specific Condition C.4. will be changed and a new Specific Condition C.20. will be added as follows:

**FROM:**

C.4. Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO16-173880]

**TO:**

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.; AO16-173880; and, 0310047-009-AC]

and,

**new:**

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.]

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



# Department of Environmental Protection

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2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

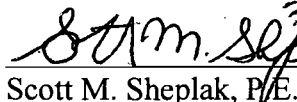
## P.E. Certification Statement

**Permittee:**  
Jacksonville Electric Authority  
Kennedy Generating Station

**DRAFT Permit No.:** 0310047-011-AV  
**Facility ID No.:** 0310047

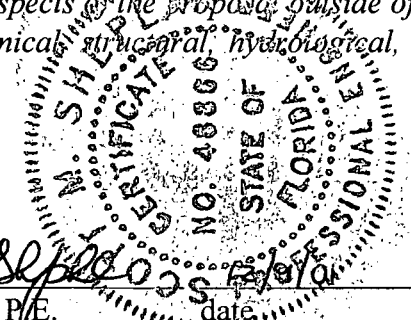
**Project type:** Title V Air Operation Permit Revision – Water Spray Fogging Devices

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

  
\_\_\_\_\_  
Scott M. Sheplak, P.E.

Registration Number: 48866

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



In the Matter of an  
Application for Permit Revision by:

Jacksonville Electric Authority  
21 West Church Street  
Jacksonville, Florida 32202

DRAFT Permit No.: 0310047-011-AV  
Kennedy Generating Station  
Duval County

---

**INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION**

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

The permittee, Jacksonville Electric Authority, submitted a request on October 5, 2001, for a permit revision. The purpose for the revision is for the authorization to operate direct water spray fogging devices ahead of the compressors on three identical and existing Westinghouse Model W 501G simple cycle combustion turbines (Nos. 3 thru 5) located at the Jacksonville Electric Authority's Kennedy Generating Station. The Jacksonville Electric Authority's Kennedy Generating Station is located at 4215 Talleyrand Avenue, Jacksonville, Duval County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V Air Operation Permit Revision is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V Air Operation Permit Revision based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. ; the City of Jacksonville Ordinance Code, Title X, Chapter 376; and, the Jacksonville Environmental Protection Board Rule 2, Parts I thru VII and Parts IX thru XII.

Pursuant to Sections 403.815 and 403.0872, F.S., and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

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

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT

TO ISSUE TITLE V AIR OPERATION PERMIT REVISION.” Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., or a party requests mediation as an alternative remedy under Section 120.573, F.S., before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any other person must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person’s right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, F.A.C.

A petition must contain the following information:

- (a) The name and address of each agency affected and each agency’s file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner’s representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner’s substantial interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and,
- (f) A demand for relief.

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

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority’s final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final

decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

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

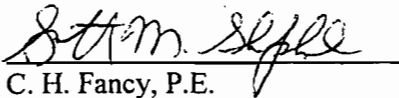
DRAFT Permit No.: 0310047-011-AV

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meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION**

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



**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION (including the PUBLIC NOTICE and the DRAFT Permit) and all copies were sent by certified mail before the close of business on 12/6/01 to the person(s) listed:

Mr. Walter P. Bussells, CEO and Managing Director/Responsible Official, JEA

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

Mr. Jon P. Eckenbach, Executive Vice President/Designated Representative, JEA  
Mr. Kennard F. Kosky, P.E., GAI  
Mr. Bert Gianazza, JEA, Application Contact

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION (including the DRAFT Permit package) were sent by INTERNET E-mail on the same date to the person(s) listed:

Mr. Richard Robinson, AWQD  
U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

Barbara J. Friday 12/6/01  
(Clerk) (Date)

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V Air Operation Permit Revision  
DRAFT Permit No.: 0310047-011-AV

Jacksonville Electric Authority  
Kennedy Generating Station  
Duval County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V Air Operation Permit Revision to Jacksonville Electric Authority for the Kennedy Generating Station located at 4215 Talleyrand Avenue, Jacksonville, Duval County. The purpose of the revision is for the authorization to operate direct water spray fogging devices ahead of the compressors on three identical and existing Westinghouse Model W 501G simple cycle combustion turbines (Nos. 3 thru 5) located at the Jacksonville Electric Authority's Kennedy Generating Station. The applicant's name and address are: Mr. Walter P. Bussells, CEO and Managing Director, Jacksonville Electric Authority, 21 West Church Street, Jacksonville, Florida 32202.

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

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

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, Florida Administrative Code (F.A.C.).

A petition must contain the following information:

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

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

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

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

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

(f) A demand for relief.

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

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

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

Mediation is not available for this proceeding.

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

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

Permitting Authority:

Department of Environmental Protection  
Bureau of Air Regulation  
111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-1344  
Fax: 850/922-6979

Affected Local Program:

City of Jacksonville  
Regulatory and Environmental Services Department  
Air & Water Quality Division  
421 West Church Street, Suite 422  
Jacksonville, Florida 32202-4111  
Telephone: 904/630-3484  
Fax: 904/630-3638

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

Jacksonville Electric Authority  
Kennedy Generating Station  
**Facility ID No.:** 0310047  
Duval County

Title V Air Operation Permit Revision  
**DRAFT Permit No.:** 0310047-011-AV

Permitting Authority:

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

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

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

Compliance Authority:

City of Jacksonville  
Regulatory and Environmental Services Department  
Air and Water Quality Division  
117 West Duval Street, Suite 225  
Jacksonville, Florida 32202  
Telephone: 904/630-4900  
Fax: 904/630-3638

Title V Air Operation Permit Revision  
DRAFT Permit No.: 0310047-011-AV

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Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

**Permittee:**

Jacksonville Electric Authority  
21 West Church Street  
Jacksonville, Florida 32202

**DRAFT Permit No.:** 0310047-011-AV

**Facility ID No.:** 0310047

**SIC No.:** 49; 4911

**Project:** Title V Air Operation Permit Revision

This permit revision is for the authorization to operate direct water spray fogging devices ahead of the compressors on three identical and existing Westinghouse Model W 501G simple cycle combustion turbines (Nos. 3 thru 5) located at the Jacksonville Electric Authority's Kennedy Generating Station. This facility is located at 4215 Talleyrand Avenue, Jacksonville, Duval County; UTM Coordinates: Zone 17, 440.065 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.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

**Referenced attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Appendix I-1, List of Insignificant Emissions Units and/or Activities  
APPENDIX TV-3, TITLE V CONDITIONS (version dated 04/30/99)  
APPENDIX SS-1, STACK SAMPLING FACILITIES (dated 10/07/96)  
TABLE 297.310-1, CALIBRATION SCHEDULE (dated 10/07/96)  
Operation and Maintenance Plan  
Phase II Acid Rain Applications/Compliance Plans received 12/26/95 and 6/2/99  
Alternate Sampling Procedure: ASP Number 97-B-01  
Appendix JEPB Rule 2  
GE Heat Input Curves  
Appendix 40 CFR 60 Subpart A-General Provisions

**Initial Effective Date:** January 1, 1998  
**Revision Effective Date:** ARMS Day 55  
**Renewal Application Due Date:** July 5, 2002  
**Expiration Date:** December 31, 2002

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Howard L. Rhodes, Director  
Division of Air Resources Management

HLR/sms/bm

"More Protection, Less Process"

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**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of two boilers, Nos. 8 and 9; four combustion turbines, Nos. 3, 4, 5 and 7; and, an auxiliary boiler, No. 1. The auxiliary boiler is allowed to operate when one of the boilers (No. 8 or No. 9) is under standby status. There are no air pollution controls associated with the boilers. Boilers Nos. 8 and 9 fire natural gas and/or No. 6 fuel oil; the combustion turbines fire only virgin No. 2 fuel oil; and, the auxiliary boiler fires No. 2 fuel oil and/or natural gas. There is a fuel oil storage tank farm associated with the boilers and turbines. Boiler No. 10 was rendered inoperative after March 5, 2000, which is the last date of operation. Also, included in this permit are miscellaneous unregulated/ insignificant emissions units and/or activities.

This facility is a major source of hazardous air pollutants (HAPs).

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

<u>ARMS E.U. ID No.</u>	<u>Brief Description</u>
-003	Combustion Turbine No. 3
-004	Combustion Turbine No. 4
-005	Combustion Turbine No. 5
-007	Boiler No. 8
-008	Boiler No. 9
-013	Auxiliary Boiler No. 1
-015	Combustion Turbine No. 7

Unregulated Emissions Units and/or Activities:

<u>ARMS E.U. ID No.</u>	<u>Brief Description</u>
-010	Storage Tanks (tanks 1 and 4)
-011	Storage Tanks (tanks 2 and 3)
-xxx	Storage Tank (tank 13)

*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; Permit History

Statement of Basis

These documents are on file with the permitting authority:

BACT Determination dated October 15, 1984.

ORDER EXTENDING PERMIT EXPIRATION DATE dated November 8, 1997.

Initial Title V Permit (FINAL) clerked on December 31, 1997, and effective January 1, 1998.

Air Construction Permit, No. 0310047-002-AC, issued/clerked on March 8, 1999.

Title V Permit Revision application received August 28, 2000.

Verification of compliance testing received September 28, 2000, from Mr. Bert Gianazza.

Mr. N. Bert Gianazza's letter with enclosure (GE heat input curves) received August 14, 2000.

Mr. N. Bert Gianazza's letter received August 14, 2000, regarding Boiler #10's status.

E-mail from Mr. Bert Gianazza received on December 20, 2000.

E-mail from Mr. Bert Gianazza received on December 22, 2000.

Fax from Mr. Bert Gianazza received on January 9, 2001.



## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
  2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. 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 Jacksonville Ordinance Code (JOC) Chapter 376, any facility that causes or contributes to the emission of objectionable odors, which results in the City of Jacksonville Air and Water Quality Division (AWQD) receiving and validating complaints from five (5) or more different households within a 90 day period, 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 that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
  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 RMP Reporting Center when, and if, such requirement becomes applicable. Any RMPs, original submittals, revisions or updates to submittals, should be sent to:  

RMP Reporting Center  
Post Office Box 3346  
Merrifield, VA 22116-3346  
Telephone: 703/816-4434
- 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: Nothing has been deemed necessary at the time of issuance of this permit.}

[Rule 62-296.320(1)(a), F.A.C.]

9. 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 AWQD upon request.

[Rule 62-296.700(6), F.A.C.; and, AO16-180744 and AO16-214191]

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

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

11. The permittee shall submit all compliance related notifications and reports required of this permit to the AWQD and Department's Northeast District offices at the following addresses:

City of Jacksonville  
Regulatory and Environmental Services Department  
Air and Water Quality Division  
117 West Duval Street, Suite 225  
Jacksonville, Florida 32202  
Telephone: 904/630-4900  
Fax: 904/630-3638

Department of Environmental Protection  
Northeast District  
Air Resources  
7825 Baymeadows Way, Suite 200B  
Jacksonville, Florida 32256-7590  
Telephone: 904/448-4310  
Fax: 904/448-4363

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

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

13. **Not federally enforceable.** Appendix JEPB Rule 2 is incorporated by reference. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIII.

{Permitting note: This appendix provides the applicable rules of the City of Jacksonville Environmental Protection Board (JEPB) contained in Rule 2, Air Pollution Control, and the corresponding rules of the Department that have been adopted by reference and within the SOA (Specific Operating Agreement) signed with the Department.}

14. **Not federally enforceable.** The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 85-1 [Final Rules with Respect to Organization, Procedures, and Practice].

15. 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.]

**Section III. Emissions Units.**

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

<u>E.U. ID No.</u>	<u>Brief Description</u>
-007	Boiler No. 8
-008	Boiler No. 9

Fossil fuel fired steam generator No. 8 is a nominal 50.0 megawatt (electric) steam generator designated as Boiler No. 8. The emissions unit is fired on No. 6 fuel oil with a maximum heat input of 541 MMBtu per hour, or natural gas with a maximum heat input of 559 MMBtu per hour, or a blend of No. 6 fuel oil and natural gas with a maximum heat input of 541-559 MMBtu per hour. LP gas is used as the igniter fuel only 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. There is no air pollution control device on this emissions unit. The combustion gases exhaust through a single stack of 149.9 feet. Fossil fuel fired steam generator No. 8 began commercial operation in 1955. Currently, the emissions unit is deactivated.

Fossil fuel fired steam generator No. 9 is a nominal 50.0 megawatt (electric) steam generator designated as Boiler No. 9. The emissions unit is fired on No. 6 fuel oil with a maximum heat input of 541 MMBtu per hour, or natural gas with a maximum heat input of 559 MMBtu per hour, or a blend of No. 6 fuel oil and natural gas with a maximum heat input of 541-559 MMBtu per hour. LP gas is used as the igniter fuel only 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. There is no air pollution control device on this emissions unit. The combustion gases exhaust through a single stack of 149.9 feet. Fossil fuel fired steam generator No. 9 began commercial operation in 1958. Currently, the emissions unit is deactivated.

