## Memorandum

# Florida Department of Environmental Protection

TO: Trina Vielhauer, Bureau of Air Regulation

THROUGH: Jeff Koerner, New Source Review Section

FROM: Tammy McWade, New Source Review

DATE: October 26, 2009

SUBJECT: Draft/Proposed Permit No. 1270009-018-AV

Florida Power & Light Company

Sanford Power Plant

Renewal of Title V Air Operational Permit

Attached for your review is the draft/proposed permit package to renew the Title V Air Operation Permit for the Sanford Power plant, which is located in Volusia County at 950 South Highway 17-92 in Debary, Florida. The existing facility primarily consists of an electric utility steam generating Unit 3 that fires residual oil and natural gas and repowered Units 4 and 5. The repowered units are "4-on-1" combined cycle gas turbine system that fire natural gas as the primary fuel. The combustion turbines associated with repowered Unit 5 may fire distillate oil as a restricted alternate fuel. We received the application on May 20, 2009 and additional information on September 25<sup>th</sup>, which made the application complete. Day 90 is December 22<sup>nd</sup>. According to the Central District Office, there is no ongoing or open enforcement case for this facility.

I recommend your approval of the attached draft/proposed permit package.

Attachments

#### P.E. CERTIFICATION STATEMENT

#### **PERMITTEE**

Florida Power & Light Company 950 South Highway 17-92 Debary, Florida 32713 Permit No. 1270009-018-AV Facility ID No. 1270009 Sanford Power Plant Title V Air Operation Permit Volusia County, Florida

#### PROJECT DESCRIPTION

The purpose of this project is to renew Title V Air Operation Permit No. 1270009-011-AV for the Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92 in Debary, Florida. The existing power plant consists of the following primary equipment.

- Unit 3 (EU 001) is a wall-fired electric utility steam generating unit rated at a nominal 156 MW. It has flue gas recirculation to improve unit performance and efficiency. The stack is equipped with CEMS to measure and record NO<sub>X</sub> and SO<sub>2</sub> emissions as well as a COMS to measure and record stack opacity.
- Repowered Units 4 and 5 (EU 005 and EU 012) are both "4-on-1" combined cycle combustion turbine systems with a nominal generating capacity of 1000 MW for each repowered system. Each repowered unit consists of four combustion turbines rated at 170 MW each, four unfired HRSG and the existing steam turbine electric generator repowered to 320 MW. Each combustion turbine fires natural gas as the primary fuel. When firing gas, NO<sub>x</sub> emissions are controlled with dry low-NO<sub>x</sub> combustion technology. The combustion turbines for repowered Unit 5 may also fire distillate oil as a restricted alternate fuel. When firing oil, NO<sub>x</sub> emissions are controlled with water injection. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Each stack is equipped with CEMS to measure and record NO<sub>x</sub> emissions.

The renewal permit is based on the Department's updated formats for a Title V Air Operation Permit. Only minor changes, clarifications and updates to regulations were made. This review was conducted by Tammy McWade under my responsible supervision.

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

Jeffery F. Koerner, P.E.

License No. 49441



## Florida Department of Environmental Protection

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

Jell Kottkamp Lt. Governor

Michael W. Sole Secretary

Electronic Mail - Received Receipt Requested

Mr. Gary Kowalczyk, Plant General Manager Florida Power and Light Company 950 South Highway 17-92 Debary, Florida 32713

Re: Permit No. 1270009-018-AV

Sanford Power Plant

Title V Air Operation Permit Renewal

### Dear Mr. Kowalczyk:

Enclosed is the draft/proposed permit package to renew the Title V air operation permit for the Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92, DeBary, Florida. The permit package includes the following documents:

- The Statement of Basis, which summarizes the facility, the equipment, the primary rule applicability, and the changes since the last Title V renewal.
- The draft/proposed Title V Air Operation Permit renewal, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the draft permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Title V Air Operation Permit must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication. In order to ensure that the Title V permit (including the Title IV Acid Rain Part) is effective by January 1, 2010, the Public Notice needs to be published as soon as you receive this document.
- If you have any questions, please contact the Project Engineer, Tammy McWade, by telephone at 850/488-1906 or by email (tammy.mcwade@dep.state.fl.us).

