Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Bureau of Air Regulation

THROUGH: Jon Holtom, Title V Section 9#,

FROM: Susan Machinski

DATE: 11/21/2008

SUBJECT: Proposed Permit No. 0310485-019-AV

JEA, Brandy Branch Generating Station Title V Air Operation Permit Renewal

Attached for your review are the following items:

• Proposed Permit Determination;

- Statement of Basis; and
- Proposed Title V Permit.

The subject of this permitting action is the renewal of Title V air operation permit No. 0310485-005-AV for the existing Brandy Branch Generating Station, which is located in Duval County, Florida. The following minor changes were made as part of this permit renewal: reformatting, replacement of TV-6 with new Appendix TV, addition of Appendix RR, and addition of Appendix TR.

Comments were received in response to the Draft permit and have been addressed in the Proposed Permit Détermination. Changes have been made to the Draft permit in response to these comments. The changes were not deemed significant enough to require a revised Draft permit and new Public Notice.

I recommend your approval of the attached Proposed Permit.

Attachments



Florida Department of **Environmental Protection**

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

November 21, 2008

(Sent by Electronic Mail – Return Receipt Requested)

James M. Chansler, P.E., Chief Operating Officer JEA 21 West Church Street Jacksonville, FL 32202

Re:

Title V Air Operation Permit Renewal Proposed Permit No. 0310485-019-AV Brandy Branch Generating Station

Dear Chansler:

One copy of the Proposed Permit Determination for the renewal of the Title V Air Operation Permit for the Brandy Branch Generating Station located at 15701 Beaver Street West, Baldwin City, Duval County, is enclosed. This letter is only a courtesy to inform you that the Draft permit has become a Proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's World Wide Web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

"http://www.dep.state.fl.us/air/eproducts/apds/default.asp"

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

If you should have any questions, please contact Susan Machinski, at 239/332-6975, Ext. 109 or Jonathan Holtom at 850/921-9531.

Sincerely, Jenathan Wilton Joan Trina L. Vielhauer

Bureau of Air Regulation

TV/jh/sm

Enclosure

Copies sent by electronic mail (return receipt requested) to the following:

Mr. James, M. Chansler, P.E., JEA: chanJM@jea.com

N. Bert Gianazza, P.E., JEA: GianNB@jea.com

Mr. Christopher Kirts, DEP NE District: christopher.kirts@dep.state.fl.us

Mr. Richard Robinson, City of Jacksonville: robinson@coj.net

Mr. Mike Halpin, P.E., Power Plant Siting Office: mike.halpin@dep.state.fl.us

Ms. Katy Forney, U.S. EPA Region 4: forney.kathleen@epamail.epa.gov

Ms. Ana Oquendo, U.S. EPA Region 4: oquendo.ana@epamail.epa.gov

Ms. Barbara Friday, DEP BAR: barbara.friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)

Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

PROPOSED PERMIT DETERMINATION

Proposed Permit No. 0310485-019-AV

I. Public Notice.

An Intent To Issue A Title V Air Operation Permit Renewal to JEA for the Brandy Branch Generating Station located at 15701 Beaver Street West, Baldwin City, Duval County, was clerked on October 2, 2008. The Public Notice of Intent To Issue A Title V Air Operation Permit Renewal was published in The Florida Times-Union on October 8, 2008. The Draft Title V Air Operation Permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent To Issue A Title V Air Operation Permit Renewal was received on October 15, 2008.

II. Public Comment(s).

No Comments were received from the Public during the 30-day public comment period; however, comments were received from the Permittee. The comments were not considered significant enough to reissue the Draft Title V Air Operation Permit and require another Public Notice; therefore, the Draft Title V Air Operation Permit was changed. Those comments are addressed below. Additions to the permit are indicated by a <u>double underline</u>. Deletions from the permit are indicated by a <u>strike through</u>.

Letter from Permittee, James M. Chansler, dated October 31, 2008.

Comment 1. Subsection C, page 2 of the draft permit states that the facility is major for hazardous air pollutants (HAP). As indicated in the application and in other provisions of the draft permit, the facility is not major for HAP. This appears to simply be a typographical error that should be corrected.

Response 1. The Department agrees with the comment. Subsection C has been changed as follows:

Based on the Title V Air Operation Renewal application received July 3, 2008, this facility is <u>not</u> a major source of hazardous air pollutants (HAP). This facility is classified as a PSD major facility. A summary of applicable regulations is shown in the following table.

Comment 2. The Title V permit should clarify that all portions of the attached appendices and all portions of 40 CFR 60, Subparts A and GG, and 40 CFR 75 do not necessarily apply. For example, under Subsection C on page 2 of the draft permit, a clarification could be added that "[a] summary of the generally applicable regulations is shown in the following table. Similarly, page 30 of the permit which lists for various appendices that are attached should include the following at the end of the heading: "The Following Appendices are Enforceable Parts of This Permit to the Extent Applicable." Each of the appendices that are attached should clarify that only the applicable provisions of those appendices apply. Otherwise it is not clear that there are provisions being included in the documents simply because they are part of the rule being quoted and that such provisions are not necessarily applicable.

Response 2. The Department does not agree with the comment. The intent of Subsection C. Applicable Regulations is to provide a quick reference to emissions units' regulations. The facility is subject to the applicable regulations of each subpart. Each subpart identifies "applicability."

Comment 3. Condition FW7. should refer to a May 1, 2009 deadline for calendar year 2008, based on a recent change to Rule 62-2 10.370, F.A.C. This same note should be included in Appendix RR.

Response 3. The Department agrees with the comment with respect to Condition FW7. The Department disagrees with the comment regarding Appendix RR. Condition No. FW7. has been changed as follows:

Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each-the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. [Rule 62-210.370(3), F.A.C.]

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Comment 4. Condition FW11. on page 4 should be deleted as unnecessary and unduly restrictive. More than 18 months have lapsed since construction has been completed, so any new project should be considered independently. The Department's rules regarding modifications and major modifications triggering New Source Review apply. If this condition is kept as part of the permit, a "reassessment" should be required only if there are increases in "limits" on hours of operation, oil firing, low load operation, etc. The hours of operation and oil firing fluctuate each year and should not be considered a change in operations or a change requiring a "reassessment." In addition, the references to 40 CFR 5 1 can be omitted because these rules apply to states for SIP purposes and not to individual units.

Response 4. The Department agrees with the comment. Condition No. FW11. has been deleted. Condition FW12 will become FW11.

BACT Determination. In accordance with paragraph (4) of 40 CFR 52.21 (j) and 40 CFR 51.166(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source." This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation, oil firing, low or base load operation (e.g. conversion to combined cycle operation) short term or annual emission limits, annual fuel heat input limits, changes in methods of operation or similar changes. [40 CFR 51.166; Rule 62-4.070, F.A.C.; 0310485-001-AC / PSD FL-267; and, 0310485-003 / PSD FL-310]

Comment 5. Conditions A.1, B.1.a, and B.1.b, establishing heat input limits, should be revised to include the permitting notes that were part of the original construction permits for these units:

Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90- 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.3 10(5), F.A.C., included in this permit requires measurement of the process variables for emission tests. Such heat input determinations may be based on measurements of fuel consumption by various methods (including but not limited to) fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the operator to calculate average hourly heat input during the test. These notes clarify the purpose of referencing the heat input rates and confirm that the rates are not intended to be not-to-exceed limits. The condition remains valid as part of the initial construction permits for these units and JEA therefore requests that these permitting notes be included in the new, renewed Title V permit.

These notes clarify the purpose of referencing the heat input rates and confirm that the rates are not intended to be not-to-exceed limits. The condition remains valid as part of the initial construction permits for these units and JEA therefore requests that these permitting notes be included in the new, renewed Title V permit.

Response 5. The permitting note is not appropriate for these combustion turbines. The permitting note was meant to address emission units subject to Rule 62-296.405, F.A.C. These combustion turbines are not subject to this rule. As addressed in Specific Conditions A.1, A.23, B.1. and B.26, heat input is demonstrated by heat input vs. ambient temperature curves. However, the above referenced permitting note was originally in Permit No. PSD-FL-267/0310485-001-AV and similar language was in Permit No. PSD-FL-310/0310485-003-AC. The permitting note with respect to Conditions B.1.a. and B.1.b. was deleted from air construction Permit No. PSD-

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FL-310/0310485-003-AC through air construction Permit No. 0310485-017-AC. However, the permitting note remains in Permit No. 0310485-001-AC/PSD-FL-267. Therefore, Condition No. A.1. has been changed as follows:

<u>Permitted Capacity</u>. The maximum allowable heat input rates, based on the lower heating value (LHV) of each fuel at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed the following when firing the corresponding type of fuel:

Unit No.	MMBtu/hr Heat Input	Fuel Type	
EU001	1,623	Natural Gas	
ECOOL	1,822	No. 2 or superior grade of distillate fuel oil	

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be re-submitted within 45 days of re-establishing the curves due to a compliance test or combustor tuning session.

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

[Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-213.440(1), F.A.C., 62-214.330, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 8]

Comment 6. Consistent with the initial construction permits, RATA test data may be used in lieu of annual test requirements to demonstrate compliance with NO_X and CO limits. This information should be included in Conditions A.16 and B.19.

Response 6. The draft permit does state in Conditions A.15, A.21, B.18, and B.24 that RATA testing may and shall demonstrate annual compliance for NO_X and CO. However, at the request of the applicant's comment, Conditions A.16 and B.19 have been changed as follows:

- A.16. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emissions standards, pursuant to Rule 62-297.310(7), F.A.C., for NO_X, VE and CO. EPA reference methods described in Specific Condition A.15. shall be used. Method 7E or RATA test data required pursuant to 40 CFR 75 may be used to demonstrate compliance for annual compliance testing. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_X as long as all testing requirements of 40 CFR 75 are met. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. [Rule 62-297.310(7), F.A.C. and Permit No. 0310485-001-AC, Specific Conditions 29 and 32]
- **B.19.** Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), these emissions units shall be tested to demonstrate compliance with the emissions standards for NO_X, CO, ammonia, and VE. RATA testing, required pursuant to 40 CFR 75, for CO and NO_X CEMS may be utilized to demonstrate annual compliance. [Rule 62-297.310(7), F.A.C., Permit No. 0310485-003-AC/PSD-FL-310, Conditions 29 and 32]

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Comment 7. JEA requests that Conditions A.17 and B.20 be deleted. The construction permits specifically provide that only "initial" VOC testing was required and that CO is to be used as a surrogate. Requiring testing prior to renewal would be new and is not appropriate. Moreover, annual testing is required in other specific conditions for the other parameters listed so there is no need to include these duplicative conditions. Additionally, Conditions A.16 and B. 19 listing the annual test requirements should be revised to explain that RATA tests can be used in lieu of annual tests, even if the RATA tests are conducted at less than 90 percent of the permitted capacity.

Response 7. The Department disagrees with the comment that VOC testing is not required prior to renewal. Rule 62-297.310(7)(a) 3., F.A.C. specifically states that "...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." This condition is also found in this facility's permit in Attachment TR, specifically condition TR7. Additionally, Permit No. 0310485-003-AC/PSD-FL-310 Condition #29 states that VOC testing is required prior to obtaining a renewal operation permit. Permit Nos. 0310485-001-AC/PSD-FL-267 and 0310485-003-AC/PSD-FL-310 allowed continuous monitoring of CO to be a surrogate for VOC emission limits in lieu of annual VOC testing and not a substitute for required testing prior to renewal per Rule 62-297.310(7)(a)3, F.A.C.

The Department disagrees with the comment to delete Conditions A.16 and B.19. Conditions A.16, A.17, B.19, and B.20 are intended to clearly state which pollutants are required to be tested annually and which pollutants are required to be tested prior to renewal for each emissions unit.

The Department has addressed the comment pertaining to RATA testing in Response 6.

Comment 8. "Immediate" Reporting-Condition RR.2 should be revised to define "immediately" as within *one* working day, not the "same" working day. This is too restrictive and inconsistent with prior statements by the Department as what was intended by that term.

Response 8. The Department disagrees with the comment. 40 CFR 70.6(a)(3)(iii)B. uses the word "prompt" for the reporting of deviations and further requires that the Permitting Authority define "prompt." The Department defines "prompt" to be the same as "immediately" (to take care of the difference between 62-4.130 and 40 CFR 70.6). The Department's definition of "prompt" to mean the same as "immediately" has been in the previous version of Appendix TV that was made part of the facility's permit and accepted by the applicant.

Comment 9. In the statement of basis, the reference to "Brandy Branch" as part of the RO's address should be deleted. Also in the statement of basis, the first line under "Facility Description" should refer to the Brandy Branch "Generating Station."

Response 9. The Department agrees with the comment. The Applicant and Facility Description sections have been changed as follows:

The applicant's responsible official and mailing address are: James M. Chansler, P.E., Chief Operating Officer, JEA, Brandy Branch, 21 West Church Street, Jacksonville, FL 32202.

The applicant operates the Brandy Branch <u>Generating Station</u>, which is located at 15701 Beaver Street West, Baldwin City, Florida.

Comment 10. In the statement of basis, under "Primary Regulatory Requirements," the reference to CAIR applicability at the bottom of the page should include the same caveat that the Department included under Condition "FW 12": "On July 11, 2008, the US. Court of Appeals for the District of Columbia recommended vacature of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were

identified in the renewal application are not being included in the permit at this time." A similar caveat should be included in the general Title V conditions as well, which refer to CAIR applicability and requirements.

Response 10. The Department does not agree with the comment that the CAIR caveat included under Condition FW12 should be included in the statement of basis. The listing of applicable regulations in the statement of basis is merely a summary of the regulations. The Department also does not agree that the CAIR caveat should be included in Appendix TV (the Title V conditions). Appendix TV is standard Title V conditions required for all Title V permits. The CAIR caveat is stated within the permit in condition FW12 and does not need to be duplicated in this draft permit's Appendix TV. This language was added to condition FW12. to provide some direction of how to comply with the applicable requirement of Rule 62-296.470, F.A.C. during the interim period while the CAIR outcome is being decided. No changes have been made as a result of this comment.

Comment 11. There are several references to Rule 62-213.410, F.A.C., regarding "changes without permit revisions," which do not seem appropriate or applicable - see, e.g., Condition A.2, B.2.

Response 11. The Department agrees with the comment. The reference to Rule 2-213.410, F.A.C. after Conditions A.2 and B.2 has been removed.

Comment 12. The "tuning" sessions referenced throughout the permit for Units 1-3 clarify that the special allowances for excess emissions, the notice requirements, re-establishment of curves, etc., are tied only to "major" tuning sessions. There are some tuning events that may occur remotely by GE. This type of tuning can occur fairly frequently and without excess emissions so that advance notice and the special conditions should not be necessary. Conditions A.1, B.13, B.14, B.16e and f, B.29, and B.32.b should all be revised to make this clarification.

Response 12. The Department agrees with the comment. Condition Nos. A.1, B.13, B.14, B.16e and f, B.29, and B.32.b have been changed to include the word "major" in reference to tuning sessions.