{Permitting note(s): These emissions units are 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; and, Rule 62-296.702, F.A.C., Fossil Fuel Steam Generators.}

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:

<u>E.U. ID No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	559	Natural Gas
	541	No. 6 Fuel Oil
	541-559	No. 6 Fuel Oil and Natural Gas
9	559	Natural Gas
	541	No. 6 Fuel Oil
	541-559	No. 6 Fuel Oil and Natural Gas

Note: When a blend of fuel oil and natural 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, AO16-214193 and AO16-214194]

A.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition A.23.  
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation - Fuels.

The only fuels allowed to be burned are No. 6 fuel oil, natural gas, a blend of No. 6 fuel oil and natural gas, and on-specification used oil. Used oil containing PCBs above the detectable level cannot be used for startup or shutdown. LP gas is used as the igniter fuel only when natural gas is not available.

[Rule 62-213.410, F.A.C.; AO16-214193 and AO16-214194; and, 0310047-001-AV]

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, AO16-214193 and AO16-214194]

**Emission Limitations and Standards**

A.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one six-minute period per hour during which opacity shall not exceed 27 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.

[Rules 62-296.405(1)(a) and 62-296.702(2)(b), F.A.C.; and, AO16-214193 and AO16-214194]

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

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

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

A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.

[Rules 62-296.405(1)(b) and 62-296.702(2)(a), F.A.C.]

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

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

A.9. Sulfur Dioxide. When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.10 pounds per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the Btu value and the percent sulfur of the liquid fuel being burned.

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

A.10. Sulfur Dioxide - Sulfur Content. The sulfur content of the as fired No. 6 fuel oil shall not exceed 1.0 percent, by weight. See Specific Condition A.21.

[Rule 62-296.405(1)(e)3., F.A.C.; and, AO16-214193 and AO16-214194]

A.11. “On-Specification” Used Oil. Only “on-specification” used oil generated by the Jacksonville Electric Authority 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 300,000 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.30., A.34. and A.35.

<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.12. 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.]

A.13. 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.]

A.14. 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

A.15. Sulfur Dioxide. **The permittee elected to demonstrate compliance using fuel sampling and analysis.** This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See Specific Conditions A.20. and A.21.  
[Rule 62-296.405(1)(f)1.b., F.A.C.; and, AO16-214193 and AO16-214194]

**A.16. Determination of Process Variables.**

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

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

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

**Test Methods and Procedures**

**A.17. Visible emissions.** The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See Specific Condition **A.18.**

[Rule 62-296.405(1)(e)1., F.A.C.]

**A.18. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid



observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

A.19. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 (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.

[Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance using fuel sampling and analysis.** See Specific Condition A.21.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.401, F.A.C.; and, AO16-214193 and AO16-214194]

A.21. For each emissions unit, the following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:

- a. Determine and record the as-fired fuel sulfur content, percent by weight, 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 following each fuel delivery.
- b. Record hourly fuel totalizer readings with calculated hourly feed rates for each fuel 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. Utilize the above information in a., b. and c., to calculate the SO<sub>2</sub> emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; and, AO16-214193 and AO16-214194]

A.22. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.23. 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.]

A.24. 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.]

A.25. 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.]

A.26. **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.]

A.27. **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 AWQD, 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 AWQD, 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 AWQD.
- (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.; AO16-214193 and AO16-214194; and, SIP approved]

A.28. 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.]

A.29. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

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

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

A.30. 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.11.**, **A.34.** and **A.35.**

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

### **Recordkeeping and Reporting Requirements**

A.31. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the AWQD 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 AWQD.

[Rule 62-210.700(6), F.A.C.]

A.32. Submit to the AWQD a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

### **A.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 AWQD on the results of each such test.

(b) The required test report shall be filed with the AWQD 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 AWQD 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.; and, AO16-214193 and AO16-214194]

A.34. 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.11., A.30. and A.35.

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

A.35. 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 Boilers Nos. 4 and 5 during the calendar year. See Specific Conditions A.11., A.29. and A.33.

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

**Miscellaneous**

A.36. **Not federally enforceable.** For Boilers Nos. 8 and 9, Jacksonville Electric Authority shall notify AWQD of the intent to startup each emissions unit at least thirty (30) days in advance of reactivation.

[AO16-214193 and AO16-214194]

A.37. For Boilers Nos. 8 and 9, Jacksonville Electric Authority shall demonstrate to the Department and the AWQD that reactivation of each emissions unit shall not constitute reconstruction pursuant to the provisions of 40 CFR 60.15 adopted at Rule 62-204.800(7)(d), F.A.C.

[40 CFR 60.15; and, AO16-214193 and AO16-214194]

**Section III. Emissions Units.**

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

<u>E.U. ID No.</u>	<u>Brief Description</u>
-013	Auxiliary Boiler No. 1

Auxiliary Boiler No. 1 is steam generator that is fired on natural gas, with a maximum heat input of 20.7 MMBtu per hour, or virgin No. 2 fuel oil, with a maximum heat input of 19.8 MMBtu per hour. LP gas is used as the igniter fuel only when natural gas is not available. The maximum sulfur content of the No. 2 fuel oil is 0.5 percent, by weight (BACT). Emissions from this boiler are uncontrolled. Auxiliary Boiler No. 1 began commercial operation prior to any NSPS promulgation that would affect this emissions unit.

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input.}

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

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

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
Aux. Boiler No. 1	20.7	Natural Gas
	19.8	No. 2 Fuel Oil

[AC16-86189; and, application of June 14, 1996]

B.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **B.17**. [Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation - Fuels.

The only fuel(s) allowed to be burned are natural gas or virgin No. 2 fuel oil. LP gas is used as the igniter fuel only when natural gas is not available.

[Rule 62-213.410, F.A.C.; and, AC16-86189]

B.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8760 hours/year, but only when at least one of the main steam generating boilers (Steam Boiler No. 8, No. 9, or No. 10) is under standby condition.

[AC16-86189]



**Emission Limitations and Standards**

B.5. Visible Emissions. Visible emissions shall not exceed 15 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.  
[AC16-86189; and, BACT dated October 15, 1984]

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

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

B.7. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas and/or low sulfur content liquid fuel. See Specific Condition **B.8**.  
[Rule 62-296.406(2), F.A.C.; and, BACT dated October 15, 1984.]

B.8. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of virgin No. 2 fuel oil sulfur content shall be limited to 0.5 percent, by weight. See Specific Condition **B.16**.  
[Rule 62-296.406(3), F.A.C.; AC16-86189; and, BACT dated October 15, 1984.]

**Excess Emissions**

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

B.10. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.  
[Rule 62-210.700(2), F.A.C.]

B.11. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.  
[Rule 62-210.700(4), F.A.C.]

### **Monitoring of Operations**

#### **B.12. 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**

**B.13. Visible emissions.** The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. See Specific Condition **B.14**.  
[Rules 62-213.440 and 62-297.401, F.A.C.; and, AC16-86189]

**B.14. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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

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

[Rule 62-297.401, F.A.C.]

B.15. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by the vendor providing a fuel analysis upon each fuel delivery. See Specific Conditions **B.8.** and **B.16.**

[Rules 62-213.440 and 62-296.406(3), F.A.C.; and, AC16-86189]

B.16. 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, 62-296.406(3) and 62-297.440, F.A.C.]

B.17. 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, AC16-86189]

B.18. 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.]

B.19. 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.

9. The owner or operator shall notify the AWQD, 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 AWQD, 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.; AC16-86189; and, SIP approved.]

B.20. 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.]

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

B.21. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the AWQD 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 AWQD.

[Rule 62-210.700(6), F.A.C.]

#### **B.22. Test Reports.**

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

(b) The required test report shall be filed with the AWQD 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.]

B.23. The permittee shall submit all fuel oil analyses (every fuel oil delivery needs a fuel analysis report) and the visible emissions test, if one is required, to the AWQD annually. If fuel oil is being fired during a visible emissions test, then a sample of fuel oil shall be extracted during the test and analyzed; and, the analysis shall be submitted with the visible emissions test result to AWQD pursuant to Rule 62-297.310(8), F.A.C. See Specific Condition **B.22.**

[AC16-86189]

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

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

<u>E.U. ID No.</u>	<u>Brief Description</u>
-003	Combustion Turbine No. 3
-004	Combustion Turbine No. 4
-005	Combustion Turbine No. 5

Emissions units numbers 003, 004 and 005 are combustion turbines manufactured by Westinghouse (Model W501G) and are designated as Combustion Turbine No. 3, No. 4 and No. 5, respectively. Each turbine has a maximum heat input from virgin No. 2 fuel oil of 744.0 MMBtu @ 70° F, LHV (Lower Heating Value). The No. 2 fuel oil has a maximum sulfur content of 0.5%, by weight. These combustion turbines 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 combustion turbines 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.

{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. Combustion turbines Nos. 3, 4 and 5 began commercial operation in 1973.}

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:

<u>EU ID. No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
3	744.0 @ 70° F, LHV	No. 2 Fuel Oil
4	744.0 @ 70° F, LHV	No. 2 Fuel Oil
5	744.0 @ 70° F, LHV	No. 2 Fuel Oil

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO16-173880; and, derived from data in tabular format and provided by the permittee on 10/22/97]

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 virgin distillate No. 2 fuel oil shall be fired in the combustion turbines. [Rule 62-213.410(1), F.A.C.; and, AO16-173880]

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.; AO16-173880; and, 0310047-009-AC]

**Emission Limitations and Standards**

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

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO16-173880]

C.6. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight.

[Requested in initial Title V permit application dated June 14, 1996; and, AO16-173880]

**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.]

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.]

**Monitoring of Operations**

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See Specific Conditions 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.]

### 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.]

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 equivalent.

[Rules 62-213.440 and 62-297.440, F.A.C.]

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.

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

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.]



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) 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.; AO16-173880; and, SIP approved.]

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.; 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 AWQD 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 AWQD.

[Rule 62-210.700(6), F.A.C.]

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 AWQD on the results of each such test.

(b) The required test report shall be filed with the AWQD 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.]

C.19. Records of No. 2 fuel oil consumption shall be maintained and made available to AWQD upon request.

[Rule 62-213.440, F.A.C.; and, AO16-173880]

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 unit.

<u>E.U. ID No.</u>	<u>Brief Description</u>
-015	Combustion Turbine No. 7 (CT #7)

Emissions unit number -015 is a natural gas/fuel-fired simple cycle unit that consists of a nominal 170 MW (at 59° F) combustion turbine generator equipped with Dry Low NO<sub>x</sub> (DLN-2.6) combustors. The emissions unit was manufactured by General Electric (Model PG 7241 FA) and is designated as Combustion Turbine (CT) No. 7. The CT has (1) a maximum heat input from natural gas of 1,623 MMBtu @ 59° F and 60% relative humidity, LHV (Lower Heating Value), and (2) a maximum heat input from new No. 2 fuel oil of 1,822 MMBtu @ 59° F and 60% relative humidity, LHV (Lower Heating Value). The new No. 2 fuel oil has a maximum sulfur content of 0.05%, by weight. The existing CTs Nos. 3 thru 6 are allowed to fire new No. 2 fuel oil with a maximum sulfur content of 0.5 %, by weight, but will be firing the 0.05 %, by weight, new No. 2 fuel oil since there is only one storage tank. This CT shall be used as a peaking unit during peak demand times, during emergencies, and during controls testing. This CT replaced one existing natural gas/fuel oil-fired boiler identified by JEA as KE10 (ARMS Emission Unit -009: Boiler #10). The project also included a 90-foot new stack.