Sincerely,

Trina Vielhauer, Chief

Bureau of Air Regulation

Date

Enclosures TLV/jfk/ttm

#### WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

In the Matter of an Application for Title V Air Operation Permit by:

Florida Power and Light Company 950 South Highway 17-92 Debary, FL 32713

Responsible Official:

Mr. Gary Kowalczyk, Plant General Manager

Permit No. 1270009-018-AV Facility ID No. 1270009 Sanford Power Plant Title V Air Operation Permit Volusia County, Florida

**Facility Location**: Florida Power and Light Company operates the Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92, Debary, Florida.

**Project**: The purpose of this project is to renew Title V Air Operation Permit No. 1270009-011-AV. Details of the project are provided in the application and the enclosed draft/proposed permit package which includes this written notice, the public notice, the draft/proposed permit and the statement of basis.

**Permitting Authority**: Applications for Title V Air Operation Permits for facilities that contain Acid Rain units are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V Air Operation Permit is required to operate the facility. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft/proposed permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft permit by visiting the following website: http://www.dep.state.fl.us/air/emission/apds/default.asp and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue a Title V Air Operation Permit renewal to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the draft/proposed permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the draft/proposed Title V Air Operation Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly. If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions**: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

#### WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

Mediation: Mediation is not available in this proceeding.

**EPA Review**: EPA has agreed to treat the Draft Title V Air Operation Permit as a proposed Title V Air Operation Permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V air operation permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that results in a different decision or significant change of terms or conditions. The status regarding EPA's 45—day review of this project and the deadline for submitting a citizen petition can be found at the following website address: http://www.epa.gov/region4/air/permits/Florida.htm.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V Air Operation Permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at http://www.epa.gov/region4/air/permits/Florida.htm.

Executed in Tallahassee, Florida.

Tor Trina Vielhauer, Chief
Bureau of Air Regulation

#### WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue

Title V Air Operation Permit Renewal (including the Public Notice, the Statement of Basis, and the

Draft/Proposed Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on

to the persons listed below.

Mr. Gary Kowalczyk, FPL, Plant General Manager: (gary.kowalczyk@fpl.com)

Ms. Mary Archer, FPL, Project Manager: (mary.archer@fpl.com)

Mr. Kennard Kosky, Golder & Associates, P.E.: (kkosky@golder.com)

Ms. Caroline Shine, DEP Central District Office: (caroline.shine@dep.state.fl.us)

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

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

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

Ms. Victoria Gibson, DEP BAR (Reading File): victoria.gibson@dep.state.fl.us

Clerk Stamp

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

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

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft/Proposed Permit No. 1270009-018-AV
Florida Power and Light Company, Sanford Power Plant
Volusia County, Florida

**Applicant**: The applicant for this project is Florida Power and Light Company (FPL). The applicant's responsible official and mailing address are: Gary Kowalczyk, Plant General Manager, Florida Power and Light Company, Sanford Power Plant, 950 South Highway 17-92, Debary, Florida 32713.

**Facility Location**: The applicant operates the existing Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92 in Debary, Florida.

**Project:** On May 20, 2009, the applicant applied to the Department of Environmental Protection (Department) to renew the Title V Air Operation Permit for the Sanford Power Plant. The existing facility is a nominal 2156 megawatt (MW) power plant consisting of an electric utility steam generating Unit 3, combined cycle combustion turbine systems (repowered Units 4 and 5) and other miscellaneous regulated and unregulated activities. The units are subject to the applicable requirements of the federal Acid Rain Program.

Unit 3 is a wall-fired electric utility steam generating unit rated at a nominal 156 MW, which began commercial operation in 1959. It fires natural gas, No. 6 fuel oil, No. 2 fuel oil and used oil from FPL operations. It has flue gas recirculation to improve unit performance and efficiency. The stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record nitrogen oxide (NO<sub>X</sub>) and sulfur dioxide (SO<sub>2</sub>) emissions as well as a continuous opacity monitoring system (COMS) to measure and record stack opacity.

Repowered Units 4 and 5 are a "4-on-1" combined cycle combustion turbine systems, which each consist of four combustion turbines, four unfired heat recovery steam generators (HRSG) and a repowered steam-electrical generator set. Each combustion turbine can produce a nominal 170 MW. The repowered steam-electrical generator set is rated at 490 MW; however, each set of four HRSG can only recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas as the primary fuel. The combustion turbines associated with repowered Unit 5 are also authorized to fire distillate oil as a restricted alternate fuel. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Carbon monoxide and volatile organic compounds are minimized by the efficient combustion of natural gas and distillate oil. NO<sub>X</sub> emissions are minimized by dry low-NO<sub>X</sub> combustion technology when firing natural gas and water injection when firing distillate oil. Particulate matter and SO<sub>2</sub> emissions are minimized by the firing of natural gas and distillate oil, which contain negligible amounts of ash and sulfur. Each stack is equipped with CEMS to measure and record NO<sub>X</sub> emissions.