Comment 13. The draft permit includes out-dated custom fuel monitoring schedule language in Conditions A.12 and B.17. The permitting note on page 12, for example, refers to the more progressive and currently applicable Subpart GG provisions for determining the sulfur content of gaseous fuel. These conditions should be revised to better clarify that the sulfur content will be determined based on the provisions of Subpart GG, or if a more specific cite is appropriate, 40 CFR 60.334(h).

Response 13. The Department disagrees with the comment. The Department believes that Conditions. A.12 and B.17 are clear. Conditions A.12. and B.17. are specific conditions from the previously accepted federally enforceable construction permits.

Comment 14. Conditions A.24, B.28, and E.7 should be revised to clarify that the NSPS excess emissions reports are required only for the reporting of exceedances of the NSPS limits (not the permit limits).

Response 14. The Department disagrees with the comment with respect to Conditions A.24 and B.28. The Department believes that these conditions are clear. The exact wordings of these conditions were in previously accepted federally enforceable permits. However, for further clarification the following conditions have been added in Subsection E. Common Conditions:

Excess Emissions

E.6. NSPS Excess Emissions. For emission units that elect to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content required under 40 CFR 60 Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emission s shall be reported for all periods of unit operation, including startup,

shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime shall be reported as defined in 40 CFR 60.334. [40 CFR 60.334]

- E.7. NO_X Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(1). [40 CFR 60.334(j)(1)]
- E.8. SO₂ Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(2). [40 CFR 60.60.334(j)(2)]

The Department agrees with the comment with respect to Condition E.7. Condition E.7 (now E.10) has been changed as follows:

E.10. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emission required by 40 CFR 60.334	Postmarked by 30th day following end of each 6 month period	60.334(j)(5)

Comment 15. Condition B. 1 should be revised to clarify that the curves have already been submitted.

Response 15. The Department agrees with the comment. Condition No. B.1. has been changed as follows:

B.1. Permitted Capacity.

a. Combustion Turbines. The maximum heat input rates, based on the higher heating value (HHV) of the fuel to these units shall not exceed:

Unit No(s).	MMBtu/hr Heat Input	Fuel Type
EU002 and	1,911	Natural Gas
EU003	2,060	Oil .

This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the ERMD EQD within 45 days of completing the initial compliance testing. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be re-submitted within 45 days of re-establishing the curves due to a compliance test or combustor tuning session. [Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-214.330, F.A.C.; Permit No. 0310485-003-AC/PSD-FL-310]

Comment 16. Condition B. 14a.(2) should be deleted. This condition addresses emissions from October 1, 2005 through October 1, 2007, and that period has passed.

Response 16. The Department agrees with the comment. Condition No. B.14. has been changed as follows:

B.14. Excess Emissions Allowed Due to Tuning.

- **a.**—Alternate NO_X and CO Emissions Standards:
 - (1)—During any calendar day, in which at least one hour of startup, shutdown or DLN tuning session has

occurred, the following alternate emission limits shall apply to each combined cycle combustion turbine:

(i) a. An alternate NO_X limit of 3,000 lbs shall apply if natural gas is the exclusively fired fuel;

(ii)b. An alternate NO_X limit of 8,880 lbs shall apply if any fuel oil is fired; and,

(iii)c. An alternate CO limit of 4,200 lbs shall apply when firing either natural gas or fuel oil.

- (2) Annual excess emissions from DLN tuning sessions from both combined cycle combustion turbines shall meet the following emission limits on an annual basis for a period of two years from the date of October 1, 2005, in order to demonstrate that the operational change did not result in a significant net emissions increase and to avoid PSD regulations:
 - (i) NO_x excess emissions shall be limited to less than 40 tons per year.
 - (ii) CO excess emissions shall be limited to less than 100 tons per year.

[Rules 62-212.400(2)(d) and (e), F.A.C.; Permit No. 0310485-014-AC]

Comment 17. Condition B. 16.h should refer only to NO_X emissions since there is a reference to Subpart GG, clarifying that the CO CEMS is not subject to these requirements.

Response 17. The Department disagrees with the comment. The heading for Condition B.16.h. is "Compliance Demonstration with Subpart GG. Since 40 CFR 60 Subpart GG does not regulate CO emissions and Condition B.16.h. does not mention CO CEMS, the Department believes this condition is clear.

Comment 18. Condition B. 18 should be revised to include Test Methods 25/25A for VOCs should that testing ever be required. Also, the ammonia testing requirement should omit the references to testing while firing oil since that was an initial only requirement.

Response 18. The Department agrees that the VOC test methods should be included in the Test Methods table. A review of construction permit No. 0310485-003-AC/PSD-FL-310 shows that Method 18 was also specified as an acceptable Method. Condition No. B.14. has been changed as follows:

<u>Test Methods</u>. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10 ·	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.} This testing may be conducted during the NO _X RATA tests, which includes loads that are less than permitted capacity.
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
<u>18</u>	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
<u>25</u>	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
<u>25A</u>	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip for ammonia slip during oil firing (I) and natural gas firing (I, A). The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O ₂) at the measured lbs/hr NO _X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the ERMD-EQD's request, according to Specific Condition B.27 .

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [PSD-FL-310]

{Permitting Note: The 40 CFR 60 Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). [PSD-FL-310]}

The Department disagrees with the comment pertaining to ammonia testing. The previously accepted federally enforceable permit, No. 0310485-003-AC/PSD-FL-310, Condition 29, required initial ammonia testing on oil, but waived the annual ammonia testing requirement while firing oil. However, the condition further states that "where initial tests only are indicated, these tests shall be repeated prior to renewal of each operation permit." Therefore, ammonia testing on gas and oil shall be performed prior to permit renewal. The renewal testing requirement also pertains to VOC. Because of this, Condition B.20 is changed as follows:

- **B.20.** Compliance Tests Prior to Renewal. Except as provided for in condition **TR7** of Appendix TR, Testing Requirements, these emissions units shall be tested for the following pollutants prior to obtaining a renewed operation permit: NO_X, CO, ammonia, <u>VOC</u> and VE. [Rule 62-297.310(7)(a)3., F.A.C. and Permit No. 0310485-003-AC/PSD-FL-310, Condition 29]
- Comment 19. Condition B.21 should most likely refer to 40 CFR 60.8 rather than 60."0."
- **Response 19.** The Department agrees with the comment. Condition No. B.21. has been changed as follows:
- **B.21.** <u>Initial Testing Requirements</u>. Initial compliance tests meeting the requirements of 40 CFR 60.0-8 shall be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or change of combustors, if specifically requested by the ERMD-EQD on a case-by-case basis. [PSD-FL-310]
- **Comment 20**. Condition B.24 should not refer to CO because annual RATA testing for CO is not required under Part 75.
- Response 20. Condition B.24 is identical language to the previously accepted federally enforceable Permit Nos. 0310485-003-AC/PSD-FL-310, 0310485-013-AV, and 0310485-016-AV. It can not be changed through the Title V permitting process, a construction permit revision will be required. However, the Department agrees that Part 75 does not address CO monitors and will insert the following permitting note after Condition B.24 clarifying that CO RATA requirements are contained in 40 CFR 60, Appendix B, not 40 CFR 75.

<u>{Permitting Note: 40 CFR 75 does not address RATA requirements for CO CEMS. The required annual RATA testing for the CO CEMS shall be performed instead as required by 40 CFR 60 Appendix B.</u>

- Comment 21. Appendix I, the list of insignificant units, includes a reference to a single tank. "Tank" should be plural since there are a few small tanks at the facility and this change would be consistent with the current Title V permit. In addition, as requested in JEA's application, please include "two indirect natural gas heaters" as insignificant activities.
- **Response 21.** The Department agrees with the comment. Appendix I, List of Insignificant Units, has been changed to indicate multiple tanks and to include two indirect natural gas heaters (application states one)
- Comment 22. Emission Computations Condition TV30 in the general conditions should be revised to include Rule 62-210.370, F.A.C., in its entirety if it is to be included at all. The applicability section of the rule, (I), explains the purpose of the rule and how it is to be used-"This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions

JEA – Brandy Branch Generating Station Proposed Permit Determination Page 9 of 9

increases . . ., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions to be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit." This introductory language is critical and must be added. Without this explanation in the conditions, the purpose of Condition TV 30 is unclear and could be misinterpreted to add new compliance requirements.

Response 22. The Department agrees with the comment. Appendix TV, Condition No. TV30 has been changed to include the language contained in Rule 62-210.370(1) and (2), F.A.C.

Comment 23. Conditions A.14 and B.30 should be revised to eliminate the references to certification and quality assurance requirements of Rule 62-296.520, F.A.C. The conditions should further be revised to clarify that the 40 CFR 60, Appendix B, certification requirements apply only to the CO monitors. The appropriate quality assurance procedures for the NO_X monitors are found in 40 CFR Part 75 (and not the State's rules or Part 60). Additionally, the last sentence of Condition B.30 regarding the equipment specifications can be omitted because this information has already been provided.

Response 23. The Department disagrees with the comment. The Rule reference stated in the permit is Rule 62-297.520, F.A.C. Rule 62-297.520, F.A.C., is applicable. The Department believes that Conditions A.14. and B.30 are clear. These conditions were previously accepted in federally enforceable permit Nos. 0310485-001-AC/PSD-FL-267, 0310485-003-AC/PSD-FL-310, 0310485-005-AV, 0310485-013-AV and 0310485-016-AV.

III. Conclusion.

The enclosed Proposed Title V Air Operation Permit includes the aforementioned changes to the Draft Title V Air Operation Permit.

The permitting authority will issue the Proposed Permit Number 0330045-016-AV, with the changes noted above.

Title V Air Operation Permit Renewal Permit No. 0310485-019-AV

APPLICANT

The applicant for this project is JEA. The applicant's responsible official and mailing address are: James M. Chansler, P.E., Chief Operating Officer, JEA, Brandy Branch, 21 West Church Street, Jacksonville, FL 32202.

FACILITY DESCRIPTION

The applicant operates the Brandy Branch <u>Generating Station</u>, which is located at 15701 Beaver Street West, Baldwin City, Florida.

The existing facility consists of three nominal 170 megawatt (MW) combustion turbine-electrical generators and two one-million gallon capacity fuel oil storage tanks. Two of the combustion turbines are configured for combined cycle mode (EU002, EU003) and one for simple cycle operation (EU001). The combustion turbines use natural gas as the primary fuel and low-sulfur distillate fuel oil as backup fuel. The combined cycle mode combustion turbines are equipped with a supplementary-fired (natural gas) heat recovery steam generator (HRSG) duct burner. Emissions from the units are controlled by dry low nitrogen oxides (NO_X) combustors when operating on natural gas and wet injection when firing fuel oil. For the combined cycle units (EU002, EU003) selective catalytic reduction systems (SCR) are utilized for further NO_X reductions. Compliance with NO_X emissions from EU001, EU002 and EU003 is demonstrated with continuous emissions monitoring systems (CEMS). For EU001, EU002 and EU003, compliance with carbon monoxide (CO) emissions may be conducted concurrently with the relative accuracy test audit (RATA) for NO_X using CEMS. Sulfur dioxide (SO₂) emissions compliance is demonstrated with fuel analysis or vendor data. Compliance with the particulate matter (PM/PM₁₀) emissions limits is demonstrated for EU001 by using compliant fuel and by complying with the opacity limit (10%) for EU002 and EU003. Clean fuels and good combustion practices are employed to control all pollutants.

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

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Title V Air Operation Permit issued 03/19/2003
Title V Air Operation Permit Revision issued 04/04/2006
Title V Air Operation Permit Revision issued 12/19/2006
Application for a Title V Air Operation Permit Renewal received 07/03/2008
Additional Information Request dated 08/13/208
Additional Information Response received 08/14/2008

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

<u>Title IV</u>: The facility operates units subject to the acid rain provisions of the Clean Air Act.

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

<u>PSD</u>: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60 (Subpart GG and Subpart A, Standards of Performance for Stationary Gas Turbines and General Provisions, respectively).

<u>CAIR</u>: The facility is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C. On July 11, 2008, the U.S. Court of Appeals for the District of Columbia recommended vacature of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were identified in the renewal application are not being included in the permit at this time. If, and at such time that, CAIR is ultimately upheld, you must begin complying with the CAIR program requirements contained in the renewal application and the Title V permit must be revised accordingly. [Rules 62-213.440 and 62-296.470, F.A.C.]

Siting: Units 002 and 003 were originally certified pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

<u>CAM</u>: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility. A CAM is not required because the emission limitations or standards were proposed after 11/15/1990 and continuous compliance determination methods for emission limitations and standards are specified in the permit.

PROJECT REVIEW

This renewal permit incorporates the following changes: reformatting, replacement of TV-6 with new Appendix TV, addition of Appendix RR, and addition of Appendix TR.

CONCLUSION

This project renews Title V air operation permit No. 0310485-005-AV, which was issued on 03/19/2003. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213 and 214, F.A.C. In accordance with the terms and conditions of this permit, the above named permittee is hereby authorized to operate the facility as shown on the application and approved drawings, plans, and other documents, on file with the permitting authority.

JEA

Brandy Branch Generating Station Facility ID No. 0310485

Duval County

Title V Air Operation Permit Renewal

Permit No. 0310485-019-AV

(Renewal of Title V Air Operation Permit No. 0310485-005-AV)

Permitting Authority

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

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

> Telephone: 850/488-0144 Fax: 850/921-9533

Compliance Authority

City of Jacksonville
Environmental Resource Management Department
Environmental Quality Division
Air Pollution Source Permitting Section

117 West Duval Street, Suite 225 Jacksonville, Florida 32202

Telephone: 904/630-4900 Fax: 904/630-3638

<u>Title V Air Operation Permit Renewal</u> Permit No. 0310485-019-AV

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PROPOSED PERMIT

PERMITTEE:

JEA 21 West Church Street, Tower 8 Jacksonville, Florida 32202-3139 Permit No. 0310485-019-AV Brandy Branch Generating Station Facility ID No. 0310485 Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit for the above referenced facility. The existing Brandy Branch Generating Station is located at 15701 Beaver Street West, Baldwin City, FL 32234 in Duval County. UTM Coordinates are: Zone 17, 408.81 East (km), 3,354.38 North (km). Latitude is: 30° 19′ 14"; and, Longitude is: 81° 56′ 55".

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

Effective Date: January 1, 2009

Renewal Application Due Date: May 20, 2013

Expiration Date: December 31, 2013

(Proposed)

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/jh/srm

Subsection A. Facility Description.

This facility consists of three dual-fuel, nominal 170 megawatt (MW) General Electric model PG7241FA combustion turbine-electrical generators and two one-million gallon capacity fuel oil storage tanks. Two of the combustion turbines (EU-002 and EU-003) are configured for combined cycle mode and one (EU-001) for simple cycle operation. Emissions from the units are controlled by Dry Low Nitrogen Oxides (NO_X) (DLN-2.6) combustors when operating on natural gas and wet injection when firing fuel oil. For the combined cycle units, selective catalytic reduction (SCR) systems are additionally utilized for further NO_X reductions. Inherently clean fuels and good combustion practices are employed to control all pollutants.