{Permitting notes: This emissions unit is regulated under 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; and, 40 CFR 60, Subpart A, adopted by reference in Rule 62-204.800(7)(d), F.A.C. CT #7 began commercial operation on April 30, 2000.}

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

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

D.1. Permitted Capacity. The maximum operation heat input rates, based on the lower heating value (LHV) of the fuel at ambient conditions of 59° F, 60% relative humidity, 100% load, and 14.7 psi pressure are as follows:

<u>E.U. ID No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
7	1,623.0 @ 59° F, LHV	Natural Gas
	1,822.0 @ 59° F, LHV	No. 2 Fuel Oil

The maximum heat input rate will vary depending upon the turbine inlet conditions and the CT characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0310047-002-AC]

D.2. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition D.24. [Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - Fuels. Only pipeline natural gas and virgin distillate No. 2 fuel oil, or better, shall be fired in the CT.  
[Rule 62-213.410(1), F.A.C.; and, 0310047-002-AC]

D.4. Hours of Operation. The maximum allowable hours of operation in any 12-month period (MAXHROP) for this CT are 4050 hours on pipeline natural gas and 1260 on virgin distillate No. 2 fuel oil or the hours calculated pursuant to the following formula:

$$\text{MAXHROP} = 4050 - (3.215 \times \text{ACTHROPFO})$$

Where: ACTHROPFO = actual hours of operation on fuel oil.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0310047-002-AC]

### **Control Technology**

D.5. Dry Low NO<sub>x</sub> (DLN) combustor shall be installed on this stationary combustion turbine to control nitrogen oxides (NO<sub>x</sub>) emissions.  
[0310047-002-AC]

D.6. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize NO<sub>x</sub> emissions and CO emissions.  
[0310047-002-AC]

D.7. A water injection system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO<sub>x</sub> emissions.  
[0310047-002-AC]

### **Emission Limitations and Standards**

D.8. Visible Emissions (VE). In lieu of a particulate emission limit, VE emissions shall not exceed 10 percent opacity while burning natural gas. VE emissions shall not exceed 20 percent opacity and particulate emissions shall not exceed 17 lbs/hr (non-condensable only) while burning oil during initial and annual tests. The permittee may request substitution of the PM limit and test requirement by a 10 percent opacity limitation while burning oil.  
[0310047-002-AC]

D.9. Sulfur Dioxide - Sulfur Content. The sulfur content of the virgin distillate No. 2 fuel oil shall not exceed 0.05 percent, by weight.  
[0310047-002-AC]

D.10. The following are the emission limits for this CT assuming full load. Values for NO<sub>x</sub> are at 15% O<sub>2</sub> on a dry basis. These limits or their equivalents in terms of pounds per hour, as well as the applicable averaging times, are followed by the applicable specific conditions.

NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	PM/Visibility (% Opacity)	Technology and Comments
15 ppm (NG) 42 ppm (FO)	<2gr/100scf (NG) 0.05% (FO)	15 ppm (NG) 20 ppm (FO)	1.4 ppm (NG) 3.5 ppm (FO)	10	Dry Low NO <sub>x</sub> Pipeline Natural Gas Good Combustion FO, 0.05%, by wt, Sulfur

[0310047-002-AC]

D.11. Nitrogen Oxides (NO<sub>x</sub>) Emissions. The concentration of NO<sub>x</sub> concentrations in the exhaust gas of this CT shall not exceed 15 ppm at 15% O<sub>2</sub> (on a 24-hr block average) as measured by the CEMS (maintained in accordance with 40 CFR 75) while burning natural gas. In addition, NO<sub>x</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 15 ppm at 15% O<sub>2</sub> nor 99 lbs/hr to be demonstrated by stack test. Total annual NO<sub>x</sub> emissions shall not exceed 200 tons on a 12-month rolling average basis (gas/oil or gas or oil).

[0310047-002-AC; and, Rule 62-212.400(2)(g), F.A.C.]

D.12. NO<sub>x</sub> Emissions. The concentration of NO<sub>x</sub> concentrations in the exhaust gas of this CT shall not exceed 42 ppm at 15% O<sub>2</sub> (on a 24-hr block average) as measured by the CEMS (maintained in accordance with 40 CFR 75) while burning fuel oil. In addition, NO<sub>x</sub> emissions calculated as NO<sub>2</sub> (at ISO conditions) shall exceed neither 42 ppm at 15% O<sub>2</sub> nor 318 lbs/hr to be demonstrated by stack test. Total annual NO<sub>x</sub> emissions shall not exceed 200 tons on a 12-month rolling average basis (natural gas/fuel oil or natural gas or fuel oil).

[0310047-002-AC; and, Rule 62-212.400(2)(g), F.A.C.]

D.13. Carbon Monoxide (CO) Emissions. The concentration of CO in the exhaust gas shall not exceed 15 ppmvd (natural gas) and 20 ppmvd (fuel oil) as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 48 lbs/hr (natural gas) and 97 lbs/hr (fuel oil) to be demonstrated by stack test.

[0310047-002-AC]

D.14. Volatile Organic Compounds (VOC) Emissions. The concentration of VOC in the exhaust gas shall not exceed 1.4 ppmvd (natural gas) and 3.5 ppmvd (fuel oil) as determined by EPA Methods 18, 25 or 25 A. VOC emissions (at ISO conditions) shall not exceed 2.9 lbs/hr (natural gas) and 19 lbs/hr (fuel oil).

[0310047-002-AC]

D.15. Sulfur Dioxide (SO<sub>2</sub>) Emissions. SO<sub>2</sub> emissions (at ISO conditions) shall not exceed 9.7 lbs/hr when firing pipeline natural gas and 98 lbs/hr when firing maximum 0.05 percent, by weight, sulfur content No. 2 or superior grade distillate fuel oil. Initial tests shall be performed by applicable compliance methods described below. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedules in Specific

Conditions **D.29.** and **D.30.** will demonstrate compliance with the applicable NSPS SO<sub>2</sub> emissions limitations. Confirmation by the Custom Fuel Monitoring Schedule that the actual sulfur content is less than 2 grains per 100 standard cubic feet (gas) and 0.05 %, by weight, sulfur content (fuel oil) will demonstrate compliance with the permit limits for SO<sub>2</sub>. Emissions of SO<sub>2</sub> shall not exceed 62 tons per year.

[0310047-002-AC; and, Rule 62-212.400(2)(g), F.A.C.]

### **Excess Emissions**

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

D.16. Excess emissions from resulting from startup, shutdown or malfunction shall be permitted provided (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, 0310047-002-AC]

D.17. 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, 0310047-002-AC]

### **Test Requirements and Compliance Determination**

D.18. Annual compliance tests required by this permit by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C.

[40 CFR 60.8; and, 0310047-002-AC]

D.19. Annual compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., unless otherwise indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

- a. EPA Reference Method 5 or 17, "Determination of Particulate Emissions from Stationary Sources".
- b. EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources".
- c. EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources".
- d. EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60, Subpart GG.
- e. EPA Reference Method 18 or 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.

[0310047-002-AC]

D.20. Continuous Compliance with the NO<sub>x</sub> Emission Limits. Continuous compliance with the NO<sub>x</sub> emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by Rule 62-210.700, F.A.C. A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>x</sub> concentrations are obtained at least 15 minutes apart. These excess emissions periods shall be reported as required in Specific Conditions **D.35.** and **D.41.**

[0310047-002-AC; and, 40 CFR 75]

D.21. Compliance with the SO<sub>2</sub> and PM/PM<sub>10</sub> Emission Limits. Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the use of pipeline natural gas and a maximum 0.05 percent sulfur content, by weight, No. 2 or superior grade virgin distillate fuel oil is the method for determining compliance for SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO<sub>2</sub> standard and the 0.05% sulfur content limit, by weight, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule. The applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1997 version).

[0310047-002-AC]

D.22. Compliance with the CO Emission Limit. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual NO<sub>x</sub> RATA testing, which is performed pursuant to 40 CFR 75.

[0310047-002-AC; and, 40 CFR 75]

D.23. Compliance with the VOC Emission Limit. After the initial compliance test, the CO emission limit will be employed as a surrogate and no annual testing is required.

[0310047-002-AC]

D.24. Testing Procedures. Testing of emissions shall be conducted with the CT operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average turbine inlet temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. turbine inlet temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at

higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Rule 62-204.800, F.A.C.

{Permitting note: Attached (GE Heat Input Curves) are the manufacturer's heat input curves that are nominal values to be used to aid in defining "full load" for stack testing purposes and do not constitute a limit on heat input.}

[0310047-002-AC]

D.25. 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 DEP's Northeast District and Jacksonville RESD's Air & Water Quality Division offices, 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.; 0310047-002-AC; and, SIP approved.]

D.26. Stack Testing Facilities. Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. See Appendix SS-1, Stack Sampling Facilities. [0310047-002-AC; and, Rule 62-297.310(6), F.A.C.]

### Monitoring of Operations

D.27. Continuous Monitoring System. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from this unit. Periods when NO<sub>x</sub> emissions (ppmvd at 15% oxygen) are above the standards listed in this permit shall be provided to the DEP Bureau of Air Monitoring and Mobile Sources pursuant to 40 CFR 75. [0310047-002-AC; and, 40 CFR 75]

D.28. CEMS in Lieu of Water to Fuel Ratio. The NO<sub>x</sub> CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS. Upon request from DEP, the CEMS emission rates for NO<sub>x</sub> on this CT shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332. [0310047-002-AC]

D.29. Natural Gas Monitoring Schedule. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334(b)(2):

- a. The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
- b. The permittee shall submit a monitoring plan, certified by signature of the Designated Representative (DR), that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
- c. This unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75.11 and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for this unit is changed to a higher sulfur fuel, SO<sub>2</sub>, emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[0310047-002-AC; and, 40 CFR 75]

D.30. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade virgin distillate fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade virgin distillate fuel oil received at the Kennedy Center Station, an analysis, which reports the sulfur content and nitrogen content of the fuel, shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). See Specific Condition **D.21**.  
[0310047-002-AC]

D.31. 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, 0310047-002-AC]

D.32. When NO<sub>x</sub> monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the specified average time.  
[0310047-002-AC]

D.33. In lieu of utilizing CEMs, for NO<sub>x</sub>, the permittee may elect to utilize the protocol specified under 40 CFR Part 75, Appendix E.  
[0310047-002-AC; 40 CFR 72.2; and, 40 CFR 75, Appendix E]

D.34. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F, or 40 CFR 75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the Department's Northeast District and the Jacksonville RESD's Air & Water Quality Division Offices for review at least 90 days prior to installation.  
[0310047-002-AC; and, 40 CFR 75]

**Recordkeeping and Reporting Requirements**

D.35. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices 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 DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices.  
[Rule 62-210.700(6), F.A.C.; and, 0310047-002-AC]

D.36. CEMS Requirement for Reporting Excess Emissions. This unit shall comply with the CEM frequency data report as specified in 40 CFR 60.7(c).  
[40 CFR 60.7; and, 0310047-002-AC]

D.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 DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices on the results of each such test.

(b) The required test report shall be filed with the DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices 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 DEP's Northeast District and Jacksonville RESD's Air & Water Quality Division offices 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.; and, 0310047-002-AC]

D.38. Records of No. 2 virgin distillate fuel oil, or better, consumption shall be maintained and made available to the DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices upon request.

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

D.39. Records. All measurements, records, and other data required to be maintained by the permittee shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.

[0310047-002-AC]

D.40. Quarterly Reports. Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7)(c) (1997 version), shall be submitted to the DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices.

[0310047-002-AC; and, 40 CFR 60.7]

D.41. Excess Emissions Report. If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's Northeast District and the Jacksonville RESD's Air & Water Quality Division offices within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. 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 this permit.

[0310047-002-AC; and, 40 CFR 60.7 (1997 version)]

**Miscellaneous**

D.42. 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.

[0310047-002-AC]

D.43. The CT shall be in compliance with all applicable requirements of 40 CFR 60, Subpart A, General Provisions (see Appendix 40 CFR 60, Subpart A, General Provisions, which is incorporated by reference), including:

- 40CFR60.7, Notification and Recordkeeping
- 40CFR60.8, Performance Tests
- 40CFR60.11, Compliance with Standards and Maintenance Requirements
- 40CFR60.12, Circumvention
- 40CFR60.13, Monitoring Requirements
- 40CFR60.19, General Notification and Reporting Requirements

[0310047-002-AC; and, 40 CFR 60, Subpart A]

D.44. ARMS Emission Unit -015, Power Generation, consisting of one (nominal) 170 MW combustion turbine (simple cycle peaking operation), shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not required to demonstrate compliance with non-NSPS permit standard(s).

[0310047-002-AC]

**Section IV. This section is the Acid Rain Part.**

**Operated by: Jacksonville Electric Authority**  
**ORIS code: 0666**

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

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

<u>E.U. ID No.</u>	<u>Description</u>
-007	Boiler No. 8 (nominal 50.0 MW electric steam generator; currently deactivated)
-008	Boiler No. 9 (nominal 50.0 MW electric steam generator; currently deactivated)
-009	Boiler No. 10 (nominal 149.6 MW electric steam generator; removed from service March 6, 2000 (last operated March 5, 2000))
-015	Combustion Turbine #7 (start-up April 30, 2000)

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

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

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations requirements for each Acid Rain unit are as follows:

<u>E.U. ID No.</u>	<u>EPA ID</u>	<u>Year</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
-007	8	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	193	193*	193*
-008	9	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	547*	547*	547*
-009	10	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	1959** <sup>a</sup>	1959** <sup>a</sup>	1959** <sup>a</sup>
-015	7	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*

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

\*\*Retired March 6, 2000 (last operated March 5, 2000).

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

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.  
[Rule 62-213.440(1)(c), F.A.C.]

A.4. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-3, TITLE V CONDITIONS}  
[Rule 62-214.420(11), F.A.C.]

A.5. Comments, notes, and justifications: Mr. Jon P. Eckenbach, Executive Vice President, Jacksonville Electric Authority, has become the new Designated Representative for Title IV purposes.