**Permitting Authority**: Applications for Title V Air Operation Permits for facilities that contain Acid Rain units are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214, of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V Air Operation Permit is required to operate the facility. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File**: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the Draft/Proposed Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the Draft/Proposed Permit by visiting the following website: http://www.dep.state.fl.us/air/emission/apds/default.asp and entering the permit number shown above.

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

Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue a renewed Title V Air Operation Permit to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft/proposed permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the draft/proposed Title V Air Operation Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly. If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft/proposed permit, the Permitting Authority shall issue a revised draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of the Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petitioner contends warrant reversal or modification of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon

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

which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

**Mediation**: Mediation is not available for this proceeding.

EPA Review: EPA has agreed to treat the Draft Title V Air Operation Permit as a Proposed Title V Air Operation Permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that results in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: http://www.epa.gov/region4/air/permits/Florida.htm.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at http://www.epa.gov/region4/air/permits/Florida.htm.

## Title V Air Operation Permit Renewal Permit No. 1270009-018-AV Florida Power and Light Sanford Power Plant

#### **APPLICANT**

The applicant for this project is Florida Power and Light Company (FPL). The applicant's responsible official and mailing address are: Gary Kowalczyk, Plant General Manager, Florida Power and Light Company, Sanford Power Plant, 950 South Highway 17-92, Debary, Florida 32713.

#### **FACILITY DESCRIPTION**

The Florida Power and Light Company operates the existing Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92 in Debary, Florida. The existing facility is a nominal 2156 MW electric generating plant that consists of the following equipment.

- Unit 3 (EU-001) is an existing Babcock & Wilcox wall-fired electric utility steam generating unit rated at a nominal 156 megawatt (MW). The unit began commercial operation in 1959 and fires natural gas, No. 6 fuel oil, No. 2 fuel oil and used oil from FPL operations. It has flue gas recirculation to improve unit performance and efficiency. Unit 3 has a single exhaust stack that is 302 feet tall and 9.5 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 608,999 actual cubic feet per minute (acfm) at 374° F. The stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record NO<sub>X</sub> and SO<sub>2</sub> emissions as well as a continuous opacity monitoring system (COMS) to measure and record stack opacity.
- Repowered Unit 4 (EU-005 EU-008) is a "4-on-1" combined cycle combustion turbine system consisting of four combustion turbines, four unfired heat recovery steam generators (HRSG) and the repowered steam-electrical generator set. Each combustion turbine can produce a nominal 170 MW and the repowered steam-electrical generator set is rated at 490 MW. Combined, the four HRSG recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas and is equipped with electric fuel heaters to preheat the natural gas for cold startups. Nitrogen oxide (NO<sub>X</sub>) emissions are controlled with dry low-NO<sub>X</sub> combustion technology. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Each combustion turbine has a single exhaust stack that is 125 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,196,162 acfm at 220° F. Each stack is equipped with CEMS to measure and record NO<sub>X</sub> emissions.
- Repowered Unit 5 (EU-009 EU-012) is a "4-on-1" combined cycle combustion turbine system consisting of four combustion turbines, four unfired heat recovery steam generators (HRSG) and the repowered steam-electrical generator set. Each combustion turbine can produce a nominal 170 MW and the repowered steam-electrical generator set is rated at 490 MW. Combined, the four HRSG recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas as the primary fuel and is equipped with electric fuel heaters to preheat the natural gas for cold startups. Nitrogen oxide (NO<sub>X</sub>) emissions are controlled with dry low-NO<sub>X</sub> combustion technology when firing natural gas. Each combustion turbine is also permitted to fire distillate oil as a restricted alternate fuel. NO<sub>X</sub> emissions are controlled with water injection when firing distillate oil. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Each combustion turbine has a single exhaust stack that is 125 feet tall and 19.0 feet in diameter. When firing natural gas, exhaust gases exit the stack with a volumetric flow rate of approximately 1,196,162 acfm at 220° F. Each stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record NO<sub>X</sub> emissions.
- There are several diesel-fired and propane-fired engines (EU-004).
- The facility includes evaporative equipment coolers (EU-013).