The facility is subject to all applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297, and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75. The facility holds ORIS code 7846 under Phase II of the Federal Acid Rain Program.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description		
Regulated	Regulated Emissions Units		
001	Simple-Cycle Combustion Turbine-Electrical Generator		
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired Heat Recovery Steam Generator (HRSG)		
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired HRSG		
004	Fuel Oil Storage Tank (one-million gallon)		
005	Fuel Oil Storage Tank (one-million gallon)		
007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower		

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received July 3, 2008, this facility is <u>not a</u> major source of hazardous air pollutants (HAP). This facility is classified as a PSD major facility. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003
40 CFR 60, Subpart GG	001, 002, 003
40 CFR 75, Acid Rain Monitoring Provisions	001, 002, 003

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section V, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

- FW2. Not federally enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) F.A.C. and 62-210.200 (Definitions), F.A.C., and Jacksonville Environmental Protection Board (JEPB) Rule 2, Part IX]
- FW3. 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 Environmental Resource Management Department's (ERMD) Environmental Quality Division (EQD) receiving and validating complaints from five (5) or more different households within a 90 day period, can be cited for objectionable odors. [JOC Chapter 376]
- FW4. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing is deemed necessary and ordered at this time: [Rule 62-296.320(1)(a), F.A.C., 0310485-005-AV]
- FW5. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- **FW6.** Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. using paved roads, parking areas, and equipment yards,
 - b. maintenance of paved areas as needed,
 - c. regular mowing of grass and care of vegetation, and
 - d. limiting access to plant property by unnecessary vehicles. [Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received July 3, 2008.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

- **FW7.** Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. [Rule 62-210.370(3), F.A.C.]
- FW8. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/Air/permitting/tyfee.htm. [Rule 62-213.205, F.A.C.]
- **FW9.** Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]
- FW10. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 1515, Lanham-Seabrook, MD 20703-1515, Telephone: 301/429-5018.
 - 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]
- FW11. BACT Determination. In accordance with paragraph (4) of 40 CFR 52.21 (j) and 40 CFR 51.166(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source." This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation, oil firing, low or base load operation (e.g. conversion to combined cycle operation) short term or annual emission limits, annual fuel heat input limits, changes in methods of operation or similar changes. [40 CFR 51.166; Rule 62 4.070, F.A.C.; 0310485 001 AC / PSD FL 267; and, 0310485 003 / PSD FL 310]
- FW121. Clean Air Interstate Rule (CAIR) Applicable Units. This facility contains emissions units that are subject to CAIR. On July 11, 2008, the U.S. Court of Appeals for the District of Columbia recommended vacature of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were identified in the renewal application are not being included in the permit at this time. If, and at such time that, CAIR is ultimately upheld, you must begin complying with the CAIR program requirements contained in the renewal application and the Title V permit must be revised accordingly. [Rules 62-213.440 and 62-296.470, F.A.C.]

Subsection A. Emissions Unit 001

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Simple-Cycle Combustion Turbine-Electrical Generator

This emissions unit is comprised of a nominal 170 MW simple-cycle combustion turbine (CT) (Make/Model: General Electric PG7241FA), with a 90-foot exhaust stack. Natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. NO_X emissions are controlled by dry low NO_X (DLN) combustors, and a water injection system for use when firing No. 2 or superior grade distillate fuel oil. The stationary combustion turbine, ducting, and stack is designed so as to not preclude installation of SCR equipment and/or oxidation catalyst equipment in the event of a failure to achieve the NO_X limits given in Specific Condition A.5., or the carbon monoxide (CO) limits given in Specific Condition A.6. Compliance Assurance Monitoring (CAM) does not apply to this emissions unit. Start-up date was: April 20, 2001.

{Permitting note: This emissions unit is regulated under: Acid Rain-Phase II, 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.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); Air Construction Permit No. 0310485-001-AC/PSD-FL-267 and amendments (A thru D); and, Power Plant Siting Project No. PA 00-43. The CT began commercial operation on April 20, 2001. Stack height = 90 feet, exit diameter = 18.0 feet, exit temperature = 1,116 °F, actual volumetric flow rate = 2,393,300 acfm.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input rates, based on the lower heating value (LHV) of each fuel at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed the following when firing the corresponding type of fuel:

Unit No.	MMBtu/hr Heat	Fuel Type
	Input	
EU001	1,623	Natural Gas
10003	1,822	No. 2 or superior grade of distillate fuel oil

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be resubmitted within 45 days of re-establishing the curves due to a compliance test or combustor <u>major</u> tuning session.

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

[Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-213.440(1), F.A.C., 62-214.330, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 8]

Subsection A. Emissions Unit 001

A.2. Methods of Operation – Fuels. Only pipeline natural gas or maximum 0.05 percent sulfur content, by weight, No. 2 or superior grade of distillate fuel oil shall be fired. [Rules 62-210.200(Definitions-PTE), F.A.C., and 62-213.410, F.A.C.; Permit No. 0310485-001-AC, Specific Condition 7, and, Applicant's request in Title V permit renewal application received July 3, 2008]

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

A.3. Hours of Operation. The stationary gas turbine shall only operate up to 4,750 hours during any consecutive twelve-month period, of which 750 hours of operation per combustion turbine may be while firing fuel oil. Additionally, the turbine shall be limited to 16 hours per day of fuel oil firing. See also Specific Condition B.3. [Rule 62-210.200(Definitions - PTE), F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 13]

Control Technology

A.4. Control Equipment. Consistent with best operation and maintenance practices, the DLN systems shall each be tuned to optimize emissions reductions and shall be maintained to minimize NO_X emissions and CO emissions. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rule 62-4.070, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 19]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions A.5. through A.10. are based on the specified averaging time of the applicable test method.

- **A.5.** Nitrogen Oxides (NO_X).
 - a. *Data Substitution*. For the sole purpose of Acid Rain reporting, when NO_X monitoring data are not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).
 - b. While firing Natural Gas. The emission rate of NO_X in the exhaust gas shall not exceed 69.3 lbs/hr (at ISO conditions) on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO_X emissions calculated as NO₂ (at ISO conditions) shall not exceed 10.5 ppmvd @ 15% O₂ to be demonstrated by annual stack test. Note: Basis for lbs/hr limit is 10.5 ppmvd @ 15% O₂, full load.
 - c. While firing Fuel Oil. The concentration of NO_X in the exhaust gas shall not exceed 42 ppmvd at $15\% O_2$ on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_X emissions calculated as NO_2 (at ISO conditions) shall not exceed 42 ppmvd @ 15% O_2 to be demonstrated by stack test.
 - d. After Firing Fuel Oil For 400 Hours. After combusting fuel oil for at least 400 hours on any individual combustion turbine (CT), the permittee shall prepare and submit for the DEP's review and acceptance an engineering report regarding the lowest NO_X emission rate that can consistently be achieved when firing distillate oil. This lowest recommended rate shall include a reasonable operating margin, taking into account long-term performance expectations and good operating and maintenance practices. The DEP may revise the NO_X emission rate based upon this report.

[Rule 62-212.400, F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 21]

Subsection A. Emissions Unit 001

- A.6. Carbon Monoxide (CO). The concentration of CO in the exhaust gas when firing natural gas shall not exceed 15 ppmvd when firing natural gas and 20 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions shall not exceed 48.0 lbs/hr (when firing natural gas) and 65.0 lbs/hr (when firing fuel oil) as indicated by EPA Method 10. [Rule 62-212.400, F.A.C.; Permit No. 0310485-001-AC, Specific Condition 22]
- A.7. Sulfur Dioxide (SO₂) and Sulfuric Acid Mist (SAM). SO₂ and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic feet) and 0.05% sulfur content, by weight, fuel oil. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Conditions A.12. and E.5. will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the combustion turbine. [40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.; BACT; and, Permit No. 0310485-004-AC, Specific Condition 23 (as revised in permit modification letter dated 4/12/01)]

{Permitting Note: This will effectively limit the combined SO₂ emissions for EU001, EU002 and EU003 to 117 TPY.}

- **A.8.** <u>Visible emissions (VE)</u>. VE emissions shall not exceed 10 percent opacity when firing natural gas or No. 2 or superior grade of fuel oil. [Permit No. 0310485-001-AC, Specific Condition 24]
- A.9. Particulate Matter (PM). PM emissions shall not exceed 9.0 lbs/hr (front catch) while firing natural gas and 17.0 lbs/hr (front catch) while firing fuel oil as indicated by opacity. [Permit No. 0310485-001-AC, Specific Condition 24]
- A.10. Volatile Organic Compounds (VOC). The concentration of VOC in the exhaust gas shall not exceed 2 ppmvd when firing natural gas and 3.5 ppmvd when firing fuel oil as assured by EPA Methods 18 and/or 25A. VOC emissions (at ISO conditions) shall not exceed 4.0 lb/hr (when firing natural gas) and 7.5 lb/hr (when firing fuel oil) as indicated by EPA Methods 18 and/or 25A. [0310485-001-AC, Specific Condition 25]

Excess Emissions

Rule 62-210.700(Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- **A.11.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided:
 - a. Best operational practices are adhered to and the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period for other reasons, unless specifically authorized by the DEP for longer duration;
 - b. Operation below 50% output while firing fuel oil (and below 62 gross megawatts while firing natural gas) shall be limited to 2 hours per unit cycle (breaker closed to breaker open);
 - c. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.

[Permit No. 0310485-001-AC, Specific Condition 26; Permit No. 0310485-010-AC (revision dated 1/18/2005) Rules 62-210.700(1) - (5), F.A.C.]

Subsection A. Emissions Unit 001

Monitoring of Operations

- **A.12.** 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 Subpart GG:
 - a. Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
 - b. JEA shall notify the DEP and the ERMD-EQD of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 standard cubic feet of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

[Permit No. 0310485-001-AC, Specific Condition 45; and, 40 CFR 60.334(h)(3)]

{Permitting note: Due to amendments to 40 CFR 60, Subpart GG, monitoring of the total sulfur content of the gaseous fuel combusted is not required if pipeline-supplied natural gas is used.}

Continuous Monitoring Requirements

- A.13. Continuous Monitoring System (CEMS). The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from the CT unit. Periods when NO_X emissions are above the standards as listed in Specific Condition A.5., shall be reported to the ERMD-EQD office pursuant to Rule 62-4.160(8), F.A.C. Following the format of 40 CFR 60.7, periods of startup, shutdown and malfunction shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards listed in Specific Condition A.5., except as noted in Specific Condition A.19. [Rule 62-204.800, F.A.C.; 40 CFR 60.7; and, Permit No. 0310485-001-AC, Specific Condition 41]
- A.14. 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 ERMD-EQD office no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. [Permit No. 0310485-001-AC, Specific Condition 43]

Test Methods and Procedures

A.15. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments	
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (or RATA test data) shall be used to demonstrate compliance with the short-term NO _X BACT limits	
9	Visual Determination of the Opacity of Emissions from Stationary Sources	
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}	
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography	
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and	

Subsection A. Emissions Unit 001

Method	Description of Method and Comments	
	Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)	
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Permit No. 0310485-001-AC]

- A.16. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emissions standards, pursuant to Rule 62-297.310(7), F.A.C., for NO_X, VE and CO. EPA reference methods described in Specific Condition A.15. shall be used. Method 7E or RATA test data required pursuant to 40 CFR 75 may be used to demonstrate compliance for annual compliance testing. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_X as long as all testing requirements of 40 CFR 75 are met. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. [Rule 62-297.310(7), F.A.C. and Permit No. 0310485-001-AC, Specific Condition 29 and 32]
- A.17. Compliance Tests Prior to Renewal. Except as provided for in condition TR7. of Appendix TR, Testing Requirements, this emissions unit shall be tested for the following pollutants prior to obtaining a renewed operation permit: NO_X, VE, VOC and CO. [Rule 62-297.310(7)(a)3., F.A.C.]
- **A.18.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.19. Continuous Compliance With the NO_X Emission Limits. Continuous compliance with the NO_X emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN technology while burning gas) or a 3-hr average (SCR technology or while burning oil). For the 24-hr block average (lb/hr) emissions may be determined via EPA Method 19 or equivalent EPA approved methods. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 62-210.200, F.A.C., where emissions exceed the applicable NO_X standard. These excess emissions periods shall be reported as required in Specific Conditions A.11. and A.24. A valid hourly emission rate shall be calculated for each hour in which at least two NO_X concentrations are obtained at least 15 minutes apart. [Rules 62-4.070, F.A.C. and 62-210.700, F.A.C.; 40 CFR 75; and, Permit No. 031485-001-AC, Specific Condition 30]
- A.20. Compliance with the SO₂ and PM/PM₁₀ Emission Limits. Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the use of pipeline natural gas and maximum 0.05 percent sulfur (by weight) No. 2 or superior grade distillate fuel oil, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60Subpart GG SO₂ standard and the 0.05% sulfur limit, fuel oil analysis using ASTM D2880-941 or D4294-90 (or equivalent latest version) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent latest version) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. The applicant is responsible for ensuring that the procedures above are used

Subsection A. Emissions Unit 001

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 Subpart GG. [Permit No. 0310485-001-AC, Specific Condition 31]

- **A.21.** Compliance With The CO Emission Limit. Annual compliance testing for CO may be conducted concurrently with the annual RATA testing for NO_X required pursuant to 40 CFR 75 (required for gas only). [Permit No. 0310485-001-AC, Specific Condition 32]
- **A.22.** <u>Volatile Organic Compounds (VOC) Emissions</u>. The CO emission limit shall be employed as a surrogate and no annual VOC testing is required. [Permit no. 0310485-001-AC, Specific Condition 33]
- A.23. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 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. [Rules 62-297.310(2) & (2)(b), F.A.C.; and, 0310485-001-AC, Specific Condition 34]

Record keeping and Reporting Requirements

See Subsection E. Common Conditions and Appendix RR, Facility-Wide Reporting Requirements for additional reporting requirements.

- **A.24.** Excess Emissions/Malfunction Report. If excess emissions occur due to malfunction, the owner or operator shall notify the ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rules 62-4.130, F.A.C. and 62-210.700(6), F.A.C.; and, Permit No. 0310485-001-AC, Specific Condition 27]
- A.25 Emission Compliance Stack Test Reports. A test report indicating the results of the required compliance tests shall be filed as per Appendix TR, Testing Requirements. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C. [Permit No. 0310485-001-AC, Specific Condition 39]
- **A.26.** Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records related to fuel usage as specified below:
 - a. Hours of operation:
 - (1) shall be submitted with the Annual Operation Report (AOR) for the prior year;
 - (2) shall be kept for each consecutive 12-month period by fuel type; and,
 - (3) daily hours of fuel oil operation shall be kept during any day in which fuel oil is fired.

[Permit No. 0310485-001-AC, Specific Condition 40]

Subsection A. Emissions Unit 001

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A.27. This emissions unit is also subject to conditions E.1. through E.11. contained in Subsection E. Common Conditions.