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

Jacksonville Electric Authority  
Kennedy Generating Station

**DRAFT Permit No.:** 0310047-011-AV  
**Facility ID No.:** 0310047

---

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

**E.U. ID No.**    **Brief Description of Emissions Units and/or Activity**

-010            Storage Tanks (tanks 1 and 4)

-011            Storage Tanks (tanks 2 and 3)

-xxx            Storage Tank (tank 13)

-010    Storage Tanks.

1. JEA Tank #1                      No. 6 Fuel Oil Storage                      4,578,000 gallons

2. JEA Tank #4                      No. 6 Fuel Oil Storage                      4,578,000 gallons

-011    Storage Tanks.

1. JEA Tank #2                      No. 2 Fuel Oil Storage                      1,680,000 gallons

2. JEA Tank #3                      No. 2 Fuel Oil Storage                      1,680,000 gallons

   No. 2 Fuel Oil Storage                      1,722,000 gallons

-xxx    Storage Tank.

1. JEA Tank #13                      No. 2 Fuel Oil Storage                      1,512,000 gallons



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

Jacksonville Electric Authority  
Kennedy Generating Station

**DRAFT Permit No.:** 0310047-011-AV  
**Facility ID No.:** 0310047

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

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

### Brief Description of Emissions Units and/or Activities:

#### A. Storage Tanks.

1. JEA Tank #5	Magnesium Oxide	10,000 gallons
2. JEA Tank #6	Lube Oil - Units 9/10	9,400 gallons
3. JEA Tank #7	Lube Oil - Units 8/9	4,800 gallons
4. JEA Tank #8	Black Start Diesel	3,000 gallons
5. JEA Tank #9	Mineral Acid	5,000 gallons
6. JEA Tank #10	Caustic	5,000 gallons
7. JEA Tank #11	Hypochloride	15,228 gallons
8. JEA Tank #12	FeSO <sub>4</sub>	2,500 gallons
9. JEA Tanks #15	Sodium BiSulfite	2,500 gallons

#### B. Boilers Nos. 8, 9 and 10 (inactive emissions units).

1. Evaporation of on-site generated boiler non-hazardous cleaning chemicals (cirtosolv and ammonia). This activity occurs once every three to five years or longer.

#### C. Emergency Generator.

1. One at this site. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank that supports the auxiliary boiler (the fuel oil has a maximum fuel sulfur content limit of 0.5%, by weight).

#### D. Black-start Generators.

1. Two at this site. These generators have historically fired a total amount of less than 10,000 gallons per year. They draw their fuel from a single diesel storage tank (the fuel oil delivered is the same as that delivered for the emergency generator, i.e., with a maximum sulfur content of 0.5%, by weight).

## Appendix H-1: Permit History

Jacksonville Electric Authority  
Kennedy Generating Station

DRAFT Permit No.: 0310047-011-AV  
Facility ID No.: 0310047

**Permit History (for tracking purposes):**

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type <sup>1</sup>
All	Facility	0310047-001-AV	01/01/98	12/31/2001	Initial
-003	Combustion Turbine #3	0310047-004-AC	04/20/2000	10/31/2001	Construction (mod.)
		0310047-005-AC	07/17/2000	12/31/2000	Construction (mod.)
		0310047-009-AC	04/04/2001	04/04/2006	Construction (mod.)
		0310047-011-AV	Pending <sup>1</sup>	12/31/2002	Revision
-004	Combustion Turbine #4	0310047-004-AC	04/20/2000	10/31/2001	Construction (mod.)
		0310047-005-AC	07/17/2000	12/31/2000	Construction (mod.)
		0310047-009-AC	04/04/2001	04/04/2006	Construction (mod.)
		0310047-011-AV	Pending <sup>1</sup>	12/31/2002	Revision
-005	Combustion Turbine #5	0310047-004-AC	04/20/2000	10/31/2001	Construction (mod.)
		0310047-005-AC	07/17/2000	12/31/2000	Construction (mod.)
		0310047-009-AC	04/04/2001	04/04/2006	Construction (mod.)
		0310047-011-AV	Pending <sup>1</sup>	12/31/2002	Revision

<sup>1</sup> Change to an actual date, which is day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolution of any objections.

JACKSONVILLE ELECTRIC AUTHORITY  
OPERATION AND MAINTENANCE PLAN

RECEIVED

JUN 19 1997

BUREAU OF  
AIR REGULATION

In compliance with Section 17-2.650(2)(g)4. of the Administrative Code, the Jacksonville Electric Authority submits its "Operation and Maintenance Plan", to be appended where appropriate to unit operating permits.

Operation and Maintenance

Following is a list of activities to be accomplished for the control of particulate emissions from units in or impacting the Duval County non-attainment area. These schedules apply to each on-line unit.

Daily:

1. Clean one deck of burners (renew tips as necessary).
2. Conduct one complete soot-blowing cycle (or as needed).
3. Maintain optimum fuel oil temperature and pressure.

Weekly:

1. Clean fuel oil strainers (more frequently if required).

Annually:

1. Clean the boiler and inspect baffles.
2. Inspect the:
  - (a) wind-box;
  - (b) registers;
  - (c) diffusers;
  - (d) refractory throat.
3. Adjust the air registers for optimum flame pattern (more frequently if required).
4. Replace burner tips (more frequently if required).

Major Outages:

1. Overhaul the: (a) turbine/generator  
(b) boiler and auxiliary equipment.
2. Calibrate the: (a) flow meters including sensing  
line checks;  
(b) pneumatic controls;  
(c) temperature gauges.

Performance Parameters

The following operational parameters are to be recorded on a bi-hourly basis.

1. Steam flow.
2. Number of burners in service.
3. Burner oil pressure.
4. Burner oil temperature.

Fuel Type: Number 6 residual oil unless otherwise stated.

Records

Records of all operating data and maintenance procedures listed herein shall be retained at the Generating Station for review, upon request, for a period of two years.



EP 4  
so the standard  
requirements and  
certification, enter  
a name of the  
designated repre-  
sentative, and sign  
and date

Standard RequirementsPermit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit.
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the permitting authority; and
  - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.8(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.8(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

**BEST AVAILABLE COPY**

Plant Name (from Step 1)

Recordkeeping and Reporting Requirements (cont.)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

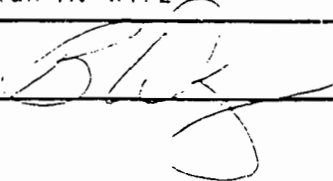
- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject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

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

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

Certification

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

Name	Brian M. Wirz	
Signature		Date 12/14/95

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

AIRS	<b>BEST AVAILABLE COPY</b>
FINDS	





# Certificate of Representation

Page 1

For more information, see instructions and refer to 40 CFR 72.24

This submission is:  New  Revised**STEP 1**

Identify the source by plant name, State, and CRIS code from NADB

Plant Name	* JEA, Kennedy Generating Station	State	FL	CRIS Code	666
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**STEP 2**

Enter requested information for the designated representative

Name	Brian M. Wirz, Associate Managing Director				
Address	Jacksonville Electric Authority 21 West Church Street Jacksonville, FL 32202				
Phone Number	(904) 632-7270	Fax Number	(904) 632-7366		

**STEP 3**

Enter requested information for the alternate designated representative (optional)

Name					
Address					
Phone Number			Fax Number		

**STEP 4**

Complete Step 5, read the certifications and sign and date

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable for the affected source and each affected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my reports, inspections, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power purchase arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

JEA, Kennedy Generating Station  
Plant Name (from Step 1)

Certification

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

Signature (designated representative)	<i>[Signature]</i>	Date	8/17/99
Signature (alternate)		Date	

EP 5  
Provide the name of  
owner and  
operator of the source  
and each affected unit  
of the source. Identify  
units they own  
and/or operate by  
their IDs from NADES.  
For owners only,  
identify each state or  
local utility regulatory  
authority with  
jurisdiction over each  
unit.

Jacksonville, Electric Authority						<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Operator
IDs	8	IDs	9	IDs	10	IDs	IDs
IDs		IDs		IDs		IDs	IDs
Fla Dept. of Env. Reg.; Reg. & Env. Services Dept. (city) Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
IDs	IDs	IDs	IDs	IDs	IDs	IDs	IDs
Regulatory Authorities							

211 West Church Street  
Tallahassee, Florida 32302-3130

February 13, 2001



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

RE: Kennedy Generating Station Combustion Turbine CT 7  
Air Construction Permit 0310047-002-AC  
Title V Operating Permit 0310047-006-AV  
Request for Permit Revision

Dear Mr.Fancy:

Per my conversation with Bruce Mitchell, please issue permit revisions to the above referenced permits changing Specific Condition 31 in the construction permit and Specific Condition D 24 in the Title V permit from requiring stack testing to be performed at 95-100% of capacity to requiring stack testing to be performed at 90-100% of capacity. It is my understanding that these revisions can be performed simultaneously to reduce processing time.

These revisions will make the specific conditions consistent with the new combustion turbine stack testing guidance DARM-OGG-07, "Guidance on Rate of Operation during Compliance Testing for Combustion Turbines" dated March 1, 2000.

If you have any questions with regard to this matter, please call me at (904) 665-6247.

Sincerely,

A handwritten signature in cursive script, appearing to read 'N. Bert Gianazza'.

N. Bert Gianazza, P.E.  
Environmental Permitting  
& Compliance

cc: Bruce Mitchell, P.E., FDEP



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Scrubs  
Secretary

DARM-OGG-07

SUBJECT: Guidance on Rate of Operation during Compliance  
Testing for Combustion Turbines

DATE : March 1, 2000

This memo is to provide guidance on determining the rate of operation during compliance testing for combustion turbines (CTs).

The mass throughput rate of combustion turbines is inversely proportional to temperature and humidity measured at the CT inlet as a result of the changing air densities encountered. Inlet air temperature is the predominant factor; therefore, higher temperatures will result in a lower heat input rate (MMBtu/hr) and vice versa. The temperature is referenced to the CT inlet temperature rather than ambient temperature, as some CTs are equipped with inlet air conditioning systems (e.g., chillers or evaporative coolers) to maintain optimum operating temperature. Inlet air temperature and ambient temperature are equivalent in cases where no conditioning systems are used. Variations of heat input (capacity) are to be expected due to the range of ambient temperatures and humidities encountered in Florida. Over the usual operating ranges, the CT operating curve (capacity vs. inlet air temperature) is essentially a straight line.

The determination of the rate of CT operation during compliance testing is illustrated in the following example. The heat input limit is often referenced to 59°F, and in this example, corresponds to 750 MMBtu/hr (Point A). On the date that compliance testing is conducted, the average ambient (or conditioned) air temperature during the test period is determined to be 80°F. According to the attached curve, the maximum design heat input rate achievable is 700 MMBtu/hr (Point B). The CT has successfully achieved 90 percent of its maximum permitted capacity for this temperature if it is determined to be operating at 630 MMBtu/hr or more (Point C). In this example, the dashed line represents 90 percent of the maximum heat input value achievable over a range of inlet air temperatures. Heat input may vary depending on CT characteristics; therefore, manufacturer's curves for correction to other temperatures shall be provided to the Department, if a source intends to use the curves for compliance purposes. At the request of a permittee, the following conditions may be incorporated into the construction and corresponding operating permits:

1. An owner or operator may use manufacturer's curves or tables in determining the maximum heat input or fuel usage rate for compliance testing. These curves or tables relate compressor inlet conditions to heat input or fuel usage rate and are part of the permit. The data shall have a resolution of 1% of the maximum heat input or fuel usage rate. Inlet condition monitoring shall

*"More Protection, Less Process"*

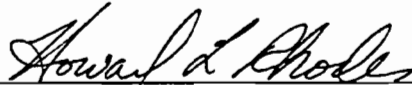
*Printed on recycled paper.*

Guidance on Rate of Operation  
Page 2

include compressor inlet temperature with optional monitoring of inlet pressure and/or moisture levels when these parameters are also used to correct heat input or fuel usage rate.

2. Compliance testing of emissions shall be conducted with the combustion turbine operating at capacity. Capacity is defined as 90-100 percent of the manufacturer's rated heat input achievable for the average compressor inlet conditions during the test. If it is impracticable to test at capacity, then combustion turbines may be tested at less than capacity. In such cases, the entire curve or table shall be adjusted downwards by the increment which reflects the reduced rate of operation at which compliance was demonstrated. This increment is equal to the difference between the manufacturer's heat input or fuel usage value and 110 percent of the value reached during the test. In this case, the data and calculations necessary to demonstrate the heat input or fuel usage rate correction shall be submitted to the Department with the compliance test report.