#### PROJECT DESCRIPTION

The purpose of this permitting project is to renew Title V Air Operation Permit No. 1270009-011-AV.

#### PROCESSING SCHEDULE AND RELATED DOCUMENTS

05/20/2009 Department received application to renew the Title V air operation permit;

07/16/2009 Department requested additional information; and

09/25/2009 Department received additional information.

#### 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 (EU-001 and EU-005 through EU-012).

<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 major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: The facility operates units subject to applicable provisions in the following New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (CFR): Subpart A, General Provisions (EU-005 - EU-012); and Subpart GG, Stationary Gas Turbines (EU-005 - EU-012).

<u>NESHAP</u>: The facility operates units subject to applicable provisions in the following National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63: Subpart A, General Provisions (EU-039); and Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines (EU-039).

<u>CAIR</u>: The facility operates units subject to the Clean Air Interstate Rule (CAIR) in accordance with Rule 62-296.470, F.A.C. (EU-001 and EU-005 through EU-012).

 $\underline{CAM}$ : The combustion turbines in repowered Unit 5 use an add-on control technology (water injection) to reduce  $NO_X$  emissions when firing distillate oil. However, each combustion turbine is equipped with a CEMS to continuously demonstrate compliance with the  $NO_X$  limit. Therefore, a Compliance Assurance Monitoring (CAM) Plan is not required for any of the emissions units.

#### PROJECT REVIEW

The renewal permit includes the following changes and updates.

#### Permit

- The renewal permit is based on the Department's updated templates for a Title V air operation permit.
- For Unit 3 (EU-001), added the facility-wide emissions caps for particulate matter (PM/PM<sub>10</sub>), NO<sub>X</sub> and sulfur dioxide (SO<sub>2</sub>) to this subsection.
- For the combustion turbines (EU-005 through EU-012), the previous subsections were combined since the units have the same requirements except for a few additional provisions for the combustion turbines in repowered Unit 5 related to firing distillate oil. Removed the obsolete Compliance Plans related to limiting commercial operation on distillate oil and operation in high-temperature peaking mode. Added the facility-wide emissions caps for particulate matter (PM/PM<sub>10</sub>), nitrogen oxides (NO<sub>X</sub>) and sulfur dioxide (SO<sub>2</sub>) to this subsection.
- For EU-004, added the propane-fired generators and determined that these new units are not subject to federal NSPS Subpart JJJJ for stationary spark ignition internal combustion engines in 40 CFR 60. Identified several

#### STATEMENT OF BASIS

miscellaneous engines that are subject to federal NESHAP Subpart ZZZZ for reciprocating internal combustion engines as existing units in 40 CFR 63, but have no applicable requirements. Also, identified emissions unit as "regulated" instead of "unregulated".

• Added the evaporative equipment coolers (EU-013) to the list of unregulated activities.

#### **Appendices**

- Removed the "Acid Rain Retired Unit Exemption Application" from the permit since the corresponding electric utility steam generating units (EU-002 and EU-003) have been dismantled and removed from the site.
- Removed "Figure 1. Summary Report Gaseous and Opacity Excess Emissions and Monitoring Systems Performance Report", which is now included in Appendix NS with other applicable provisions of NSPS Subpart A.
- Removed "Table 297-310-1 Calibration Schedule" from the appendices, which is now included in "Appendix CR. Facility-wide Testing Requirements".
- Renamed "Appendix A-1. Citation Formats" to "Appendix A. Abbreviations, Acronyms, Citations and Identification Numbers".
- Updated Appendix I for insignificant activities and equipment.
- Removed the "Phase II Acid Rain Application/Compliance Plan" from the appendices, which is now included in Section V of the permit.
- Removed "Appendices CP-1 and CP-2, Compliance Plans" as obsolete.
- Added "Appendix CR. Common Regulatory Requirements" to identify generally applicable requirements for all emission units and activities at the facility.
- Added "Appendix NE. NESHAP Subpart A, General Provisions" and "Appendix ZZZZ. NESAHP Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines" for the miscellaneous engines (EU-004) subject to the applicable federal NESHAP provisions.
- Added "Appendix NS. NSPS Subpart A, General Provisions" and "Appendix GG. NSPS Subpart GG, Stationary Gas Turbines" for the combustion turbines (EU-005 through EU-012) subject to the applicable federal NSPS provisions.
- Added "Appendix RR. Facility-Wide Reporting Requirements" to identify generally applicable notification and reporting requirements.
- Removed "Appendix SS-1. Stack Sampling Facilities" and "Table 297-310-1 Calibration Schedule", which are now included in "Appendix TR. Facility-Wide Testing requirements".
- Added "Appendix TR. Facility-Wide Testing Requirements" to identify generally applicable procedures, notification and reporting requirements related to testing.
- Updated and renamed "Appendix TV-4. Title V Conditions" to "Appendix TV. Title V General Conditions".