Subsection B. Emissions Units 002, 003

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description		
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners		
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary- fired (natural gas) HRSG Duct Burners		

Each emissions unit is comprised of a nominal 170 MW (Make/Model: General Electric PG7241 FA) stationary combustion turbine-electrical generator equipped with an evaporative cooler, a supplementary-fired (natural gas) heat recovery steam generator (HRSG) duct burner, an associated 190-foot stack, and a selective catalytic reduction (SCR) unit for reducing NO_x emissions, including ancillary equipment and ammonia storage; in addition, the emission units share one nominal 200 MW steam electrical generator and one freshwater cooling tower. For the CTs, natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. Compliance Assurance Monitoring (CAM) does not apply to these emissions units. Initial startup was 11/27/2004 for both EUs 002 and 003.

{Permitting note: These emissions units are regulated under: Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); PSD-FL-310 and amendments (A thru F); and, Power Plant Siting Project No. PA 00-43. The CT began commercial operation on November 27, 2004. Stack height = 190 feet, exit diameter = 18.0 feet, exit temperature = 204°F, actual volumetric flow rate = 1,009,200 acfm.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity.

a. Combustion Turbines. The maximum heat input rates, based on the higher heating value (HHV) of the fuel to these units shall not exceed:

Unit No(s).	MMBtu/hr Heat Input	Fuel Type
EU002 and	1,911	Natural Gas
EU003	2,060	Oil

This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the ERMD-EQD within 45 days of completing the initial compliance testing. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions have been provided to the Department of Environmental Protection (DEP) and shall be re-submitted within 45 days of re-establishing the curves due to a compliance test or combustor tuning session. [Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-214.330, F.A.C.; Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 8]

b. HRSG equipped with Duct Burners. The maximum heat input rate of each natural gas-fired HRSG duct burner shall not exceed 200 MMBtu/hr (HHV). [Rule 62-210.200(Definitions-PTE), F.A.C.; Permit Nos.0310485-003-AC, Specific Condition 9, 0310485-006-AC/PSD-FL-310(A) and 0310485-017-AC/PSD-FL-310(F)]

Subsection B. Emissions Units 002, 003

- **B.2.** Methods of Operation Fuels. The facility is authorized to burn any combination of natural gas (2.0 grains sulfur/100 scf), low sulfur fuel oil (0.05% sulfur content, by weight) and lower sulfur fuel oil (0.0065% sulfur content, by weight). The combinations of these fuels are subject to the hour limitations and recordkeeping requirements set forth in this permit. Unless otherwise authorized by this permit, CT operation below 65 gross megawatts shall be limited to 2 hours during each calendar day. [Rules 62-210.200(Definitions PTE), F.A.C. and 62-213.410, F.A.C.; PSD-FL-310, Specific Condition 7; Permit Nos. 0310485-007-AC and 0310485-015-AC]
- **B.3.** Hours of Operation. Except for the HRSG duct burners, the emission units are authorized to operate 8,760 hours per year while firing natural gas (2.0 grains sulfur/100 scf). The combined cycle units are authorized to operate up to a combined maximum of 576 actual plus "equivalent hours" per consecutive 12-month period while firing 0.05% sulfur content, by weight, fuel oil **OR** a combined maximum of 1,478 actual plus "equivalent hours" while firing 0.0065% sulfur content, by weight, fuel oil per consecutive 12-month period, whichever occurs first. The simple cycle unit is authorized to operate up to a maximum of 750 actual plus "equivalent hours" per consecutive 12-month period, while firing either 0.05% or 0.0065% sulfur content, by weight, fuel oil, whichever occurs first. Tracking of "equivalent hours" shall conform with and be recorded as defined within this permit. Additionally, the following requirements shall apply:
 - a. 0.05% Sulfur Fuel Oil. In the event that any of the 3 emission units (simple or combined cycle) fires No. 2 distillate fuel oil (0.05% sulfur content, by weight) during a calendar day, that unit shall be limited to 16 hours of daily operation on any fuel. Additionally, the other 2 units shall not be fired on any of the allowable fuels for that calendar day.
 - b. 0.0065% Sulfur Fuel Oil. In the event that the simple cycle unit fires lower sulfur oil (0.0065% sulfur content, by weight) during any calendar day, but for 8 hours or less, the combined cycle units may fire any combination of lower sulfur oil (0.0065% sulfur content, by weight) or natural gas (2 grains/100 scf) during that calendar day.
 - c. 0.0065% Sulfur Fuel Oil More Than 8 Hours. In the event that the simple cycle unit fires lower sulfur fuel oil (0.0065% sulfur content, by weight) for more than 8 hours during a calendar day, it shall be allowed 24 hours of daily operation while the combined cycle units shall not be fired on any fuel for the calendar day.
 - d. *HRSG Duct Burners*. Each HRSG duct burner operation shall not exceed 4,500 hours per consecutive 12-months. (See Specific Condition **B.32.a.(3)**.

[Rules 62-210.200(Definitions - PTE) and 62-212.400(12), F.A.C.; Permit Nos.0310485-003-AC/PSD-FL-310, Specific Condition 14, 0310485-007-AC/PSD-FL-310(B) and 0310485-017-AC/PSD-FL-310(F)]

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

Control Technology

- B.4. Control Equipment. Dry Low NO_X (DLN) combustors and a selective catalytic reduction system shall be installed on each stationary combustion turbine to comply with the NO_X and ammonia limits listed in this permit. Wet injection shall additionally be installed on each stationary combustion turbine for use during fuel oil firing, in conjunction with the SCR. [Design; Rules 62-4.070, F.A.C. and 62-212.400, F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Conditions 16 & 17]
- **B.5.** Selective Catalytic Reduction System. EU002 and EU003 shall be operated with the use of the SCR system, except during periods of startup and shutdown in accordance with the manufacturer's requirements. [Permit No. 03 | 0485-003-AC/PSD-FL-310, Specific Condition 45]

Subsection B. Emissions Units 002, 003

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **B.6.** - **B.12.** are based on the specified averaging time of the applicable test method.

- **B.6.** Nitrogen Oxides (NO_X). The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on natural gas and the duct burner on, shall not exceed 3.5 ppmvd @ 15% O₂ on a 3-hr block average. The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil (duct burner firing not permitted), shall not exceed 15.0 ppmvd @ 15% O₂ on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT; Rule 62-212.400, F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 20]
- **B.7.** Ammonia. The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 5.0 ppmvd @ 15% O₂ while firing natural gas, nor 9 ppmvd @ 15% O₂ while firing oil. [BACT; Rules 62-212.400, F.A.C. and 62-4.070, F.A.C.; and, PSD-FL-310]
- **B.8.** Carbon Monoxide (CO). Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on any fuel (with duct burners on or off) shall not exceed 14 ppmvd @ 15% O₂, on a 24-hr block average to be demonstrated by CEMS. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 21]
- **B.9.** Volatile Organic Compounds (VOC). Emissions of VOC in the stack exhaust gas (base load at ISO conditions) with the combustion turbine operating on gas shall not exceed 6.81 lbs/hour (4.0 lbs/hour with duct burners off) and with the combustion turbine operating on oil shall not exceed 7.68 lbs/hr. See Specific Condition **B.25**. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, 0310485-003-AC/PSD-FL-310, Specific Condition 22]
- **B.10.** Sulfur Dioxide (SO₂) and Sulfuric Acid Mist (SAM). SO₂ and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic feet) and a limited amount of 0.05% sulfur content, by weight, fuel oil (or superior). Compliance with this requirement will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the combustion turbines as well as the duct burners. [BACT; 40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400 and 62-204.800(7), F.A.C.; Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 23; and, 0310485-016-AV]
- **B.11.** Particulate Matter (PM/PM₁₀). PM/PM₁₀ emissions from each combustion turbine and HRSG train shall not exceed 22.02 lbs/hr at 100% output firing natural gas with the duct burner on and 62.1 lbs/hr at 100% output firing fuel oil to be demonstrated by opacity. [BACT; Rules 62-4.070, F.A.C. 62-212.400, F.A.C. and 62-204.800(7), F.A.C.; Permit No. 0310485-006-AC and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 24]
- B.12. Visible emissions (VE). VE emissions shall not exceed 10 percent opacity from the stack in use. [BACT; Rules 62-4.070, F.A.C. 62-212.400, F.A.C. and 62-204.800(7), F.A.C.; Permit No. 0310485-006-AC and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 25]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

Subsection B. Emissions Units 002, 003

- **B.13.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided:
 - a. Best operational practices are adhered to and the duration of excess emissions shall be minimized;
 - b. Excess emissions occurrences shall in no case exceed two hours in any calendar day except during startup, shutdown or during DLN <u>Major</u> Tuning as described in the alternate NO_X and CO emissions standards below;
 - c. A startup of any type is defined as being complete upon the first 3-hour block NO_X average of 3.5 ppmvd or less (15 ppmvd or less for oil firing); and,
 - d. Operation below 65 gross MW output per turbine shall otherwise be limited to 2 hours in any 24-hour period except for periods of startup, shutdown or DLN <u>Major</u> Tuning.

[Rules 62-212.400(2)(d) and (e), F.A.C., and 62-210.700(1) - (5), F.A.C.; Permit Nos. 0310485-012-AC and 0310485-015-AC, and Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 25]

B.14. Excess Emissions Allowed Due to Tuning.

- a.—Alternate NO_X and CO Emissions Standards:
 - (1) During any calendar day, in which at least one hour of startup, shutdown or DLN <u>major</u> tuning session has occurred, the following alternate emission limits shall apply to each combined cycle combustion turbine:
 - (i)a. An alternate NO_X limit of 3,000 lbs shall apply if natural gas is the exclusively fired fuel;
 - (ii)b. An alternate NO_X limit of 8,880 lbs shall apply if any fuel oil is fired; and,
 - (iii)c. An alternate CO limit of 4,200 lbs shall apply when firing either natural gas or fuel oil.
 - (2) Annual excess emissions from DLN tuning sessions from both combined cycle combustion turbines shall meet the following emission limits on an annual basis for a period of two years from the date of October 1, 2005, in order to demonstrate that the operational change did not result in a significant net emissions increase and to avoid PSD regulations:
 - (i) NO_x excess emissions shall be limited to less than 40 tons per year.
 - (ii) CO excess emissions shall be limited to less than 100 tons per year.

[Rules 62-212.400(2)(d) and (e), F.A.C.; Permit No. 0310485-014-AC]

B.15. Excess Emissions Not Allowed. 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.]

Continuous Monitoring Requirements

- **B.16.** Continuous Monitoring Systems (CEMS).
 - a. CEM Requirement. The permittee shall install, calibrate, maintain, and operate a continuous emission monitors in the stack to measure and record the emissions of NO_X and CO from these emissions units, and the carbon dioxide (CO₂) content of the flue gas at the location where NO_X and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit.
 - b. Compliance demonstration using CEM. The CEM system shall be used to demonstrate compliance with the emission limits for NO_X and CO established in this permit. Compliance with the emission limits for NO_X shall be based on a 3-hour block average. The 3-hour block average shall be calculated from 3 consecutive hourly average emission rate values. Compliance with the emission limits for CO shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 consecutive hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data

Subsection B. Emissions Units 002, 003

- points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop an algorithm based on fuel characteristics and stack CO₂ (or O₂) measurements to calculate the moisture content in the exhaust gas to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.
- c. NO_X Monitor Requirements. The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. For purposes of determining compliance with the emission limits specified within this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 3 or 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E, Appendix A, 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span values for the NO_X monitor will be determined in accordance with section 2.1.2 in Appendix A, 40 CFR 75.
- d. CO Monitor Requirements. The CO monitor and CO₂ monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B; Performance Specifications 4 and 4A. The CO₂ monitor shall be certified and maintained pursuant to 40 CFR 75. Quality assurance procedures for the CO monitor shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to EQD and the Department's Northeast District office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, Appendix A, 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 20 ppm, and the span for the upper range shall be set as appropriate to reflect the level of CO emissions seen during unit startup. The RATA tests required for the CO₂ monitor shall be performed using EPA Method 3A or 3B, Appendix A, 40 CFR 60.
- e. CEMS Excluded Data. NO_X, CO and CO₂ emissions data shall be recorded by the CEM system during episodes of DLN major tuning, startup, shutdown and malfunction. Periods of data excluded for malfunctions shall not exceed two hours in any calendar day. All periods of data excluded for any startup, shutdown, DLN major tuning or malfunction episode shall be consecutive for each episode. Periods of data excluded for start-up, shutdown or DLN major tuning are subject to the alternate NO_X and CO emissions standard. The owner or operator shall minimize the duration of data attributed to DLN major tuning, startup, shutdown and malfunctions, to the extent practicable. Data recorded during DLN major tuning, startup, shutdown or malfunction events shall not be excluded if the DLN major tuning, startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.
- f. Failure to Maintain or Operate. Best operational practices shall be used to minimize hourly emissions that occur during episodes of DLN <u>major</u> tuning, startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.
- g. Reporting. A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to EQD office and the Department's Northeast District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration

Subsection B. Emissions Units 002, 003

- of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.
- h. Compliance Demonstration with Subpart GG. Upon request from the ERMD-EQD, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60 Subpart GG. JEA shall be permitted to utilize O₂ as a diluent (rather than CO₂), but shall notify the ERMD-EQD of this change prior to CEMS installation.