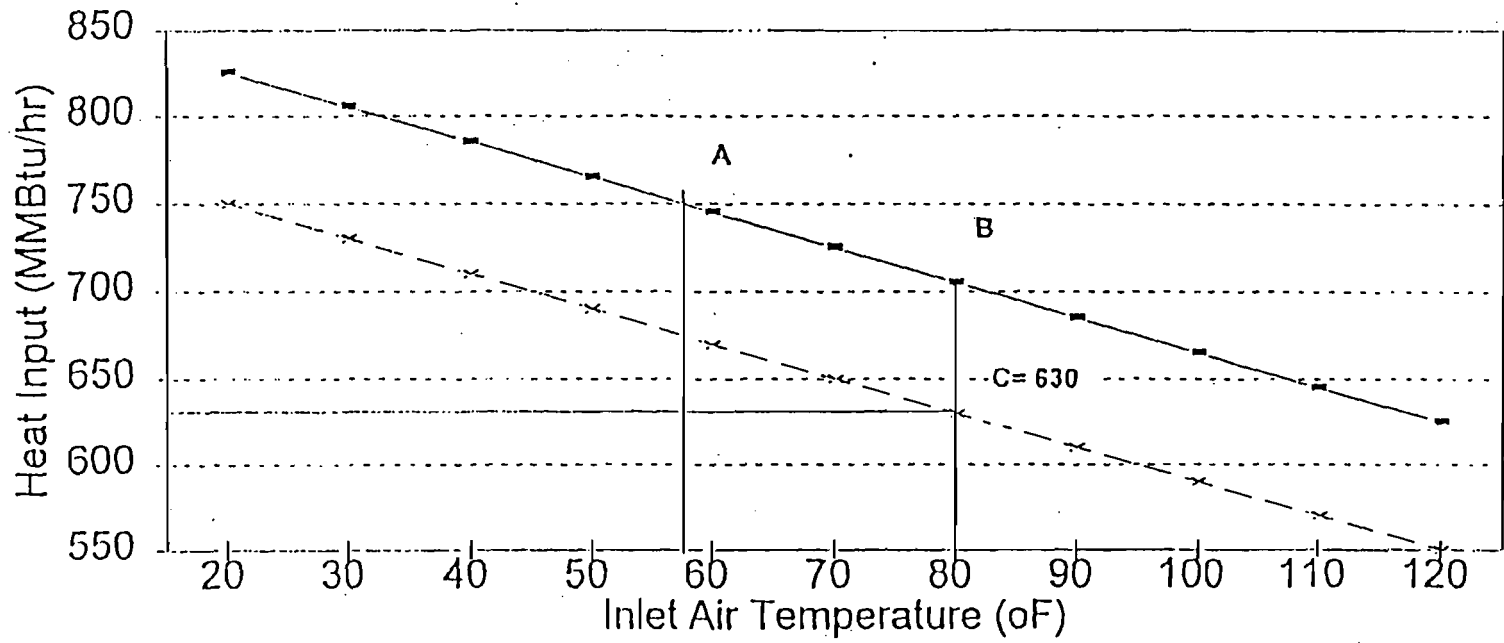
3. To demonstrate compliance with 40 CFR 60.330 federal New Source Performance Standard (NSPS) Subpart GG - Standards of Performance for Stationary Gas Turbines, an initial test shall be conducted at four load points and corrected to International Standards Organization (ISO) conditions for comparison to the NSPS allowable. Subsequent annual compliance tests conducted to establish compliance with  $\text{NO}_x$  limits that are more stringent than the NSPS standard shall not require an ISO correction or testing at four load points; rather, the testing shall be conducted at capacity, as defined above. However, when the Department has reason to believe that  $\text{NO}_x$  emissions exceed an applicable  $\text{NO}_x$  standard (based on emissions data from CEMS or stack testing, or based on fuel quality) the Department may require that the company conduct emissions testing at four loads as required in Subpart GG.



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Howard L. Rhodes, Director  
Division of Air Resources Management

COMBUSTION TURBINE OPERATING CURVE  
 FUEL HEAT INPUT vs. INLET AIR TEMPERATURE



--- 90% of Maximum Operating Level --- Maximum Operating Capacity

# JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD

## RULE 2 AIR POLLUTION CONTROL

Effective	03/18/85
Amended	12/15/85
Amended	06/18/86
Amended	06/15/88
Amended	10/27/88
Amended	12/20/88
Amended	07/09/90
Amended	10/22/92
Repealed, renumbered and readopted	04/10/93
Amended	12/19/94, Effective 01/11/95
Amended	09/11/95, Effective 10/05/95
Amended	11/12/96, Effective 12/16/96

**PART X - STATIONARY SOURCES EMISSION STANDARDS**

2.1001 Adopts 62-296 FAC by reference

**PART XI - STATIONARY SOURCES - EMISSIONS MONITORING**

2.1101 Adopts 62-297 FAC by reference

**PART XII - AIR POLLUTION NUISANCE RULES**

- 2.1201 General Standard for Volatile Organic Compounds
- 2.1202 Emissions from Ships and Locomotives
- 2.1203 Air Pollution Nuisances

**PART XIII - PERMITS - GENERAL PROVISIONS**

- 2.1301 Adopts 62-4 FAC by reference
- 2.1302 Adopts 120.57 FS and 62-103.150 FAC by reference



## TRACKING TABLE FOR THE AMENDMENT OF CURRENT RULE 2

Current Rule 2 Sections	Amended & New Rule 2 Sections
Part I - General Provisions 2.101 2.102 2.103 2.104 2.105 2.106 2.107 2.108 2.109 2.110	Part I - General Provisions 2.101 <span style="float: right;">AMENDED</span>
Part II 2.201 (Adopts 62-210 FAC)	Part II 2.201 <span style="float: right;">NEW</span> (Adopts 62-204 FAC - new)
Part III 2.301 (Adopts 62-212 FAC)	Part III 2.301 AMENDED (Adopts 62-210 FAC)
Part IV 2.401 (Adopts 62-252 FAC)  2.402	Part IV 2.401 (Adopts 62-212) AMENDED  2.402 <span style="float: right;">MOVED</span>
Part V 2.501 (Adopts 62-256 FAC)	Part V 2.501 <span style="float: right;">Former Section 2.1202</span> (Adopts 62-213)
Part VI 2.601 (Adopts 62-272 FAC)  2.602	Part VI 2.601 (Adopts 62-252 FAC) <span style="float: right;">Former Section 2.401</span>  2.602 <span style="float: right;">Former Section 2.402</span>
Part VII 2.701 (Adopts 62-273 FAC)  2.702	Part VII 2.701 <span style="float: right;">Former Section 2.501</span> (Adopts 62-256)  2.702 <span style="float: right;">Moved</span>

<p>Part VIII 2.801 (Adopts 62-275 FAC)</p>	<p>Part VIII 2.801 Former Section 2.602 Ambient Air Quality Standards for Aggregate Reduced Sulfur</p>
<p>Part IX 2.901 (Adopts 62-296 FAC)</p> <p>2.902 (Adopts 62-257.350 FAC)</p>	<p>Part IX 2.901 Former Section 2.702 Air Pollution Episodes - Local Rules</p> <p>2.902 Incorporated into 2.201</p>
<p>Part X 2.1001 (Adopts 62-297 FAC)</p>	<p>Part X 2.1001 AMENDED (Adopts 62-296 FAC)</p>
<p>Part XI 2.1101 2.1102 2.1103</p>	<p>Part XI 2.1101 AMENDED (Adopts 62-297 FAC)</p> <p>2.1102 Moved 2.1103 Moved</p>
<p>Part XII 2.1201 (Adopts 62-4 FAC)</p> <p>2.1202 (Adopts 62-213 FAC)</p> <p>2.1203 (Adopts 62-215 FAC)</p> <p>2.1204 (Adopts 62-120.57 FS &amp; 62-103.150 FAC)</p>	<p>Part XII 2.1201 Former Section 2.1101</p> <p>2.1202 Former Section 2.1102</p> <p>2.1203 Former Section 2.1103</p>
	<p>Part XIII 2.1301 NEW (Adopts 62-4) Former Section 2.1201</p> <p>2.1302 Former Section 2.1204 (Adopts 120.57 FS and 62-103.150 FAC)</p>

**RULE OF THE  
JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD  
JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD  
RULE 2  
AIR POLLUTION CONTROL**

**PART I  
GENERAL PROVISIONS**

**2.101 Definitions**

In this rule, unless the context otherwise requires:

- A. The definitions included in Chapters 62-4, 62-204, 62-210, 62-252, and 62-256, Florida Administrative Code, are adopted and incorporated in this rule by reference, except that:
  - 1. the word Department means the Regulatory and Environmental Services Department.
  - 2. the word Secretary means the Director of the Regulatory and Environmental Services Department.
- B. Board means the Jacksonville Environmental Protection Board.
- C. Department means the Regulatory and Environmental Services Department, City of Jacksonville.
- D. Division means the Air and Water Quality Division of the Regulatory and Environmental Services Department. [History: Effective 3/18/85, Amended 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended 11/12/96]

**2.102 Authority and Intent**

The Jacksonville Environmental Protection Board adopts these rules as the City's standards with respect to air pollution control. The specific Authority for adopting these rules is found in Section 100.201, Section 362.104(c) and Section 73.102, Ordinance Code. The law implemented is Chapter 362, Ordinance Code. The Board intends that where any locally more stringent provision conflicts with a provision of the Florida Administrative Code adopted by reference, the locally more stringent provision shall apply. [History: Formerly EPB Rule 2 Preface; Effective 3/18/85; Amended and renumbered 1/10/93]

**2.103 Severability**

The provisions of these air pollution control rules are severable. If one or more of the provisions should be invalidated, the Board intends that the other portions should become effective or remain in effect. [History: Formerly EPB 2.104, Effective 3/18/85; Renumbered 1/10/93]

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**2.104 Registration and Reports**

A person engaging in an activity or operation which is or may be a source of air pollution shall register with the Department and file reports with the Department at or within times and as required by the Board or the Department. [History: Formerly S.362.103(a), City Ordinance Code; EPB 2.105; Effective 3/18/85; Amended and renumbered 1/10/93]

**2.105 Maintenance of Pollution Control Devices**

Air pollution control devices and systems shall be properly and consistently maintained in order to maintain emissions in compliance with the standards of the Board. [History: Formerly S.362.103, City Ordinance Code; EPB 2.108; Effective 3/18/85; renumbered 1/10/93]

**2.106 General Restrictions**

No plant or source shall operate at capacities which exceed the limits of operation of control devices or exceed the capability of the plant or control devices to maintain the air pollution emissions within the limitations imposed by this rule or by permit conditions. [History: Formerly S.362.106, City Ordinance Code; EPB 2.109; Effective 3/18/85; renumbered 1/10/93]

**2.107 Air Pollution Prohibited**

No person shall cause or permit the discharge or emission of air pollutants from an installation in quantities prohibited by law, by the rules of the State Department of Environmental Protection or by the rules of the Board. [History: Formerly S.362.201, City Ordinance Code; EPB 2.201; Effective 3/18/85; renumbered 1/10/93, Amended 12/19/94]

**2.108 Enforcement**

This rule shall be enforced by the Department in accordance with the provisions of Chapters 360 and 362, Ordinance Code. [History: New, Effective 1/10/93]

**2.109 Investigations - Right of Entry**

Inspections and investigations made to determine compliance with the provisions of this rule shall be made in accordance with the provisions of Section 360.109; Ordinance Code, and Board Rule 1, Part VIII. [History: New, Effective 1/10/93]

**2.110 Penalties and Injunctive Relief**

Violations of this rule shall be punishable by civil penalties specified in Chapter 360, Part 7, Section 362.110, Ordinance Code; and to injunctive relief as provided in Section 360.407, Ordinance Code. [History: New, Effective 1/10/93]

**PART II**  
**AIR POLLUTION CONTROL - GENERAL PROVISIONS**

**2.201**

Chapter 62-204, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's general provisions for air pollution control. [History: Effective 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule sections 2.601, 2.801, 2.901 and 2.902.

**PART III**  
**STATIONARY SOURCES - GENERAL REQUIREMENTS**

**2.301**

Chapter 62-210, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's general requirements for stationary sources. [History: Effective 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended and renumbered 11/12/96]  
Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.201.

**PART IV**  
**STATIONARY SOURCES - PRECONSTRUCTION REVIEW**

**2.401**

Chapter 62-212, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's preconstruction review requirements for stationary sources. [History: Effective 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.301.

**PART V**  
**OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION**

**2.501**

Chapter 62-213, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's operation permit requirements for major sources of air pollution. [History: New, Effective 12/19/94, Amended 9/11/95, Amended and Renumbered 11/12/96]  
Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1202



**PART VI  
GASOLINE VAPOR CONTROL**

**2.601**

Chapter 62-252, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's gasoline vapor control standards. [History: Effective 1/10/93, Amended 12/19/94, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by referenced under former EPB rule section 2.401.