[Rule 62-204.800; 40 CFR 60.7; 0310485-014-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 41]

{Permitting note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures}

B.17. Fuel Monitoring Schedule. An optional SO₂ Emissions Data Protocol (without additional EPA approvals) for Gas-Fired and Oil-Fired Units pursuant to 40 CFR 75, Appendix D, for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60 Subpart GG provided the following requirement is met: Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 42]

Test Methods and Procedures

B.18. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments		
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources		
9	Visual Determination of the Opacity of Emissions from Stationary Sources		
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.} This testing may be conducted during the NO _X RATA tests, which includes loads that are less than permitted capacity.		
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)		
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines		
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography		
<u>25</u>	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon		
<u>25A</u>	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer		
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip for ammonia slip during oil firing (I) and natural gas firing (I, A). The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O ₂) at the measured lbs/hr NO _X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the ERMD-EQD's request, according to Specific Condition B.27 :		

Subsection B. Emissions Units 002, 003

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [PSD-FL-310]

{Permitting Note: The 40 CFR 60 Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). [PSD-FL-310]}

- B.19. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), these emissions units shall be tested to demonstrate compliance with the emissions standards for NO_X, CO, ammonia, and VE. RATA testing, required pursuant to 40 CFR 75, for CO and NO_X CEMS may be utilized to demonstrate annual compliance. [Rule 62-297.310(7), F.A.C., Permit No. 0310485-003-AC/PSD-FL-310, Conditions 29 and 32]
- **B.20.** Compliance Tests Prior to Renewal. Except as provided for in condition TR7 of Appendix TR, Testing Requirements, these emissions units shall be tested for the following pollutants prior to obtaining a renewed operation permit: NO_X, CO, ammonia and VE. [Rule 62-297.310(7)(a)3., F.A.C.]
- **B.21.** Initial Testing Requirements. Initial compliance tests meeting the requirements of 40 CFR 60.0-8 shall be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or change of combustors, if specifically requested by the ERMD-EQD on a case-by-case basis. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 29]
- B.22. Continuous Compliance with the CO and NO_X Emission Limits. Continuous compliance with the CO and NO_X emission limits shall be demonstrated by the CEM system on the specified hour average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. Specific Condition B.16. further describes the CEM system requirements. Excess emissions periods shall be reported as required in Specific Condition B.13., B.14., B.28., and B.29. Since CEMS are used for compliance, testing at four separate loads is not required for demonstrating initial compliance under 40 CFR 60 Subpart GG consistent with recent EPA guidance. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 30; Rules 62-4.070, F.A.C. and 62-210.700, F.A.C.; 40 CFR 75; and, BACT]
- **B.23.** Compliance with the SO₂ and PM/PM₁₀ emission limits. For the purposes of demonstrating compliance with the 40 CFR 60 Subpart GG SO₂ standard, ASTM methods 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 or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60 Subpart GG or 40 CFR 75 are used when determination of fuel sulfur content is made. 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 Subpart GG. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 31]
- **B.24.** Compliance with the CO Emission Limit. Annual RATA testing for the CO and NO_X CEMS shall be required pursuant to 40 CFR 75. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 32]

<u>{Permitting Note: 40 CFR 75 does not address RATA requirements for CO CEMS. The required annual RATA testing for the CO CEMS shall be performed instead as required by 40 CFR 60 Appendix B.</u>

Subsection B. Emissions Units 002, 003

- **B.25.** Compliance with the VOC Emission Limit. Continuous monitoring of CO shall represent a surrogate for VOC emissions and provide assurance that the emission rates of the BACT Determination are being met. [BACT; Rule 62-212.400, F.A.C.; Permit No. 0310485-006-AC, and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 33]
- **B.26.** Operating Rate during Testing. Unless otherwise specified, testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 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. [Rules 62-297.310(2) & (2)(b), F.A.C.; and, Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 34]
- **B.27.** Selective Catalytic Reduction System (SCR) Compliance Procedures.
 - a. NO_X and Ammonia Annual Testing. An annual stack emission test for nitrogen oxides and ammonia from the CT/HRSG pair shall be simultaneously conducted while firing natural gas and operating with the duct burner on as defined in Specific Condition **B.6**. The ammonia injection rate necessary to comply with the NO_X standard shall be established and reported during each annual performance test.
 - b. SCR Operation. The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods, as dictated by manufacturer's guidelines and in accordance with this permit.
 - c. Ammonia Flow Meter. The permittee shall install and operate an ammonia flow meter to continuously measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. It shall be maintained and calibrated according to the manufacturer's specifications.
 - d. Ammonia Flow Rate. During the stack test, the permittee (at each tested load condition) shall determine and report the ammonia flow rate required to meet the emissions limitations. During NO_X CEM downtimes or malfunctions, the permittee shall operate at the ammonia flow rate, which was established during the last stack test.
 - e. *Emission Calculations*. Ammonia emissions shall be calculated continuously using inlet and outlet NO_X concentrations from the SCR system and ammonia flow supplied to the SCR system. The calculated ammonia slip shall be used as an indicator of ammonia slip, and to assist in determining appropriate injection rates, but not as the method of determining compliance. A calculated ammonia slip above the permitted value shall result in JEA taking appropriate and timely action, and documenting each event from its occurrence to its resolution. The calculation procedure shall be provided with the CEM monitoring plan required by 40 CFR 75. The following calculation represents one means by which the permittee may demonstrate compliance with this condition:

Ammonia slip @ 15% $O_2 = (A - (B \times C/1,000,000)) \times (1,000,000/B) \times D$, where:

- A = ammonia injection rate (lbs/hr)/17 (lbs/lb-mol).
- B = dry gas exhaust flow rate (lbs/hr)/29 (lbs/lb-mol).
- C = change in measured NO_X (ppmv @ 15% O₂) across catalyst.
- D = correction factor, derived annually during compliance testing by comparing actual to tested ammonia slip.

Subsection B. Emissions Units 002, 003

- f. Reporting. The calculation along with each newly determined correction factor shall be submitted with each annual compliance test. Calibration data ("as found" and "as left") shall be provided for each measurement device utilized to make the ammonia emission measurement and submitted with each annual compliance test.
- g. Re-Testing. Upon specific request by the local compliance authority (ERMD-EQD) or the DEP, a special re-test shall occur as described in the previous conditions concerning annual test requirements, in order to demonstrate that all NO_X and ammonia slip related permit limits can be complied with.

[Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 45]

Recordkeeping and Reporting Requirements

See Subsection E. Common Conditions and Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

B.28. Excess Emissions/Malfunction Report. If excess emissions occur due to malfunction, the owner or operator shall notify the ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the ERMD-EQD may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, and using the monitoring methods listed in this permit, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions B.6. through B.12. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the ERMD-EQD as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rules 62-4.130, F.A.C. and 62-210.700(6), F.A.C.]

B.29. DLN Major Tuning:

- a. Notification. At least one business day prior to performing any major tuning session, the permittee shall provide the ERMD-EQD's Compliance Authority with an advance notice that details the activity and proposed major tuning schedule. The notice may be by letter, facsimile transmittal, or electronic mail. Once the major tuning session is completed, the ERMD-EQD's Compliance Authority shall be notified in a like manner, within one business day. Within 15 days of completion of the major tuning session, the excluded CEMS data shall be forwarded to the ERMD-EQD's Compliance Authority. CEMS data shall not be excluded from any Acid Rain reporting requirements.
- b. Compliance Data. Data collected during periods covered by the alternate emissions standard provisions of Specific Condition **B.14**. may be excluded from the compliance determination calculation requirements of Specific Conditions **B.6**. and **B.8**.

[Design; and, Rule 62-4.070(3), F.A.C., 0310485-014-AC]

B.30. 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

Subsection B. Emissions Units 002, 003

ERMD-EQD office no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. [0310485-001-AC/PSD-FL-310]

- **B.31.** Compliance Test Reports. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C. [Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 39]
- **B.32.** Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records:
 - a. Hours of operation shall be:
 - (1) submitted with the Annual Operation Report (AOR) for the prior year for each combustion turbine by fuel type;
 - (2) kept for each consecutive 12-month period for each combustion turbine by fuel type; and
 - (3) kept for each consecutive 12-month period while firing natural gas for each HRSG duct burner. (See Specific Condition **B.3.d.**)
 - b. Daily hours shall be kept for:
 - (1) fuel oil and natural gas operation for each combustion turbine during any day in which fuel oil is fired;
 - (2) when the CT is being fired and the SCR is not in service, along with support documentation demonstrating that the unit was in a DLN Major Tuning, startup or shutdown condition; and
 - (3) (as-fired) sulfur content of fuel oil for each combustion turbine during any day in which fuel oil is fired.

[Permit No. 0310485-003-AC/PSD-FL-310, Specific Condition 40; and, Permit Nos. 0310485-017-AC/PSD-FL-310(F), 0310485-014-AC and 0310485-012-AC]

B.33. Recordkeeping Requirements and Fuel Switching: Upon prior written notification, JEA may switch between firing 0.05% or 0.0065% sulfur content, by weight, fuel oil on a calendar day basis (i.e. switching is not authorized within any calendar day). A record shall be made every day for each emission unit documenting: the fuel type actually used, the number of actual hours of firing each fuel type, and (for the hours when any oil is fired) the "equivalent hours" for the fuel oil which was not fired. The following shall be used to determine the "equivalent hours": each actual hour of combustion of 0.05% sulfur content, by weight, distillate oil shall equate to 2.6 "equivalent hours" of lower sulfur oil (0.0065% sulfur content, by weight) combustion and each actual hour of firing lower sulfur oil (0.0065% sulfur content, by weight) shall equate to 0.39 "equivalent hours" of 0.05% sulfur content, by weight, fuel oil combustion. At the end of each calendar month, the total number of "equivalent hours" plus actual hours shall be determined. A running total shall be maintained in order to ensure compliance with Specific Condition **B.3**. [Permit No. 0310485-007-AC/PSD-FL-310(B); Rule 62-210.700(6), F.A.C.]

Common Conditions

B.34. This emissions unit is also subject to conditions **E.1. through E.11.** contained in **Subsection E.** Common Conditions.

Subsection C. Emissions Units 004, 005

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description	
004	Fuel Oil Storage Tank (one-million gallon)	
005	Fuel Oil Storage Tank (one-million gallon)	

Emissions units 004 and 005 are two one-million (1,000,000) gallon capacity No. 2 distillate fuel oil storage tanks. The tanks are of a vertical fixed-roof design. The emissions points are breather valves on the dome roofs, located at 40 feet above ground level. The start-up date was April 16, 2001.

{Permitting note: These emissions units are not subject to the provisions of 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; and, PSD-FL-267 (0310485-001-AC)}

Essential Potential to Emit (PTE) Parameters

C.1. <u>Hours of Operation</u>. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(Definitions-PTE), F.A.C.]

Recordkeeping Requirements

C.2. On-Site Records. The permittee shall maintain records on site for storage vessels identification numbers 004 and 005 to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels. [40 CFR 60.116b(b)]

Subsection D. Emissions Unit 007

The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower

Emissions Unit 007 is not subject to a NESHAP because chromium-based chemical treatment is not used.

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(Definitions-PTE), F.A.C.]

Control Technology

D.2. Control Equipment. Drift eliminators shall be installed on the cooling tower to reduce PM/PM₁₀ emissions. [PSD-FL-310]

Subsection E. Common Conditions

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt) Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fire (natural gas) HRSG Duct Burners	

General Requirements

- **E.1.** <u>Definitions</u>. 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 (ERMD-EQD). [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- E.2. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and, 0310485-001-AC, Specific Condition 11]

Essential Potential to Emit (PTE) Parameters

E.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Continuous Monitoring Requirements

- E.4. CEMS in lieu of Water to Fuel Ratio. The NO_X CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60, Subpart GG. The calibration of the water/fuel-monitoring device required in 40 CFR 60 Subpart GG will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from the ERMD-EQD office, the CEMS emission rates for NO_X shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60 Subpart GG. [Permit No. 0310485-001-AC, Specific Condition 42; PSD-FL-310]
- E.5. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the JEA's Brandy Branch Generating Station, an analysis which reports the sulfur 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 Subpart GG. [Permit Nos. 0310485-001-AC, Specific Condition 44, 0310485-012-AC; 0310485-003-AC/PSD-FL-310, Specific Condition 42]

Subsection E. Common Conditions

Excess Emissions

- E.6. NSPS Excess Emissions. For emission units that elect to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content required under 40 CFR 60 Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime shall be reported as defined in 40 CFR 60.334. [40 CFR 60.334]
- E.7. NO_X Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(1). [40 CFR 60.334(j)(1)]
- E.8. SO₂ Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.334(j)(2). [40 CFR 60.60.334(j)(2)]

Test Methods and Procedures

E.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

E.810. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emission	Postmarked by 30th day following end of each 6 month period	60.334(j)(5)

E.911. Records. All measurements, records, and other data required to be maintained by JEA 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 and the ERMD-EQD representatives upon request. [Permit Nos. 0310485-001-AC/PSD-FL-267, Specific Condition 38; and 0310485-003-AC/PSD-FL-310, Specific Condition 38; 40 CFR 60.7(f)]

Operated by: JEA ORIS Code: 7846

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

E.U. ID No.	Description
001	Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt)
002	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner
003	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner

- **A.1.** The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is 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 listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 05/06/08, received 07/03/08. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- **A.2.** Sulfur dioxide (SO₂) allowance allocations and nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2009	2010	2011	2012	2013
001	001	SO ₂ allowances, under Table 2or 3 of 40 CFR 73	0	. 0	0	0	0
002	002	SO ₂ allowances, under Table 2or 3 of 40 CFR 73	0	0	0	0	0
003	003	SO ₂ allowances, under Table 2or 3 of 40 CFR 73	0.	0	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, 3, or 4 of 40 CFR 73.
- A.3. <u>Emission Allowances</u>. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
 - b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
 - c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]
- A.4. Comments, notes, and justifications: None.

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

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his submission is:	☐ New	Revised	- ✓	Renewa

STEP 1

identify the source by plant name, state, and ORIS or plant code.

	r	
Brandy Branch	Florida	7846
Plant name	State	ORIS/Plant Code

STEP 2 Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column

If unit a SO₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-In units, enter the requested information in columns "d" and "e."

	a	b	С	đ	e
•	Unit ID#	SO₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO ₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
	001	No_	Yes		
	002	No	Yes		
	003	No_	Yes		
ļ			Yes		
			Yes		
j			Yes		
			Yes		
			Yes		
			Yes	<u> </u>	
ļ			Yes		
			Yes		
ı		_	Yes		

DEP Form No. 62-210.900(1)(a) - Form Effective: 3/16/08

Brandy Branch	
Plant Name (from STEP 1)	

STEP 3

Acid Rain Part Requirements.

Read the standard 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 and 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 DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part:
- The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
 - (II) Have an Acid Rain Part.

Monitoring Requirements.

- 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.
 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
- (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
- (4) For applications including a SO₂ Opt-In unit, a monitoring plan for each SO₂ Opt-In unit must be submitted with this application pur CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

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)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), 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 firnitations 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

- 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 72.6(a)(2); or

 (ii) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to
- (a) An allowance small not be deducted in order to contry with the requirements which paragraph (1) in a south children include 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 Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of taw 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

Recordkeeping and Reporting 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 ed 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.

- (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 EPA or the DEP:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rein 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, provided that to the extent that 40 CFR Part 75 provides for a
 - 3-year period for recordiceping, the 3-year period shall apply;
 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program;

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Brandy Branch	
Plant Name (from STEP 1)	

STEP 3, Continued.

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.

- (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 an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any pensity owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Aci.
 (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 Aci 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 40 CFR 78.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 78.17 (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 lightle for some other feel plant of the first part of the Including on the Including of the Including of the Including on the Including on the Including on the Including of the Including of the Including on the Including on the Including of the Includin under 40 CFR Part 75 (including 40 CFR 73.15, 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 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, 74, 75, 78, 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 Acid.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be

- construed as:

 (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compilance with any other provision of the Act, including the provisions of title I of the Act retailing 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
- (2) Limiting the number of allowances a unit can now; provided, tract the number of allowances need by the unit of the Act;

 obligation to comply with any other provisions of the Act;

 (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;

 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

 (5) Interfering with or Impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4 For SO₂ Opt-in units only.

In column "f" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

in column "h" enter the hours.

	f	g	h (not required for renewal application)
r 	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
[

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	Brandy Branch						
	Plant Name (from ST	EP 1)					
STEP.5	1	j	k	1	m	n	
For SO ₂ Opt-in				<u> </u>			
units only. (Not required for SO ₂ Opt-in renewal applications.)	Unit ID#	Baseline or Alternative Baseline under	Actual SO ₂ Emissions Rate under	Allowable 1985 SO ₂ Emissions Rate under	Current Allowable SO₂ Emissions Rate under	Current Promulgated SO ₂ Emissions Rate under	
In column "i" enter the unit ID# for		40 CFR 74.20	40 CFR 74.22	40 CFR 74.23	40 CFR 74.24	40 CFR 74.25	
every SO ₂ Opt-in		(mm8tu)	(lbs/mmBtu)	(lbs/mmBtu)	(lbs/mmBtu)	(lbs/mmBtu)	
column "a" (and in column "f").		_	_	ļ			
For columns "j"						<u> </u>	
through "n," enter the information		-					
required under 40 CFR 74.20-74.25					<u> </u>		
and attach all supporting							
documentation required by 40 CFR					1		
74.20-74.25.				 			
					J 		
STEP 6	thermal energy (n source seeks to qualify for plan as provided in 40 CFR	74.47 for combustic	on sources must be a	attached.	ergy, a	
For SO ₂ Opt-in units only.	C. A statement that	ether the combustion unit w it the combustion unit is not	an affected unit un				
	D. Attach a comple	r 40 CFR 72.7, 72.8, or 72.6 ete compliance plan for SO, representative of the comb	under 40 CFR 72.4		o in accordance with 4	ın	
Attach additional requirements,	CFR 74.61. For	renewal application, submit atement must be signed by	lt an updated monit	oring plan If applicab	e under 40 CFR 75.53	'5.53(b).	
certify and sign.	the combustion	source: "I certify that the da e combustion source and ha	ata submitted under	40 CFR Part 74, Su			
	<u> </u>						
STEP 7	Signature Certification (for	r designated represent	ative or alternate	Date designated repr	esentative only)		
_	,	ke this submission on behalf of		•	••	which the submission	
Read the certification statement; provide name, title, owner company name,	is made. I certify under document and all its all statements and inform	er penaity of law that I have persitachments. Based on my inqui- ation are to the best of my know thements and information or om-	onally examined, and a ry of those individuals of dedge and belief true, a	am familiar with, the stat with primary responsibili accurate, and complete.	ements and information s by for obtaining the information I am aware that the	ubmitted in this	
phone, and e-mail address; sign, and	Michael Brost	chael Brost Vice President, Electric Systems					
date.	Name						
	Owner Company N	ame					
	(904) 665-7547		brosm @jea.com				
	Phone		E-mail address				
	Signature	2-or		Date	5-6-08		
		•					

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SECTION V. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

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

Appendix NSPS, Subpart A – General Provisions.

Appendix NSPS, Subpart GG.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Abbreviations and Acronyms:

° F: degrees Fahrenheit

acfm: actual cubic feet per minuteAOR: Annual Operating Report

ARMS: Air Resource Management System

(Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system **DARM**: Division of Air Resources Management

DCA: Department of Community Affairs

DEP: Department of Environmental Protection

Department: Department of Environmental

Protection

dscfm: dry standard cubic feet per minute **EPA**: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft **F.S.**: Florida Statutes

FGR: flue gas recirculation

Fl: fluoride ft²: square feet ft³: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury
I.D.: induced draft

ID: identification

ISO: International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)

kPa: kilopascals
LAT: Latitude

lb: pound

lbs/hr: pounds per hourLONG: Longitude

MACT: maximum achievable technology

mm: millimeter

MMBtu: million British thermal units MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for

Hazardous Air Pollutants

 NO_X : nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen

ORIS: Office of Regulatory Information Systems

OS: Organic Solvent

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic

diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch **PTE**: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit
RMP: Risk Management Plan
RO: Responsible Official
SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen

oxides)

SOA: Specific Operating Agreement

SO₂: sulfur dioxide

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

TPH: tons per hour VE: visible emissions

TPY: tons per year VOC: volatile organic compounds

UTM: Universal Transverse Mercator coordinate

system

By or times

Citations:

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

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 refers to Title 40

CFR refers to Code of Federal Regulations

60 refers to Part 60

60.334 refers to Regulation 60.334

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

Example: [Rule 62-213.205, F.A.C.]

Where: 62 refers to Title 62

62-213 refers to Chapter 62-213

62-213.205 refers to Rule 62-213.205, F.A.C.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221= 4-digit number assigned by permit tracking database

APPENDIX A - GLOSSARY

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

001 or 002= 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01 AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC53 = old Air Construction Permit numbering identifying the facility is located in Polk County

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

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

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

Brief Description of Emissions Units and/or Activities

- 1. Sand blaster, welding, lathes, hand-held tools, etc.
- 2. Diesel generator.
- 3. Fire water tank(s).
- 4. Brazing, soldering, or welding equipment and related shop activities.
- 5. Fire and safety equipment.
- 6. Fuel Storage Tanks
- 7. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly provided:
 - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
- 8. Two indirect natural gas heaters.

TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 SUBPART A

Updated 6/7/06

[Source: Federal Register dated 7/1/98, Federal Register 5/8/98, 2/12/99, 10/17/00, 6/28/02, 6/1/06]

Subpart A-General Provisions for 40 CFR 60

40 CFR 60.1 Applicability.

- (a) Except as provided in 40 CFR 60 subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced
- after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution controlagency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (CAA) as amended November 15, 1990 (42 U.S.C. 7661).

 [40 CFR 60.1(a), (b) and (c)]

40 CFR 60.5 Determination of construction or modification.

- (a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.
- (b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

§ 60.6 Review of plans.

- (a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.
- (b)(1) A separate request shall be submitted for each construction or modification project.
- (2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.
- (c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 SUBPART A

40 CFR 60.7 Notification and record keeping.

- (a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
- 1. A notification of the <u>date construction</u> (or reconstruction as defined under § 60.15) of an affected facility is <u>commenced</u> postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - 2. Reserved.
- 3. A notification of the <u>actual date of initial startup</u> of an affected facility postmarked within 15 days after such date.
- 4. A notification of <u>any physical or operational change</u> 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 § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
- 5. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
- 6. A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- 7. A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of 40 CFR 60. This notification shall be postmarked not less than 30 days prior to the date of the performance test.
- (b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- (c) 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 paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; 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 six-month period. Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

- (d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]

- (e) (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, 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 this subpart and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.
- (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 re-port
- (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 paragraphs (e)(1) and (e)(2) of this section.

- (f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:
- (1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.
- (2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.
- (3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
- (g) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
- (h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[40 CFR 60.7(a), (b), (c), (d), (e), (f), (g), (h)]

40 CFR 60.8 Performance tests.

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

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

 [40 CFR 60.8(b)(1), (2), (3), (4) & (5)]

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

 [40 CFR 60.8(c)].
- (d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the perfomance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.
- (e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - (1) Sampling ports adequate for test methods applicable to such facility. This includes
- (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and
- (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - (2) Safe sampling platform(s).
 - (3) Safe access to sampling platform(s).
 - (4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)].

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

[40 CFR 60.8(f)].

§ 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§ 60.5 and 60.6 is governed by §§ 2.201 through 2.213 of this chapter and not by § 2.301 of this chapter.)

40 CFR 60.10 State authority.

The provisions of 40 CFR 60 shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

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(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

[40 CFR 60.10(a) and (b)].

40 CFR 60.11 Compliance with standards and maintenance requirements.

- (a) Compliance with standards in this part, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
- (b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- (c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- (d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- (e) (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.
- (2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall

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record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

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

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

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

40 CFR 60.12 Circumvention.

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

[40 CFR 60.12]

40 CFR 60.13 Monitoring requirements.

- (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section 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 to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
- (b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
- (c) 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/she 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 40 CFR 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 40 CFR 60.8 is conducted.
- (2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.
- (d) (1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must 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 a COMS, the

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optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must 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.
- (e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems 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.
- (f) All continuous monitoring systems 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.
 - (g) (1) When more than one continuous monitoring system is used to measure the emissions from only one affected facility (e.g. multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. 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 installation of fewer systems is approved by the Administrator.
 - (2) When the effluents from two or more affected facilities subject to the same opacity standard are combined before being released to the atmosphere, the owner or operator may either install a continuous opacity monitoring system at a location monitoring the combined effluent or install an opacity combiner system comprised of opacity and flow monitoring systems on each stream, and shall report as per Sec. 60.7(c) on the combined effluent. When the affected facilities are not subject to the same opacity standard applicable, except for documented periods of shutdown of the affected facility, subject to the most stringent opacity standard shall apply
 - (3) When the effluents from two or more affected facilities subject to the same emissions standard, other than opacity, are combined before released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the continuous monitoring standard, separate continuous monitoring systems shall be installed on each effluent and the owner or operator shall report as required for each affected facility.
- (h) 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 system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in

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the data averages computed under this paragraph. For owners or operators complying with the requirements in Sec. 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. 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 O2 or ng or pollutant per J of heat input). 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). [Rule 62-296.800, F.A.C.; 40 CFR 60.13(h)].

- (i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:
- (1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
 - (2) Alternative monitoring requirements when the affected facility is infrequently operated.
- (3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
- (4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
 - (5) Alternative methods of converting pollutant concentration measurements to units of the standards.
- (6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
 - (7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
- (8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.
- (9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point. [Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].
- (j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
- (1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in section 8.4 of Performance Specification 2 and substitute the procedures in section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed
- following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require

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specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in section 8.4 of Performance Specification 2. [Rule 62-296.800, F.A.C.; 40 CFR 60.13(j)].

40 CFR 60.14 Modification.

- (a) Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(a)].
- (b) Emission rate shall be expressed as kg/hr (lbs./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
- (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
- (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(b)].
- (c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(c)].
- (d) [Reserved]

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- (e) The following shall not, by themselves, be considered modifications under this part:
- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
- (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
- (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
- (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
- (6) The relocation or change in ownership of an existing facility. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(e)].
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(f)].

- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(g)].
- (h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.
- (i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.
- (j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.
 - (2) This exemption shall not apply to any new unit that:
 - (i) Is designated as a replacement for an existing unit;
- (ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and
 - (iii) Is located at a different site than the existing unit.
- (k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5

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years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

40 CFR 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

[Rule 62-296.800, F.A.C.; 40 CFR 60.15(a)].

- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(b)].
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(c)].
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
 - (1) Name and address of the owner or operator.
 - (2) The location of the existing facility.
 - (3) A brief description of the existing facility and the components which are to be replaced.
- (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
- (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
 - (6) The estimated life of the existing facility after the replacements.
- (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(d)].
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

[Rule 62-296.800, F.A.C.; 40 CFR 60.15(e)].

- (f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:
- (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
- (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility:
- (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

- (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(f)].
- (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[Rule 62-296.800, F.A.C.; 40 CFR 60.15(g)].

§ 60.18 General control device requirements.

- (a) *Introduction*. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.
- (b) Flares. Paragraphs (c) through (f) apply to flares.
- (c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
- (3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.
 - (i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, Vmax, as determined by the following equation:

 $V_{max}=(XH2-K1)*K2$

Where:

Vmax=Maximum permitted velocity, m/sec.

K1=Constant, 6.0 volume-percent hydrogen.

K2=Constant, 3.9(m/sec)/volume-percent hydrogen.

XH2=The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 60.17).

- (B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.
- (ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.
- (4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.
 - (ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
 - (iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
- (5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V max, as determined by the method specified in paragraph (f)(6).

- (6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted. (d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_{T} = K \sum_{i=1}^{n} C_{i}H_{i}$$

 $H_{T} = \kappa \sum_{i=1}^{n} c_{i}H_{1}$ http://www.access.gpo.gov/ecfr/graphics/pdfs/ec01jn92.008.pdf

where:

HT=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

where the standard temperature for $(\frac{g \text{ mole}}{scm})$ is 20°C;

http://www.access.gpo.gov/ecfr/graphics/pdfs/ec01in92.009.pdf

Ci=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in § 60.17); and

Hi=Net heat of combustion of sample component i, kcal/g mole at 25 °>C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation. Log10 (Vmax)=(HT+28.8)/31.7

Vmax=Maximum permitted velocity, M/sec

28.8=Constant

31.7=Constant

HT=The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation. Vmax=8.706+0.7084 (HT)

Vmax=Maximum permitted velocity, m/sec

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8.706=Constant 0.7084=Constant HT=The net heating value as determined in paragraph (f)(3).

§ 60.19 General notification and reporting requirements.

- (a) 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.
- (b) 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 post-marked 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 post-mark 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.
- (c) 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 paragraph (f) of this section.
- (d) 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 paragraph (f) of this section.
- (e) 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.
- (f) (1) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, 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 (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

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- (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.

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Updated 4/27/06

Source [44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000; 69 FR 41346, July 8, 2004]

Subpart GG-Standards of Performance for Stationary Gas Turbines

§ 60.330 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of § 60.332.

§ 60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.
- (b) Simple cycle gas turbine means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.
- (c) Regenerative cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.
- (d) Combined cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.
- (e) *Emergency gas turbine* means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.
- (f) *Ice fog* means an atmospheric suspension of highly reflective ice crystals.
- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (h) Efficiency means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.
- (i) *Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.

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- (i) Base load means the load level at which a gas turbine is normally operated.
- (k) Fire-fighting turbine means any stationary gas turbine that is used solely to pump water for extinguishing fires.
- (I) Turbines employed in oil/gas production or oil/gas transportation means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
- (m) A Metropolitan Statistical Area or MSA as defined by the Department of Commerce.
- (n) Offshore platform gas turbines means any stationary gas turbine located on a platform in an ocean.
- (o) Garrison facility means any permanent military installation.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combuster inlet pressure, combuster inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) Electric utility stationary gas turbine means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.
- (r) *Emergency fuel* is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
- (s) Unit operating hour means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
- (t) Excess emissions means a specified averaging period over which either:
 - (1) The NO_X emissions are higher than the applicable emission limit in Sec. 60.332;
- (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in Sec. 60.333; or
- (3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.
- (u) Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by
- weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.
- (v) Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

(w) Lean premix stationary combustion turbine means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in

both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.

- (x) Diffusion flame stationary combustion turbine means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (y) Unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

§ 60.332 Standard for nitrogen oxides.

- (a) On and after the date on which the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.
- (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_X emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

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

 $F = NO_X$ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_X emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

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

F = NOX emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

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- (3) The use of F in paragraphs (a)(1) and (2) of this seciton is optional. That is, the owner or operator may choose to apply a NO_X allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.
- (4) If the owner or operator elects to apply a NO_X emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under Sec. 60.8 as follows:

Fuel-bound nitrogen (% by wei	ght) F (NO _X % by volume)	
N≤0.015	0	
0.015 <n<0.1< th=""><th>0.04(N)</th><th></th></n<0.1<>	0.04(N)	
0.1 <n<0.25< th=""><th>0.004+0.0067(N-0.1)</th><th></th></n<0.25<>	0.004+0.0067(N-0.1)	
N>0.25	0.005	

Where:

N = the nitrogen content of the fuel (percent by weight).or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance

test required by Sec. 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

- (b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.
- (c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.
- (d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in § 60.332(b) shall comply with paragraph (a)(2) of this section.
- (e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.
- (f) Stationary gas turbines using water or steam injection for control of NO_X emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
- (g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.