**2.602 Expanded Stage I Controls in Duval County**

- A. The applicability criteria of Paragraph 62-252.300(1), FAC notwithstanding, all gasoline dispensing facilities in Duval County regardless of monthly throughput, shall be subject to emission limiting standards and control technology requirements as set forth in 62-252.300(2), FAC except that gasoline storage tanks with less than 1000 gallons capacity are exempt from this requirement.
- B. Gasoline dispensing facilities in existence in Duval County upon the effective date of this rule, and not previously subject to 62-252.300, FAC, shall install Stage I vapor recovery control technology at the time of any vehicular fuel petroleum storage tank system replacement or upgrade, other than spill containment as shown in Table I, Section 62-761.510, FAC Performance Standards for Existing Vehicular Fuel Petroleum Storage Tank Systems, as amended, and in no case later than December 31, 1998. (See Appendix A). Gasoline dispensing facilities built after the effective date of this rule shall be subject to Section 2.402 A. upon construction.
- C. Gasoline tank trucks or trailers used to deliver gasoline to any facility subject to section 2.602 must be equipped as required in Section 62-252.300, FAC.
- D. Stage I vapor recovery control technology required by this rule shall conform with equipment specifications pursuant to "Design Criteria for Stage 1 Vapor Control Systems at Gasoline Service Stations." United States Environmental Protection Agency, Research Triangle Park, NC, November, 1975. Copies are available for review in the offices of the Air and Water Quality Division, Regulatory & Environmental Services Department, City of Jacksonville. [History: Formerly EPB 2.207 B, Effective 10/22/92; Amended and Renumbered 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.402.

## Appendix A

TABLE I - 62-761.510, FAC

Year Tank or Integral Piping Installed	Year Replacement, Upgrading or Closure Required				
	<u>1989</u>	<u>1992</u>	<u>1995</u>	<u>1998</u>	<u>2009</u>
•Before 1970	O	B		AL	E
•1970 - 1975		SBL		A	E
•1976 - 1980		B	SL	A	E
•1981 - 09/01/84		B		SAL	E
•After - 09/01/84		B		SAL	E
•Other*		B		SAL	E

\*All systems with a capacity of between 110 gallons to 550 gallons, all marine fueling facilities and those systems of greater than 550 gallon capacity that use less than 1,000 gallons per month or 10,000 gallons per year.

O = Retrofit for corrosion protection under chapter 62-61, FAC.

A = Secondary containment for integral piping or, in-line leak detectors with automatic shutoff for integral piping protected from corrosion

B = Spill containment

L = Dispenser liners, overfill protection, and replacement of swing joints or flex connectors not protected from corrosion

S = Secondary containment for storage tanks and integral piping

E = Secondary containment for existing storage tanks systems protected from corrosion

**PART VII  
OPEN BURNING AND FROST PROTECTION FIRES**

**2.701**

Chapter 62-256, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's requirements for open burning and frost protection fires. [History: Effective 1/10/93, Amended 12/19/94, Renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.501.

**PART VIII  
AMBIENT AIR QUALITY STANDARDS FOR  
AGGREGATE REDUCED SULFUR (ARS)**

**2.801****A. General**

1. **Intent.** This rule limits ground level concentrations of ARS. Persons subject to this rule may also be subject to the requirements of Total Reduced Sulfur (TRS) emission limiting standards for Kraft pulp mills and to Best Management Practices requirements for odorous substances. Nothing in this rule shall, in any manner be construed as authorizing or legalizing the creation or maintenance of an objectionable odor or an odor nuisance pursuant to Ordinance 88-117-123.
2. **Exemptions.** The limits of this rule shall not apply to emissions emanating from materials odorized for safety purposes.
3. **Definitions.** "Aggregate Reduced Sulfur" (ARS) means the sum of sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, dimethyl disulfide and all other reduced sulfur species which are oxidized to sulfur dioxide (SO<sub>2</sub>) as measured by methods prescribed in Section 2.801 C. below.

**B. Standard**

1. **Prohibitions and Restrictions.** No person shall build, erect, construct or implant any new source; operate, modify or rebuild any existing source; or by any other means release or take action which would result in the release of ARS compounds into the atmosphere which would result in ground level concentrations greater than the ambient ARS standard established under Section 2.801 B.2. on any property at or beyond the property limits of the premises occupied and used by the person responsible for the emission into the atmosphere.
2. **Aggregate Reduced Sulfur Standard established.** The maximum ground level concentration of ARS shall not exceed 55 parts per billion (ppb) averaged over any three consecutive minutes.
3. **Calculations.** The standard shall be calculated on a three minute rolling average basis, rounding the arithmetic mean of all measurements to the nearest part per billion. In determining exceedances of the standard, any sequential set of measurements may be used only once to calculate an exceedance.

**C. ARS Ambient Air Quality Monitoring Methodology.**

1. **Purpose.** This section specifies the monitoring method which must be used in ARS ambient air quality monitoring stations.
2. **ARS Air Monitoring Station (ARS AMS).** Unless otherwise provided in this section, a monitoring method used in a ARS AMS must use two sulfur dioxide (SO<sub>2</sub>) automated reference or equivalent method (continuous analyzers) as defined in Title 40, Part 50, Section 1, Code of Federal Regulations (CFR).

3. Applicability. This method provides a measurement of the concentration of ARS in ambient air for determining compliance with the ARS ambient air quality standard as specified in Section 2.801 B.2. above. The method is applicable to the measurement of ambient ARS concentrations using an averaging period of 3 minutes.
4. Principle.
  - a. The ARS continuous monitor consists of a thermal oxidation furnace and two SO<sub>2</sub> automated reference or equivalent analyzers. A thermal oxidizer converts ARS compounds to SO<sub>2</sub>.
  - b. The sample gas stream is first split into two equal channels using a teflon union tee. One channel is analyzed directly in a SO<sub>2</sub> automated reference method analyzer for SO<sub>2</sub> content. The second channel is directed through a quartz tube housed within a high temperature ceramic oven. The quartz oven chamber is designed to provide retentions, at maximum flow rate (1.5 l/min.), well in excess of the recommended minimum (0.1 sec.) for oxidation.

For ARS applications, a temperature range between 800 and 950°C is used. At lower retention times or lower temperature, dimethyl sulfide (DMS) and dimethyl disulfide (DMDS) are not oxidized. If the temperature is too high, SO<sub>2</sub> will be oxidized to SO<sub>3</sub>.

After the ARS compounds have been oxidized to SO<sub>2</sub>, the cumulative SO<sub>2</sub> is then monitored by the second SO<sub>2</sub> automated reference method analyzer. The SO<sub>2</sub> measured in the second channel is the sum of the SO<sub>2</sub> ambient gas concentration and the SO<sub>2</sub> converted from ambient ARS gases as a result of oxidation in the thermal oxidation furnace. The difference between the ambient SO<sub>2</sub> concentration monitored in channel one and the cumulative SO<sub>2</sub> concentration monitored in channel 2 is ambient ARS.

5. Range. The lower limit of detection of the SO<sub>2</sub> analyzers must be 1.0 ppb and operated on a range of 0 to 100 ppb. The SO<sub>2</sub> analyzers may be used on a higher range if they have been designated as a reference or equivalent method on the range being used.
6. Calibration, Operation, Maintenance and Quality Assurance.
  - a. Either of two methods may be used for dynamic multi point calibration of SO<sub>2</sub> analyzers. One method uses a single certified standard cylinder of SO<sub>2</sub> gas, diluted as necessary with zero air or N<sub>2</sub>, to obtain the various calibration concentrations needed. The other method uses an SO<sub>2</sub> permeation gas standard generator. The SO<sub>2</sub> emitted from the standard generator is diluted with zero air or N<sub>2</sub> to produce SO<sub>2</sub> concentrations suitable for calibration of the SO<sub>2</sub> analyzers.
  - b. The SO<sub>2</sub> gaseous standard must be as prescribed in Title 40, Part 58, Appendix A, Section 2.3.1, Code of Federal Regulations.
  - c. The Department's quality assurance program, which has been approved by the EPA Regional Administrator, describes in detail the operation, calibration and maintenance of the SO<sub>2</sub> analyzer and the Department's EPA approved quality assurance program is as prescribed in Title 40, Part 58, Appendix A, Section 2.0, Code of Federal Regulations.

- d. The data quality assessment requirements shall be the same as those used in the state and local air monitoring station (SLAMS), defined in Title 40, Part 58, Section 1, Code of Federal Regulations, except that the accuracy of the SO<sub>2</sub> analyzers shall be determined from the following ranges:

AUDIT LEVEL	CONCENTRATION RANGE PPB
1	15-20
2	35-45
3	80-90

The precision of the SO<sub>2</sub> analyzer shall be determined from audit level one (1).

- e. For determining exceedances of the standards, only data collected while the monitor was stationary will be considered.
- D. **New Source Review Criterion.** No new, modified or rebuilt air pollution source shall be permitted or constructed whose predicted maximum one-hour ground level concentration of ARS exceeds 15 parts per billion (ppb), as determined by mathematical dispersion models approved by the Department except that sources subject to NSPS shall be exempt from this new source review criterion.
- E. **Action When Standard Exceeded.**
1. **Corrective Action.** If a measurement of any sample shows that the ground level concentrations are greater than the ARS standards established, the Department shall take appropriate action to determine the reason for and if possible, the source of the excess ARS. The Jacksonville Environmental Protection Board will also determine whether further source-specific controls or Best Management Practice Rules are necessary.
  2. **Enforcement.** A measurement that shows that the ARS standard has been exceeded may be used to begin investigation into an emission or an odor which may be an objectionable odor or an odor nuisance, as defined by Chapter 376, Ordinance Code. Evidence discovered as a result of that investigation may lead to enforcement action, pursuant to §376.110 and §376.111, Ordinance Code. However, such a measurement may not be used as evidence in that enforcement action.
- F. **Effective Date.** This amendment shall become effective twenty (20) days after the date it is submitted to the office of the City Council Secretary. [History: Formerly EPB 2.303; Effective 10/27/88, Amended 12/20/88, Amended and renumbered 1/10/93, Amended and Renumbered 11/12/96] Note: The rules covered by this part were previously adopted under former EPB rule section 2.602.

**PART IX  
AIR POLLUTION EPISODES**

**2.901 Air Pollution Episode - Local Rules**

**A. City-Wide Episode Control Plans**

The Department shall prepare appropriate city-wide episode control plans to reduce air pollution levels based upon the plans submitted by sources of pollutants as required in JEPB Rule 2.104. The objective of the plans shall be to bring about a diminution of the particular air contaminants by curtailing the operations of industrial, business or other activities, the conduct of which is essential to the health and welfare of the community.

**B. Episode Alert**

In the event that an exceedance of the ambient air quality standards, as defined in JEPB Rule 2.201, is reached, the Department shall notify the following persons:

1. Mayor.
2. Public Health Officer.
3. Regional and State officers, State Department of Environmental Protection.
4. Board Members.
5. Local public official and public safety personnel having responsibilities or interests in air pollution.
6. Air pollution sources which require alert data in order to execute emergency control plans.
7. General public, through available media of communication.

**C. Coordination**

Upon notification of a high air pollution episode, the Department will coordinate monitoring and enforcement activities with the State Department of Environmental Protection if the State Department of Environmental Protection elects to participate. [History: Formerly S. 362.405 - S. 362.408, Ordinance Code, EPB 2.405 - 2.408; Effective 3/18/85; Amended and Renumbered 1/10/93, Amended 12/19/94, Amended and renumbered 11/12/96]. Note: The rules covered by this part were previously adopted under former EPB rule section 2.702.

**PART X**  
**STATIONARY SOURCES - EMISSION STANDARDS**

**2.1001**

Chapter 62-296, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's emission standards for stationary sources. [History: Effective 1/10/93, Amended 12/19/94, Amended 9/11/95, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.901.



**PART XI**  
**STATIONARY SOURCES - EMISSION MONITORING**

**2.1101**

Chapter 62-297, Florida Administrative Code, is adopted and incorporated in this rule by reference as the City's emission monitoring requirements for stationary sources. [History: Effective 1/10/93, Amended 12/19/94, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1001.

**PART XII  
AIR POLLUTION NUISANCE RULES**

**2.1201 General Standard for Volatile Organic Compounds**

Persons shall use reasonable care to avoid discharging, leaking, spilling, seeping, pouring, or dumping volatile organic compounds or organic solvents. [History: Formerly S.362.206, City Ordinance Code; EPB 2.205 B.2.; Effective 3/18/85; Renumbered 1/10/93, Renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1101.

**2.1202 Emissions from Ships and Locomotives**

**A. Applicability**

This rule applies to the operation of ships and locomotives at all places within the borders of Duval County, Florida.

**B. Definitions**

1. "Cold boiler light off" - The light off of a steam boiler without the use of steam from an operating shipboard boiler or shore steam, to preheat the boiler furnace and combustion air.
2. "Distillate Fuel" - Liquid fuels distilled, usually from crude petroleum and conforming to the properties of nos.1 through 4 fuel oils as specified in ASTM D 396-80.
3. "Emergency boiler shut down" - An unscheduled, immediate cessation of boiler operation caused by a failure of the boiler and/or boiler auxiliaries, a fire in the machinery spaces or a similar unforeseeable casualty which all preventable measures could not have eliminated.

**C. Prohibited Acts**

No person, including owners, ships' Captains and engineers, shall cause, let, permit, suffer or allow:

1. Visible emissions from ships or locomotives greater than twenty percent (20%) opacity, except that visible emission as great as forty percent (40%) opacity shall be permissible for no more than two minute in an hour.
2. Operation of any shipboard steam boiler without posting and maintaining in a conspicuous place within plain view of the boiler operators a warning placard as shown in Attachment I.
3. The blowing of steam boiler tubes, economizers, air heaters, stacks or any other boiler components for the purpose of removing accumulated soot while in the port of Jacksonville, except in the event of an emergency threatening life or property.

4. Operation of any steam boiler without having in charge of the engine room an engineer duly licensed by the country of the vessels registry or by the United States Coast Guard. Proof of identity and license of said engineer shall be maintained on-board the vessel and shall be made available for inspection to the Department upon request.
5. Emergency boiler shut-downs, the light off of a cold boiler or boiler pressure relief valve safety test, without giving notice to the Department. In the case of cold boiler light off and boiler pressure relief valve safety tests, notification shall be by telephone and shall be given prior to the test or light off. Notification shall be given by telephone as soon as possible following an emergency boiler shut-down. Each notice required by this part shall include the following information:
  - a. Name of vessel.
  - b. Location of vessel.
  - c. Time of reported event.
  - d. Name of operator in charge of the vessel and of the engine room.
6. A cold boiler light off using any fuel other than distillate fuel.

#### D. Exemptions

1. Visible emissions caused by an emergency boiler shut-down or by boiler pressure relief valve safety tests shall be exempt from the opacity limits of Section 2.1202 C.1. above, provided that -
  - a. Best operational practices to minimize emissions are adhered to.
  - b. The duration of the excess emission shall be minimized, but in no case shall exempted emissions exceed 30 minutes in any 24-hour period, and
  - c. Notification of the emergency boiler shut-down or safety valve test shall have been provided in a timely manner, pursuant to the requirements of Section 2.1202 C.5. above.
2. In the event of a visible emission in excess of the opacity limits of Section 2.1202 C.1. caused by an emergency boiler shut-down or by boiler safety valve tests, a written report shall be submitted within 30 days, if requested by the Department, detailing the exact cause of the excess emission and the operational practices taken to minimize the emission.

#### E Equipment Specifications.

In addition to the payment of any fines, penalties or settlements tendered in resolution of said violations, a vessel which is the source of an emission, in violation of Section 2.1202 C., shall be subject to the equipment specifications set forth below. This Section will apply if the violations are admitted or uncontested, or if contested, are found by the Board or by a court of competent jurisdiction to have occurred.

1. Vessels powered by steam boilers and subject to this Section shall be equipped with smoke detectors and alarms which immediately alert engineers on watch in the engine room of any excessive smoke emitted from the ship. Smoke detectors shall, at all times, be calibrated, operated and maintained in accordance with manufacturer's written specifications. The manufacturer's specification, together with written records of all instrument calibrations and maintenance performed, shall be maintained on-board the vessel and shall be made available for inspection to the Department upon request.
2. Smoke detectors and alarms required by this section shall be installed and calibrated as soon as possible, but not later than six months from the date of Citation if uncontested, or if contested, not later than six months from the date of determination by the Board or Court that the violation occurred.
3. Whenever the smoke detector required by this section measures an emission into the atmosphere in excess of forty percent (40%) opacity, notice shall be given by telephone to the Department immediately upon discovery of the excess emission and shall include the following information:
  - a. Name of vessel.
  - b. Location of vessel.
  - c. Time of discovery of excessive emission.
  - d. Duration of excessive emission.
  - e. Suspected cause of excessive emission.
  - f. Corrective action taken to abate the excessive emission.
  - g. Name of operator in charge of the vessel and of the engine room.

F. Compliance Test Method

Determinations of the opacity of emissions, pursuant to Section 2.1202 C.1., above, shall be made using United States Environmental Protection Agency Reference Method No.9 (40 Code of Federal Regulation (CFR) 60, Appendix A). Only determinations made by qualified observers trained and certified in accordance with Reference Method No.9 shall be used to enforce the opacity limits.

G. Penalties and Injunctive Relief

Violations of this rule shall be punishable by civil penalties specified in Section 362.110, Ordinance Code and to injunctive relief as provided in Section 360.407, Ordinance Code.

H. Enforcement

This rule shall be enforced by the Department in accordance with the provisions of Chapter 360 and 362, Ordinance Code.

I. Air Pollution Nuisance Prohibited

Nothing in this rule shall in any manner be construed as authorizing or legalizing the creation or maintenance of an air pollution nuisance, as defined in Environmental Protection Board Rule 2.1203. A violation of this rule does not, in and of itself, constitute an air pollution nuisance, as defined in Board Rule 2.1203.

J. Effective Date

This rule shall become effective twenty days following adoption by the Board and filing with the Council Secretary. [History: Formerly S 362.208, City Ordinance Code; EPB 2.206; Effective 7/9/90; Amended and renumbered 1/10/93, Amended and renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1102.

**2.1203 Air Pollution Nuisances**

A. Preamble

An Environmental Protection Board rule; developed pursuant to the rule making powers of the Board as defined in Section 360.108, Ordinance Code; prohibiting the creation of public air pollution nuisances that would adversely affect human welfare or cause damage to property or unreasonably interfere with the enjoyment of life or property or the conduct of business; providing procedures for notification to the source in the event of occurrence of a nuisance; and defining the elements of property damage.

B. Air Pollution Nuisance Defined

1. The term "air pollution nuisance" shall mean the presence in the atmosphere, from any source or sources whatever, of any air contaminant, including but not limited to smoke, ashes, dust, dirt, grime, soot, acids, fumes, gases, vapors, abrasive blasting grit, paint, or any other substance or combination of substances, in such amounts as to adversely affect human welfare; or cause harm or damage to property or unreasonably interfere with the enjoyment of life or property or the conduct of business.

In order for the Board to abate a nuisance under this section, the nuisance must be a public nuisance, as opposed to a private nuisance, although a nuisance may be both public and private. A public nuisance affects rights common to the whole community or a considerable number of persons and not merely some particular person. After the Department has received and validated citizen complaints from ten or more persons who do not live in the same household within a one year period or less, each alleging an adverse affect to that person's human welfare or damage to his own property, or unreasonable interference with enjoyment of life or property or the conduct of business, the source responsible shall be deemed a public nuisance. In addition, and irrespective of the number or frequency of complaints, damage to property or unreasonable interference with the enjoyment of life or property or the conduct of business which occurs in or on any public way or place, including but not limited to parks, playgrounds, recreational area, schools, street, highways, bodies of water, or any publicly owned land or buildings, shall be deemed a public nuisance.

2. For the purpose of this rule, source means any stationary point source as defined in Section 62-210.200, FAC, any unconfined or area source and any mobile source, including but not limited to automobiles, trucks, buses, locomotives and ships.

#### C. Exceptions

1. Objectionable odors are not included under this section.
2. In the case of a permitted source of air pollution equipped with continuous emission monitors (CEMs) which measure the air pollutant alleged to have caused the nuisance and which meet applicable Federal performance specifications for continuous emissions monitors, the submission of CEM data showing compliance with applicable emission limiting standards during the time of the air pollution nuisance shall constitute prima facie evidence of no violation of the provisions of this rule.

#### D. Elements of property damage

Pursuant to this rule, property damage shall include, but is not limited to the deposition, impaction, settling or condensation of an air pollution nuisance, as defined in Section B on any property at any point beyond the property limits of the premises occupied or used by the person responsible for the emission into the atmosphere of the air pollution nuisance as defined in Section B, so as to cause:

1. Excessive corrosion of metal surfaces as demonstrated by comparison with similar surfaces in the general area or other portions of the same structures.
2. Etching or discoloration of surface coatings.
3. Soiling in amounts which necessitate additional cleaning of property not otherwise required or refinishing of coated or polished surfaces.
4. Discoloration or soiling over and above normal wear and tear resulting from the tracking of deposited material onto carpets or other types of finished floor covering which necessitate cleaning not otherwise required.
5. Impaction of paint droplets or other coating materials onto surfaces.

#### E. Air Pollution Nuisance Prohibited

No person who owns or operates a source which emits air contaminants as defined in Section B shall cause, suffer, allow or permit the emission or escape into the atmosphere of an air pollution nuisance, as defined in Section B; and nothing in this rule shall, in any manner be construed as authorizing or legalizing the creation or maintenance of an air pollution nuisance, as defined in Section B.

#### F. Civil Penalties and Injunctive Relief

Persons who cause an air pollution nuisance, as defined in Section B shall be subject to civil penalties specified in Section 362.110, Ordinance Code; as well as to injunctive relief as specified in Section 360.407, Ordinance Code.

### G. Source Notification Procedures

The Department shall make all reasonable attempts to notify the owner or operator of the source alleged to be causing a nuisance not later than the next business day after the Department has initially identified the source as the suspected cause of the complaint. [History: Formerly EPB 2.211; Effective December 1985; Amended and renumbered 1/10/93, Amended 12/19/94, Amended and renumbered 11/12/96]  
Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1103.

NOTICE TO SHIPS  
WHILE IN THE PORT OF JACKSONVILLE

**EXCESSIVE SMOKE**

The Jacksonville Ordinance Code prohibits the emission into the air of visible smoke greater than 20 percent (20%) opacity, except that a visible emission as great as 40 percent (40%) opacity shall be permissible for not more than two minutes in any hour.

Soot blowing except in an emergency threatening life or property, is prohibited.

Violation of these and all other applicable rules of the City of Jacksonville are punishable by fines of up to \$10,000 per day, for each separate offense.

To report cold boiler lightoffs, emergency boiler shutdown, boiler safety testing or excess emission call

**630-3685**



**PART XIII  
PERMITS - GENERAL PROVISIONS**

**2.1301 Air Pollution Source Permits**

Chapter 62-4, Florida Administrative Code, is adopted and incorporated into this rule by reference as the City's air pollution source permitting requirements. [History: New, Effective 12/19/94, Amended 9/11/95, Amended and Renumbered 11/12/96] Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1201.

**2.1302 Air Pollution Source Permit Hearings and Public Notice Requirements**

Section 120.57, Florida Statutes, and Rule 62-103.150, Florida Administrative Code are adopted by reference as the Board requirements for hearings and public notice in conjunction with air pollution permitting. [History: New, Effective 12/19/94, Amended and Renumbered 9/11/95, Amended and Renumbered 11/12/96]. Note: The rules covered by this part were previously adopted by reference under former EPB rule section 2.1204.

**DONE AND ORDERED** This \_\_\_\_ day of \_\_\_\_\_, 1996, at the regular meeting of the Environmental Protection Board, City of Jacksonville.

**ENVIRONMENTAL PROTECTION BOARD**

**BY:**

\_\_\_\_\_  
**M. F. MASS, M.D.  
CHAIRMAN**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of: )

Florida Electric Power Coordinating Group, Inc., )

ASP No. 97-B-01

Petitioner. )

ORDER ON REQUEST  
FOR  
ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]

2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.

3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually."

5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."

6. Rule 297.310(7)(a)2., F.A.C., states, "The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision."

7. Rule 297.310(7)(a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: a. Did not operate; or, b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours."

8. Rule 297.310(7)(c)4., F.A.C., states, "During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for: a. Visible emissions, if there is an applicable standard; b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."

9. Rule 297.310(7)(a)5., F.A.C., states, "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."

10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.”

11. Rule 297.310(7)(a)7., F.A.C., states, “For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.” [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]

12. The fifth edition of the U. S. Environmental Protection Agency’s Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]

13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

#### CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

#### ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours;

2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;

3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

#### PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;

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

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

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

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

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(a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(b) A statement of the preliminary agency action;

(c) A statement of the relief sought; and

(d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully



each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

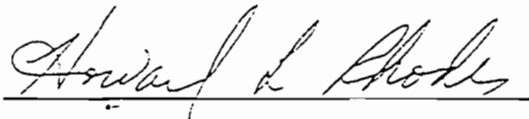
This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director  
Division of Air Resources Management  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 18<sup>th</sup> day of March 1997.

Clerk Stamp

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

Martha M. Wise      3-18-97  
Clerk                              Date



January 28, 1997

Clair H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 5505  
Tallahassee, FL 32301

RECEIVED

JAN 28 1997

BUREAU OF  
AIR REGULATION

RE: Comments Regarding Draft Title V Permits

Dear Mr. Fancy:

The Florida Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter.

Primarily, the FCG members are concerned that the Title V permits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

1. Federal Enforceability--The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that *all* terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DARM-PER/V-18), but we understand that the Department may now intend to remove all references to

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Clair H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
January 28, 1997  
Page 2

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do *not* become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

2. PM Testing on Gas--The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBtu emission limit established under Rule 62-296.405(1)(b), F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fuel. Typically only *de minimis* amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department, and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.