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- (h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.
- (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
- (j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.
- (k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.
- (l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

§ 60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by § 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

- (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

§ 60.334 Monitoring of operations.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_X emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_X emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_X and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NO_X concentrations to 15 percent O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F,

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Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_X and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:

- (i) On a ppm basis (for NO_X) and a percent O2 basis for oxygen; or
- (ii) On a ppm at 15 percent O2 basis; or
- (iii) On a ppm basis (for NO_X) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NO_X data to 1.5 percent O2).
- (2) As specified in Sec. 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in Sec. 60.13(h).
- (i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_X and diluent, the data acquisition and handling system must calculate and record the hourly NO_X emissions in the
- units of the applicable NO_X emission standard under Sec. 60.332(a), i.e., percent NO_X by volume, dry basis, corrected to 15 percent O2 and International Organization for Standardization (ISO) standard conditions (if required as given in Sec. 60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19.0 percent O2 may be used in the emission calculations.
- (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.
- (iii) If the owner or operator has installed a NO_X CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in Sec. 60.7(c).
- (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NOX emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NOX emission limit under Sec. 60.332, that approved procedure may continue to be used.
- (d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_X emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_X CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.
- (e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NOX emissions, may, but is not required to, elect to use a NOX CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. Other acceptable monitoring approaches include periodic testing approved by EPA or the State or local permitting authority or continuous parameter monitoring as described in paragraph (f) of this section.

- (f) The owner or operator of a new turbine that commences construction after July 8, 2004, which does not use water or steam injection to control NOX emissions may, but is not required to, perform continuous parameter monitoring as follows:
- (1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_X formation characteristics and shall monitor these parameters continuously.
- (2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NOX mode.
- (3) For any turbine that uses SCR to reduce NO_X emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.
- (4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_X emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in Sec. 75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in Sec. 75.19(c)(1)(iv)(H) of this chapter.
- (g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under Sec. 60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in Sec. 75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in Sec. 75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.
- (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:
- (1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see Sec. 60.17), which measure the major sulfur compounds may be used; and
- (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in Sec. 60.332). The nitrogen content of the fuel shall be determined using methods described in Sec. 60.335(b)(9) or an approved alternative.
- (3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in Sec. 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
- (4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
- (i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
- (1) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
- (2) Gaseous fuel. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- (3) Custom schedules. Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Sec. 60.333.
- (i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:
- (A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.
- (B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.
- (C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:
- (1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.
- (2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.
- (3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.
- (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.

- (ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:
- (A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (i.e., the maximum total sulfur content of natural gas as defined in Sec. 60.33 l(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
- (B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.
- (C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.

 (D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.
- (j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Sec. 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - (1) Nitrogen oxides.
 - (i) For turbines using water or steam to fuel ratio monitoring:
- (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.332, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.
- (B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
- (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).
- (ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.
- (A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in Sec. 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.
- (B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
 - (iii) For turbines using NO_X and diluent CEMS:
- (A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_X concentration exceeds the applicable emission limit in Sec. 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO_X concentration" is the arithmetic average of the average

NO_X concentration measured by the CEMS for a given hour (corrected to 15 percent O2 and, if required under Sec. 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_X concentrations immediately preceding that unit operating hour.

- (B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_X concentration or diluent (or both).
- (C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).
- (iv) For owners or operators that elect, under paragraph (f) of this section, to monitor combustion parameters or parameters that document proper operation of the NOX emission controls:
- (A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.
- (B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.
- (2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:
- (i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions

according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

- (iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
- (3) *Ice fog.* Each period during which an exemption provided in § 60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
- (4) Emergency fuel. Each period during which an exemption provided in § 60.332(k) is in effect shall be included in the report required in § 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
- (5) All reports required under Sec. 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

Sec. 60.335 Test methods and procedures.

- (a) The owner or operator shall conduct the performance tests required in Sec. 60.8, using either
 - (1) EPA Method 20,
 - (2) ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or

- (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_X and diluent concentration.
- (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- (5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:
 - (i) You may perform a stratification test for NO_X and diluent pursuant to
 - (A) [Reserved]
 - (B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75

of this chapter.

- (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O2, is within 10 percent of the mean normalized concentration for all

traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_X concentration during the stratification test; or

(B) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O2, is within 5 percent of the mean normalized concentration for all

traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

- (6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.
- (b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Sec. 60.332 and shall meet the performance test requirements of Sec. 60.8 as follows:
- (1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{Xo}) corrected to 15 percent O2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$NO_X = (NO_{Xo})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288[deg]K/Ta)^{1.53}$$

Where:

 NO_X = emission concentration of NO_X at 15 percent O2 and ISO standard ambient conditions, ppm by volume, dry basis.

 NO_{Xo} = mean observed NO_X concentration, ppm by volume, dry basis, at 15 percent O2,

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,

P_o = observed combustor inlet absolute pressure at test, mm Hg,

H_o = observed humidity of ambient air, g H2O/g air,

e = transcendental constant, 2.718, and

 $T_a =$ ambient temperature, [deg]K.

(2) The 3-run performance test required by Sec. 60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest

achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in Sec. 60.331).

- (3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_X emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_X emission limit in Sec. 60.332 for the combustion turbine must still be met.
- (4) If water or steam injection is used to control NO_X with no additional post-combustion NO_X control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with Sec. 60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable Sec. 60.332 NO_X emission limit.
- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in Sec. 60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in Sec. 60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.
- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
- (7) If the owner or operator elects to install and certify a NO_X CEMS under Sec. 60.334(e), then the initial performance test required under Sec. 60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
- (ii) Use the test data both to demonstrate compliance with the applicable NO_X emission limit under Sec. 60.332 and to provide the required reference method data for the RATA of the CEMS described under Sec. 60.334(b).
 - (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator elects under Sec. 60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NOX emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in Sec. 60.334(g).
- (9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
- (i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
- (10) If the owner or operator is required under Sec. 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see Sec. 60.17); or
- (ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

APPENDIX NSPS, SUPBART GG

- (11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section 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.
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in Sec. 60.8 to ISO standard day conditions.

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RR1. Reporting Schedule. This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
Annual Emissions Fee Form and Fee	March 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed .	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV17
Test Reports	Maximum 45 days following compliance tests	TR8

{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}

RR2. Reports of Problems.

- a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
- b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (1) A description of and cause of noncompliance; and
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

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- d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately". [Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]
- RR3. Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. *Rule 62-210.700(6)*: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

 [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]
- **RR4.** Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]

RR5. Annual Operating Report.

- a. The permittee shall submit to the Compliance Authority, each calendar year, on or before April 1, a completed DEP Form No 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year.
- b. Emissions shall be computed in accordance with the provisions of Rule 62-210:370(2), F.A.C. [Rules 62-210.370(2) & (3), and 62-213.440(3)2., F.A.C.]
- **RR6.** Annual Emissions Fee Form and Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.
 - a. If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
 - b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
 - c. A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.

[Rules 62-213.205(1), (1)(g), (1)(i) & (1)(j), F.A.C.]

RR7. Annual Statement of Compliance.

a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C.,

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for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:

- (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
- (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
- c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

- a. A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (1) Typographical errors noted in the permit;
 - (2) Name, address or phone number change from that in the permit;
 - (3) A change requiring more frequent monitoring or reporting by the permittee;
 - (4) A change in ownership or operational control of a facility, subject to the following provisions:
 - (a) The Department determines that no other change in the permit is necessary;
 - (b) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and,
 - (c) The new permittee has notified the Department of the effective date of sale or legal transfer.
 - (5) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (6) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
 - (7) Any other similar minor administrative change at the source.
- b. Upon receipt of any such notification, the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- c. After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- d. For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

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

RR9. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

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- a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
- b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained. [Rule 62-210.300(5), F.A.C.]
- **RR10.** Report Submission. The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}
- **RR11.** EPA Report Submission. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.
- **RR12.** Acid Rain Report Submission. Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.
- **RR13.** Report Certification. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- **RR14.** Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]
- **RR15.** Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]
- **RR16.** Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at: http://www.dep.state.fl.us/Air/forms.htm.
 - a. Major Air Pollution Source Annual Emissions Fee Form (Effective 01/03/2001).
 - b. Statement of Compliance Form (Effective 06/02/2002).
 - c. Responsible Official Notification Form (Effective 06/02/2002).

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

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Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit for which testing is required. The terms "stack" and "duct" are used interchangeably in this appendix.

- TR1. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard: [Rule 62-297.310(1), F.A.C.]
- TR2. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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 purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- TR3. <u>Calculation of Emission Rate</u>. For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

TR4. Applicable Test Procedures.

- a. Required Sampling Time.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum

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- 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, F.A.C.

TABLE 297.310-1 CALIBRATION SCHEDULE					
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE		
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%		
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F		
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F		
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale		
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3		
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"		
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%		
	2. One Point: Semiannually				
	3. Check after each test series	Comparison check	5%		

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

TR5. 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.

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- 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.]
- TR6. Sampling Facilities. Permittees that are required to sample mass emissions from point sources shall install stack sampling ports and provide sampling facilities that meet the requirements of this condition. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.
 - a. Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
 - b. Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
 - c. Sampling Ports.
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
 - d. Work Platforms.
 - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
 - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
 - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
 - e. Access to Work Platform.
 - (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with

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- a minimum of 3 compatible safety belts available for use by sampling personnel.
- (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. Electrical Power.
 - (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. Sampling Equipment Support.
 - (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 - (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
 - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

- **TR7.** <u>Frequency of Compliance Tests</u>. 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.
 - (1) 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.
 - (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 and/or solid 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 sub-subparagraph 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.

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- (4) During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) Each NESHAP pollutant, if there is an applicable emission standard.
- (5) An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
- (6) 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.
- (7) For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 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.
- (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.
- (10) An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- 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 Department rule or in a permit issued pursuant to those rules is being violated, it shall 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 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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

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

TR8. Test Reports.

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days

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- after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 - (1) The type, location, and designation of the emissions unit tested.
 - (2) The facility at which the emissions unit is located.
 - (3) The owner or operator of the emissions unit.
 - (4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - (5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - (6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - (7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - (8) The date, starting time and duration of each sampling run.
 - (9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - (10) The number of points sampled and configuration and location of the sampling plane.
 - (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - (12) The type, manufacturer and configuration of the sampling equipment used.
 - (13) Data related to the required calibration of the test equipment.
 - (14) Data on the identification, processing and weights of all filters used.
 - (15) Data on the types and amounts of any chemical solutions used.
 - (16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - (17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - (18) All measured and calculated data required to be determined by each applicable test procedure for each run.
 - (19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
 - (20) The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
 - (21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

TITLE V GENERAL CONDITIONS

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

Operation

- TV1. General Prohibition. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]
- TV2. <u>Validity</u>. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
- TV3. Proper Operation and Maintenance. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
- TV4. Not Federally Enforceable. Health, Safety and Welfare. To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]
- TV5. Continued Operation. An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, applicable requirements of the CAIR Program, and applicable requirements of the Hg Budget Trading Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]
- TV6. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
 - a. Permitted sources may change among those alternative methods of operation;
 - b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
 - c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.

[Rule 62-213.410, F.A.C.]

TV7. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

Compliance

TV8. Compliance with Chapter 403, F.S., and Department Rules. Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the

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requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

- TV9. Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
- TV10. Binding and enforceable. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
- TV11. <u>Timely information</u>. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]
- TV12. <u>Halting or reduction of source activity</u>. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]
- TV13. Final permit action. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- TV14. <u>Sudden and unforeseeable events beyond the control of the source</u>. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- TV15. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program, the CAIR Program. [Rule 62-213.460, F.A.C.]

Permit Procedures

- **TV16.** Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV17. Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1,

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- 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]
- TV18. <u>Insignificant Emissions Units or Pollutant-Emitting Activities</u>. The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.
- TV19. Savings Clause. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

TV20. Suspension and Revocation.

- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (1) Submitted false or inaccurate information in his application or operational reports.
 - (2) Has violated law, Department orders, rules or permit conditions.
 - (3) Has failed to submit operational reports or other information required by Department rules.
 - (4) Has refused lawful inspection under Section 403.091, F.S.
- d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

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

TV21. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

TV22. Emissions Unit Reclassification.

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

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

TV23. Transfer of Permits. Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

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Rights, Title, Liability, and Agreements

- TV24. Rights. As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]
- TV25. <u>Title</u>. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.]
- **TV26.** <u>Liability</u>. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

TV27. Agreements.

- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (1) Have access to and copy any records that must be kept under conditions of the permit;
 - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

TV28. Permit. The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

TV29. Recordkeeping.

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

TITLE V GENERAL CONDITIONS

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- (2) The person responsible for performing the sampling or measurements;
- (3) The dates analyses were performed;
- (4) The person and company that performed the analyses;
- (5) The analytical techniques or methods used;
- (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

TV30. Emissions Computation. Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

<u>For any of the purposes specified above, t</u>The owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

- a. Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. Continuous Emissions Monitoring System (CEMS).
 - (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
 - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - (a) A calibrated flowmeter that records data on a continuous basis, if available; or
 - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the

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owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

- c. Mass Balance Calculations.
 - (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
 - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- d. Emission Factors.
 - (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- e. Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

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- g. Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- h. Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

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Responsible Official

TV31. <u>Designation and Update</u>. The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

Prohibitions and Restrictions

- TV32. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]
- TV33. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.
- TV34. Open Burning Prohibited. Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996). Table H, Permit History.

FIGURE 1--SUMMARY REPORT

GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-Ger	neral Provisions]
Pollutant (Circle One): SO ₂ NO _X TRS H ₂ S	CO Opacity
Reporting period dates: From	to
Company:	
Emission Limitation:	
Address:	
Monitor Manufacturer:	
Model No.:	
Date of Latest CMS Certification or Audit:	
Process Unit(s) Description:	
Total source operating time in reporting period ¹ :	
Emission data summary ¹	CMS performance summary i
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions
	missions is 1 percent or greater of the total operating time or tal operating time, both the summary report form and the
Note: On a separate page, describe any changes since last qu	arter in CMS, process or controls.
I certify that the information contained in this report is true, ac	curate, and complete.
Name:	
Signature:	Date:
Title:	