3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

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Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
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excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

4. Compliance Testing for Combustion Turbines--While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion turbines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition *only* if requested by a permittee, we understand that the Department may intend to include this requirement in Title V permits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO *only* to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Standard Subpart GG under 40 CFR § 60.332 and not annually thereafter.

5. Test Methods--The FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should *not* be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

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6. Quarterly Reports--The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied *only* if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., oil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.

7. Trivial Activities--As you may recall, in May of 1996, the FCG submitted to the Department a list of small, *de minimis* emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DARM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1996, list to be "trivial." We would like to discuss a possible resolution of this issue with you and your staff at the January 30 meeting.

8. Permit Shields--The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to caveat the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the draft Title V permits. We very much appreciate the cooperation we have received from the Department throughout the

Clair H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
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Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-625-7661.

Sincerely,

*Rich Piper*

Rich Piper, Chair *hgm*  
FCG Air Subcommittee

Enclosures

cc: Howard L. Rhodes, DEP  
John Brown, DEP  
Pat Comer, DEP OGC  
Scott M. Sheplak, DEP  
Edward Svec, DEP  
FCG Air Subcommittee  
Angela Morrison, HGSS

33601

AP-42  
FIFTH EDITION  
JANUARY 1995

COMPILATION  
OF  
AIR POLLUTANT  
EMISSION FACTORS

VOLUME I:  
STATIONARY POINT  
AND AREA SOURCES

Office Of Air Quality Planning And Standards  
Office Of Air And Radiation  
U. S. Environmental Protection Agency  
Research Triangle Park, NC 27711

January 1995

Exhibit 1



## 1.4 Natural Gas Combustion

### 1.4.1 General<sup>1-2</sup>

Natural gas is one of the major fuels used throughout the country. It is used mainly for industrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9800 kcal/m<sup>3</sup> (900 to 1100 Btu/scf).

### 1.4.2 Emissions And Controls<sup>3-5</sup>

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combustion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-containing mercaptan is added to natural gas to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen oxides (NO<sub>x</sub>) are the major pollutants of concern when burning natural gas. Nitrogen oxide emissions depend primarily on the peak temperature within the combustion chamber as well as the furnace-zone oxygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO<sub>x</sub> control techniques being applied to natural gas-fired boilers (which result in characteristic changes in emission rates) are low NO<sub>x</sub> burners and flue gas recirculation. Low NO<sub>x</sub> burners reduce NO<sub>x</sub> by accomplishing the combustion process in stages. Staging partially delays the combustion process, resulting in a cooler flame which suppresses NO<sub>x</sub> formation. The three most common types of low NO<sub>x</sub> burners being applied to natural gas-fired boilers are staged air burners, staged fuel burners, and radiant fiber burners. Nitrogen oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO<sub>x</sub> burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (i. e., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO<sub>x</sub> emission rates for these systems.

In a flue gas recirculation (FGR) system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO<sub>x</sub> emissions by two mechanisms. The recycled flue gas is made up of combustion products which act as inerts during combustion of the fuel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak flame temperature and reducing the amount of NO<sub>x</sub> formed. To a lesser extent, FGR also reduces NO<sub>x</sub> formation by lowering the oxygen concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO<sub>x</sub> emission rates for these systems. Flue gas

recirculation is normally used in combination with low  $\text{NO}_x$  burners. When used in combination, these techniques are capable of reducing uncontrolled  $\text{NO}_x$  emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce  $\text{NO}_x$  emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion flue gas, to reduce inlet  $\text{NO}_x$  emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than 1 micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of  $\text{NO}_x$  control systems such as FGR and low  $\text{NO}_x$  burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, and 1.4-3.<sup>6</sup> For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units) EMISSION FACTORS FOR PARTICULATE MATTER (PM)  
FROM NATURAL GAS COMBUSTION<sup>a</sup>

Combustor Type (Size, 10 <sup>6</sup> Btu/hr Heat Input) (SCC) <sup>b</sup>	Filterable PM <sup>c</sup>			Condensable PM <sup>d</sup>		
	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	16 - 80	1 - 5	B	ND	ND	NA
Small industrial boilers (10 - 100) (1-02-006-02)	99	6.2	B	120	7.5	D
Commercial boilers (0.3 - < 10) (1-03-006-03)	72	4.5	C	120	7.5	C
Residential furnaces (< 0.3) (No SCC)	2.8	0.18	C	180	11	D

<sup>a</sup> References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10<sup>6</sup> cubic meters natural gas fired and lb of pollutant/10<sup>6</sup> cubic feet natural gas fired. Based on an average natural gas higher heating value of 8270 kcal/m<sup>3</sup> (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

<sup>b</sup> SCC = Source Classification Code.

<sup>c</sup> Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

<sup>d</sup> Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO<sub>2</sub>), NITROGEN OXIDES (NO<sub>x</sub>), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION<sup>a</sup>

Combustor Type (Size, 10 <sup>6</sup> Btu/hr Heat Input) (SCC) <sup>b</sup>	SO <sub>2</sub> <sup>c</sup>			NO <sub>x</sub> <sup>d</sup>			CO <sup>e</sup>		
	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/Large Industrial Boilers (> 100) (1-01-006-01, 1-01-006-04)									
Uncontrolled	9.6	0.6	A	8800	550 <sup>f</sup>	A	640	40	A
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	1300	81 <sup>f</sup>	D	ND	ND	NA
Controlled - Flue gas recirculation	9.6	0.6	A	850	53 <sup>f</sup>	D	ND	ND	NA
Small Industrial Boilers (10 - 100) (1-02-006-02)									
Uncontrolled	9.6	0.6	A	2240	140	A	560	35	A
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	1300	81 <sup>f</sup>	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	A	480	30	C	590	37	C
Commercial Boilers (0.3 - < 10) (1-03-006-03)									
Uncontrolled	9.6	0.6	A	1600	100	B	330	21	C
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	270	17	C	425	27	C
Controlled - Flue gas recirculation	9.6	0.6	A	580	36	D	ND	ND	NA
Residential Furnaces (< 0.3) (No SCC)									
Uncontrolled	9.6	0.6	A	1500	94	B	640	40	B

<sup>a</sup> Units are kg of pollutant/10<sup>6</sup> cubic meters natural gas fired and lb of pollutant/10<sup>6</sup> cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m<sup>3</sup> (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

<sup>b</sup> SCC = Source Classification Code.

<sup>c</sup> Reference 7. Based on average sulfur content of natural gas, 4600 g/10<sup>6</sup> Nm<sup>3</sup> (2000 gr/10<sup>6</sup> scf).

Table 1.4-2 (cont.).

- <sup>d</sup> References 10,15-19. Expressed as NO<sub>2</sub>. For tangentially fired units, use 4400 kg/10<sup>6</sup> m<sup>3</sup> (275 lb/10<sup>6</sup> ft<sup>3</sup>). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO<sub>x</sub> emissions from controlled boilers will be reduced at low load conditions.
- <sup>e</sup> References 9-10,16-18,20-21.
- <sup>f</sup> Emission factors apply to packaged boilers only.

Table 1.4-3 (Metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO<sub>2</sub>) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTION<sup>a</sup>

Combustor Type (Size, 10 <sup>6</sup> Btu/hr Heat Input) (SCC) <sup>b</sup>	CO <sub>2</sub> <sup>c</sup>			TOC <sup>d</sup>		
	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	ND <sup>e</sup>	ND	NA	28 <sup>f</sup>	1.7 <sup>f</sup>	C
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	D	92 <sup>g</sup>	5.8 <sup>g</sup>	C
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 E+05	C	128 <sup>h</sup>	8.0 <sup>h</sup>	C
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180 <sup>h</sup>	11 <sup>h</sup>	D

<sup>a</sup> All factors represent uncontrolled emissions. Units are kg of pollutant/10<sup>6</sup> cubic meters and lb of pollutant/10<sup>6</sup> cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m<sup>3</sup> (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value.

NA = not applicable.

<sup>b</sup> SCC = Source Classification Code.

<sup>c</sup> References 10,22-23.

<sup>d</sup> References 9-10,18.

<sup>e</sup> ND = no data.

<sup>f</sup> Reference 8: methane comprises 17% of organic compounds.

<sup>g</sup> Reference 8: methane comprises 52% of organic compounds.

<sup>h</sup> Reference 8: methane comprises 34% of organic compounds.

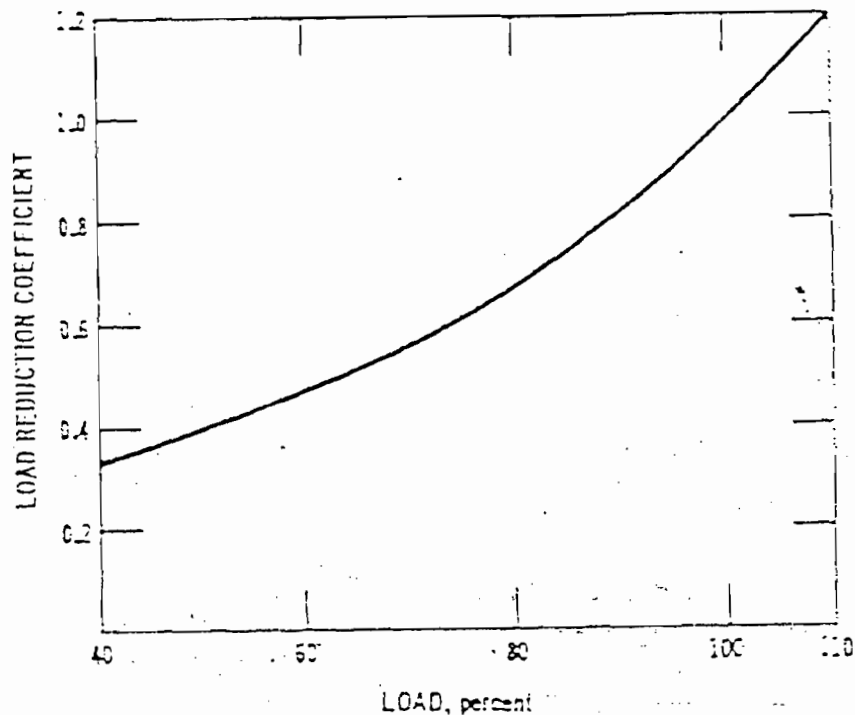


Figure 1.4-1. Load reduction coefficient as a function of boiler load.  
(Used to determine  $\text{NO}_x$  reductions at reduced loads in large boilers.)

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STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of: )

Florida Electric Power Coordinating Group, Inc., )

ASP No. 97-B-01

Petitioner. )

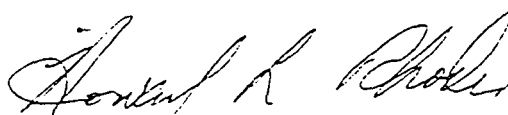
ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit pursuant to ~~Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.~~ the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director  
Division of Air Resources Management  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(904) 488-0114

## Appendix 40 CFR 60 Subpart A-General Provisions

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

[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

### 40 CFR 60.7 Notification and recordkeeping.

2. 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)]

3. 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)]

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

Written reports of excess emissions shall include the following information:

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

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

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

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and

the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

*{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)*

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

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

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

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

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

[40 CFR 60.7(e)(1)]

7. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

**40 CFR 60.8 Performance tests.**

8. 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)]

**40 CFR 60.11 Compliance with standards and maintenance requirements.**

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

[40 CFR 60.11(a)]

10. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).

[40 CFR 60.11(b)]

11. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

[40 CFR 60.11(c)]

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

[40 CFR 60.11(d)]

13. 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 EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she 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 EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

14. 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(g)]

#### **40 CFR 60.12 Circumvention.**

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

[40 CFR 60.12]

#### **40 CFR 60.13 Monitoring requirements.**

16. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

17. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

[40 CFR 60.13(c)(1)]

18. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance

specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

19. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

20. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

21. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

22. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable

conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

#### **40 CFR 60.19 General notification and reporting requirements.**

23. For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

[40 CFR 60.19(a)]

24. For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

[40 CFR 60.19(b)]

25. Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in 40 CFR 60.19(f).

[40 CFR 60.19(c)]

26. If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in 40 CFR 60.19(f).

[40 CFR 60.19(d)]

27. If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

[40 CFR 60.19(e)]

28. (1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs 40 CFR 60.19(f)(2) and (f)(3), the owner or operator of an affected facility remains strictly subject to the requirements of this part.
- (ii) An owner or operator shall request the adjustment provided for in paragraphs 40 CFR 60.19(f)(2) and (f)(3) each time he or she wishes to change an applicable time period or postmark deadline specified in this part.
- (2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
- (3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
- (4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.
- [40 CFR 60.19(1)(f)(i) & (ii), (2), (3) and (4)]