TABLE H

PERMIT HISTORY

.U. ID No.	Description	Permit No.	Effective Date 1	Expiration Date	Project Type
001	Simple-Cycle Combustion Turbine	0310485-001-AC/PSD-FL-267	10/14/1999	12/31/2002	Initial construction
Initial Title V Permit Very Low Sulfur Oil Modification Revised Low Load Limit Minor Monitoring Revisions Title V Permit Revision		0310485-005-AC	03/19/2003	12/31/2008	Initial
		0310485-007-AC	05/18/2004.		Construction (mod.)
		0310485-010-AC	01/13/2005		Construction (mod.)
		0310485-012-AC	10/25/2005	12/31/2008	Construction (mod.)
		0310485-013-AV	04/04/2006	12/31/2008	Revision
002	Simple-Cycle Combustion Turbine	0310485-001-AC/PSD-FL-267	10/14/1999	12/31/2002	Initial Construction
		0310485-004-AC	04/12/2001	12/31/2005	Construction (mod.)
	Conversion to Combined Cycle	0310485-003-AC/PSD-FL-310	03/26/2002		Construction (mod.)
Initial Title V Permit Duct Burner Size Increase Very Low Sulfur Oil Modification Revised Low Load Limit Minor Monitoring Revisions Title V Permit Revision Duct Burner Heat Input Rate Increase Title V Permit Revision		0310485-005-AV	03/19/2003	12/31/2008	Initial
		0310485-006-AC/PSD-FL-310A	06/06/2003		Construction (mod.)
		0310485-007-AC/PSD-FL-310B	05/18/2004		Construction (mod.)
		0310485-015-AC	10/13/2005		Construction (mod.)
	Minor Monitoring Revisions	0310485-012-AC	10/25/2005	12/31/2008	Construction (mod.)
		0310485-013-AV	04/04/2006	12/31/2008	Revision
		0310485-017-AC/PSD-FL-310F	10/12/2006	12/31/2008	Construction (mod.)
		0310485-016-AV	12/19/2006	12/31/2008	Revision
003	Simple-Cycle Combustion Turbine	0310485-001-AC/PSD-FL-267	10/14/1999	12/31/02	Initial Construction
		0310485-004-AC	04/12/2001	12/31/2005	Construction (mod.)
	Conversion to Combined Cycle	0310485-003-AC/PSD-FL-310	03/26/2002		Construction (mod.)
	Initial Title V Permit	0310485-005-AV	03/19/2003	12/31/2008	Initial
	Duct Burner Size Increase	0310485-006-AC/PSD-FL-310A	06/06/2003		Construction (mod.)
	Very Low Sulfur Oil Modification	0310485-007-AC/PSD-FL-310B	05/18/2004		Construction (mod.)
	Revised Low Load Limit	· 0310485-015-AC	10/13/2005		Construction (mod.)
	Minor Monitoring Revisions	0310485-012-AC	10/25/2005	12/31/2008	Construction (mod.)
	Title V Permit Revision	0310485-013-AV	04/04/2006	12/31/2008	Revision
	Duct Burner Heat Input Rate Increase	0310485-017-AC/PSD-FL-310F	10/12/2006	12/31/2008	Construction (mod.)
	Title V Permit Revision	0310485-016-AV	12/19/2006	12/31/2008	Revision
004	Fuel Oil Storage Tank	0310485-001-AC/PSD-FL-267	10/14/1999	12/31/2002	Initial Construction
		0310485-004-AC	04/12/2001		Construction (mod.)
	Initial Title V Permit	0310485-005-AV	03/19/2003	12/31/2008	Initial
005	Fuel Oil Storage Tank	0310485-001-AC/PSD-FL-267	10/14/1999	12/31/2002	Initial Construction
		0310485-004 - AC	04/12/2001		Construction (mod.)
	Initial Title V Permit	0310485-005-AV	03/19/2008	12/31/2008	Initial
007	One Mechanical Draft Cooling Tower	0310485-003-AC/PSD-FL-310	03/26/2002	12/31/2005	Initial Construction
	Initial Title V Permit	0310485-005-AV	03/19/2003	12/31/2008	Initial

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 resolvement of any objections

Linero, Alvaro

From:

ROOSEVELT@TRAVELTLH.COM [youritinerary@worldspan.com]

Sent:

Thursday, November 13, 2008 9:24 AM

To:

Linero, Alvaro

Subject:

Itinerary for LINERO ALVARO Monday 24 November 2008

Importance: High

Carlson Wagonlit Travel 1834 Hermitage Blvd. Suite 100 Tallahassee, FL 32308 850-893-6200 Mon-Thu 8:30-5:30 Fri 8:30-5:00 www.carlsontravel.com/go

AIRLINES ARE NOW CHARGING FOR CHECKED BAGS ON COACH CLASS DOMESTIC TICK

THIS IS YOUR E-TICKET AND THIS E-MAIL SERVES AS AN ITINERARY/INVOICE RECEIPT. RECORDS. AIRLINES REQUIRE THAT YOU CHECK IN AT LEAST 1 HOUR PRIOR TO FLIGHT INTERNATIONAL FLIGHTS. PASSENGERS NOT CHECKED IN 30 MINUTES PRIOR TO DEPAF

Travel Consultant: Roosevelt Trip Locator: 3WVMWM

ALVARO LINERO

Monday 24 November 2008

Air

Northwest Airlines Inc - Flight NW 2252

OPERATED BY PINNACLE AIRLINES/NWA AIRLINK

Depart:

Arrive:

Tallahassee Municipal Airport

Tallahassee, FL, US

Memphis Int'l Airport

Memphis, TN, US

7:18 AM

7:55 AM

Airline Ref:

3WVMWM

Confirmed

Seat:

Status:

Class:

K-Economy/Coach

Mileage:

460

Travel Time: 1:37 **Stopovers:**

Aircraft:

Canadair Regional Jet

Meal:

Remarks:

Frequent Flyer- Northwest Airlines Inc 2279530576

Monday 24 November 2008

Air

Northwest Airlines Inc - Flight NW 0593

Depart: Memphis Int'l Airport

Memphis, TN, US

Minneapolis, MN, US

Minneapolis St. Paul Int'l Airport

8:25 AM

10:37 AM

Terminal L

Status: Airline Ref: Confirmed 3WVMWM

Seat:

22E

Class:

K-Economy/Coach

Mileage:

700

Travel Time: 2:12

Stopovers:

Aircraft:

Airbus 320-100/200

Meal:

Remarks:

Arrive:

Frequent Flyer- Northwest Airlines Inc 2279530576

Monday 24 November 2008

Car

Avis

Tel:

612 726 5220

Minneapolis St. Paul Int'l Airport

Status:

Confirmed Confirmation: 06892865US0 \$ZI\$

Pick Up: Minneapolis, MN, US

Rate:

38.62 USD

10:37 AM

Rate Plan:

Minneapolis St. Paul Int'l Airport

Mileage:

Daily Unlimited

Drop Off:

Minneapolis, MN, US

Wednesday 26 November 2008

2:15 PM

Car Type:

COMPACT CAR AUTO A/C

Remarks:

APPROX TOTAL 146.44 USD INCLUDES TAXES-FEES-SURCHARGES

Wednesday 26 November 2008

Air

Air

Northwest Airlines Inc - Flight NW 0444 Minneapolis St. Paul Int'l Airport Depart:

Status: Airline Ref: Confirmed 3WVMWM

Minneapolis, MN, US

Seat:

32B

3:15 PM

Class:

T-Economy/Coach

Terminal L

Mileage:

700

Memphis Int'l Airport

Stopovers:

Travel Time: 2:01 0

Memphis, TN, US

Aircraft:

Boeing 757-300

5:16 PM

Meal:

Status:

Remarks:

Arrive:

Frequent Flyer- Northwest Airlines Inc 2279530576

Wednesday 26 November 2008

Confirmed

Northwest Airlines Inc - Flight NW 2257

OPERATED BY PINNACLE AIRLINES/NWA AIRLINK

Depart:

Arrive:

Memphis Int'l Airport

Memphis, TN, US

7:45 PM

Airline Ref:

3WVMWM

Seat:

Class:

T-Economy/Coach

Mileage:

460

Travel Time: 1:26 Tallahassee Municipal Airport

Tallahassee, FL, US

10:11 PM

Stopovers:

Aircraft:

Canadair Regional Jet

Meal:

Remarks:

Frequent Flyer- Northwest Airlines Inc 2279530576

Agency Remarks

YOUR TRAVEL ARRANGEMENTS WERE MADE BY ROOSEVELT.

NON REF/MIN \$150.00 PENALTY

Ticketing Information

Issue Date Passenger Name

Transaction Type Document Number Amount

13NOV

LINERO/ALVARO Electronic Ticket 0127552448294

346.00 USD

13NOV

LINERO/ALVARO

Misc Charge

8908134175178

28.00 USD

To:

chanjm@jea.com

Cc:

Gianazza, N. Bert; Kirts, Christopher; ROBINSON@coi.net; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria:

Machinski, Susan; Holtom, Jonathan

Subject:

JEA - BRANDY BRANCH FACILITY: 0310485-019-AV

Attachments:

0310485-019-AVProposedCoverLetter.pdf

Click on the link to the documents displayed below and send a "reply" message verifying receipt of the document(s) provided in this email; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". We must receive verification that you are able to access the documents. Your reply will preclude subsequent e-mail transmissions to verify receipt of the documents).

Click on the following link to access the permit project documents: http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0310485.019.AV.P pdf.zip

This is the official notification of the Proposed Permit Renewal and its associated documents for the following project:

Attention: Susan Machinski/Jonathan Holtom

Owner/Company Name: JEA

Facility Name: BRANDY BRANCH FACILITY

Project Number: 0310485-019-AV

Permit Status: PROPOSED

Permit Activity: PERMIT RENEWAL

Facility County: DUVAL

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

From:

Exchange Administrator

Sent:

Friday, November 21, 2008 1:35 PM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT256221.txt; JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

chanjm@jea.com
GianNB@jea.com

From:

Chansler, James M. - Chief Operating Officer [ChanJM@jea.com]

To:

Friday, Barbara

Sent:

Subject:

Friday, November 21, 2008 2:22 PM Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

ChanJM@jea.com

Subject:

was read on 11/21/2008 2:22 PM.

From: Sent: Gianazza, N. Bert [GianNB@jea.com] Monday, December 01, 2008 1:38 PM

To:

Friday, Barbara

Subject:

RE: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

My R.O. and I have received this email.

Tx, B.

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Friday, November 21, 2008 1:35 PM **To:** Chansler, James M. - Chief Operating Officer

Cc: Gianazza, N. Bert; Kirts, Christopher; ROBINSON@coj.net; Halpin, Mike; Forney.Kathleen@epamail.epa.gov;

Oquendo, Ana@epamail.epa.gov; Gibson, Victoria; Machinski, Susan; Holtom, Jonathan

Subject: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

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This is the official notification of the Proposed Permit Renewal and its associated documents for the following project:

Attention: Susan Machinski/Jonathan Holtom

Owner/Company Name: JEA

Facility Name: BRANDY BRANCH FACILITY

Project Number: 0310485-019-AV

Permit Status: PROPOSED

Permit Activity: PERMIT RENEWAL

Facility County: DUVAL

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Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

Florida has a very broad Public Records Law. Virtually all written communications to or from State and Local Officials and employees are public records available to the public and media upon request. JEA does not differentiate between personal and business e-mails. E-mail sent on the JEA system will be considered public and will only be withheld from disclosure if deemed confidential pursuant to State Law. Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact JEA by phone or in writing.

From:

Gianazza, N. Bert [GianNB@jea.com]

To:

Sent:

Subject:

Friday, Barbara
Monday, December 01, 2008 1:38 PM
Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

GianNB@jea.com

Subject:

was read on 12/1/2008 1:38 PM.

From:

System Administrator

To: Sent: Kirts, Christopher; Gibson, Victoria Friday, November 21, 2008 1:35 PM

Subject:

Delivered: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To: 'chanjm@jea.com'

Cc: Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Sent: 11/21/2008 1:35 PM

was delivered to the following recipient(s):

Kirts, Christopher on 11/21/2008 1:35 PM Gibson, Victoria on 11/21/2008 1:35 PM

From: To:

Kirts, Christopher Friday, Barbara

Sent:

Wednesday, November 26, 2008 2:26 PM

Subject:

Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To: 'chanjm@jea.com'

Cc:

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV Sent: 11/21/2008 1:35 PM

was read on 11/26/2008 2:26 PM.

From:

Gibson, Victoria

To:

Friday, Barbara

Sent:

Wednesday, November 26, 2008 11:12 AM

Subject:

Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

'chanjm@jea.com'

Cc:

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

Subject:

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Sent: 11/21/2008 1:35 PM

was read on 11/26/2008 11:12 AM.

From:

Exchange Administrator

Sent:

Friday, November 21, 2008 1:35 PM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT256222.txt; JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

ROBINSON@coj.net

From: Robinson, Richard [ROBINSON@coj.net] Sent: Friday, November 21, 2008 2:48 PM

To: Friday, Barbara

RE: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV Subject:

Barbara.

I was able to view the documents in the e-mail link below.

Thanks,

Richard L. Robinson, P.E. **Environmental Engineering Manager** Air Quality Branch **Environmental Quality Division Environmental and Compliance Department** City of Jacksonville, Florida 117 West Duval Street, Suite 225 Jacksonville, FL 32202

Phone: (904) 630-4900 Fax: (904) 630-3638 E-Mail: robinson@coi.net

Please note: that under Florida's very broad public records law, e-mail communications to and from City officials may be subject to public disclosure.



Please consider the environment before printing this email.

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Friday, November 21, 2008 1:35 PM

To: chanim@iea.com

Cc: Gianazza, N. Bert; Kirts, Christopher; Robinson, Richard; Halpin, Mike; Forney.Kathleen@epamail.epa.gov;

Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Machinski, Susan; Holtom, Jonathan

Subject: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

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This is the official notification of the Proposed Permit Renewal and its associated documents for the following project:

Attention: Susan Machinski/Jonathan Holtom

Owner/Company Name: JEA

Facility Name: BRANDY BRANCH FACILITY

Project Number: 0310485-019-AV

Permit Status: PROPOSED

Permit Activity: PERMIT RENEWAL

Facility County: DUVAL

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Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on https://doi.org/10.1001/jhis.link.nd to the DEP Customer Survey. Thank you in advance for completing the survey.

From:

System Administrator

To:

Halpin, Mike; Holtom, Jonathan

Sent:

Friday, November 21, 2008 1:35 PM

Subject:

Delivered: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

'chanjm@jea.com'

Cc:

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

Subject:

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Sent: 11/21/2008 1:35 PM

was delivered to the following recipient(s):

Halpin, Mike on 11/21/2008 1:35 PM Holtom, Jonathan on 11/21/2008 1:35 PM

Halpin, Mike From:

Sent:

To:

Friday, November 21, 2008 1:38 PM
Friday, Barbara
Delivered: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV
ATT256233.txt Subject: Attachments:

Your message was delivered to the recipient.

From:

Halpin, Mike

To: Sent: Friday, Barbara

Subject:

Friday, November 21, 2008 1:39 PM Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

'chanjm@jea.com' To:

Cc:

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV Subject:

Sent: 11/21/2008 1:35 PM

was read on 11/21/2008 1:39 PM.

From:

Holtom, Jonathan

To:

Friday, Barbara

Sent:

Friday, November 21, 2008 2:34 PM

Subject:

Read: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

'chanjm@jea.com'

Cc:

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

Subject:

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Sent: 11/21/2008 1:35 PM

was read on 11/21/2008 2:34 PM.

From: Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]

Sent: Friday, November 21, 2008 1:37 PM

To: Friday, Barbara

Subject: Successful Mail Delivery Report Attachments: Successful Mail Delivery Report Delivery report; Message Headers

This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<<u>Forney.Kathleen@epamail.epa.gov</u>>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 4926FFB3 31834 120300 1 6F5BB214005

<Quendo.Ana@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK,
 sent 4926FFB3_31834_120300_1 6F5BB214005

From:

System Administrator

To:

Machinski, Susan

Sent:

Friday, November 21, 2008 1:35 PM

Subject:

Delivered: JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Your message

To:

'chanjm@jea.com'

Gianazza, N. Bert; Kirts, Christopher; 'ROBINSON@coj.net'; Halpin, Mike; Cc:

Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria;

Machinski, Susan; Holtom, Jonathan

JEA - BRANDY BRANCH FACILITY; 0310485-019-AV

Sent: 11/21/2008 1:35 PM

was delivered to the following recipient(s):

Machinski, Susan on 11/21/2008 1:35 PM