#### CONCLUSION

This project renews Title V Air Operation Permit No. 1270009-011-AV, which was issued on December 30, 2004. 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 62-214, 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.

## Florida Power and Light Sanford Power Plant

Facility ID No. 1270009-018-AV Volusia County, Florida

#### DRAFT/PROPOSED

## Title V Air Operation Permit Renewal

Permit No. 1270009-018-AV (Renewal of Title V Air Operation Permit No. 1270009-011-AV)



## **Permitting Authority**

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road
Mail Station #5505

Telephone: 850/488-0114 Fax: 850/921-9531

Tallahassee, Florida 32399-2400

## **Compliance Authority**

State of Florida
Department of Environmental Protection
Central District Office
Air Resource Section

3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

> Telephone: 407/894-7555 Fax: 407/897-2966

# DRAFT/PROPOSED Title V Air Operation Permit Renewal Permit No. 1270009-018-AV

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## DRAFT PERMIT

#### **PERMITTEE:**

Florida Power and Light Company 950 South Highway 17-92 DeBary, Florida 32713 Permit No. 1270009-018-AV Sanford Power Plant Facility ID No. 1270009 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 Sanford Power Plant is located in Volusia County at 950 South Highway 17-92 in DeBary, Florida. The map coordinates are: UTM Zone 17; 468.1 km East and 3190.86 km North; and Latitude 28° 50' 42" North and Longitude 81° 19' 37" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility, in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2010

Renewal Application Due Date: May 20, 2014

Expiration Date: December 31, 2014

(Draft/Proposed)

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/jfk/ttm

#### Subsection A. Facility Description.

The Florida Power and Light Company (FPL) operates the existing Sanford Power Plant, which is located in Volusia County at 950 South Highway 17-92 in Debary, Florida. The existing facility is a nominal 2156 megawatt (MW) electric generating plant that consists of the following equipment.

- Unit 3 (EU-001) is an existing Babcock & Wilcox wall-fired electric utility steam generating unit rated at a nominal 156 megawatt (MW). The unit began commercial operation in 1959 and fires natural gas, No. 6 fuel oil, No. 2 fuel oil and on-specification used oil from FPL operations. It has flue gas recirculation to improve unit performance and efficiency. Unit 3 has a single exhaust stack that is 302 feet tall and 9.5 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 608,999 actual cubic feet per minute (acfm) at 374° F. The stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record nitrogen oxide (NO<sub>X</sub>) and sulfur dioxide (SO<sub>2</sub>) emissions and a continuous opacity monitoring system (COMS) to determine the stack opacity.
- Repowered Unit 4 (EU-005 EU-008) is a "4-on-1" combined cycle combustion turbine system consisting of four combustion turbines, four unfired heat recovery steam generators (HRSG) and the repowered steam-electrical generator set. Each combustion turbine can produce a nominal 170 MW and the repowered steam-electrical generator set is rated at 490 MW. Combined, the four HRSG recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas and is equipped with electric fuel heaters to preheat the natural gas for cold startups. NO<sub>X</sub> emissions are controlled with dry low-NO<sub>X</sub> combustion technology. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Each combustion turbine has a single exhaust stack that is 125 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,196,162 acfm at 220° F. Each stack is equipped with a CEMS to measure and record NO<sub>X</sub> emissions.
- Repowered Unit 5 (EU-009 EU-012) is a "4-on-1" combined cycle combustion turbine system consisting of four combustion turbines, four unfired HRSG and the repowered steam-electrical generator set. Each combustion turbine can produce a nominal 170 MW and the repowered steam-electrical generator set is rated at 490 MW. Combined, the four HRSG recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas as the primary fuel and is equipped with electric fuel heaters to preheat the natural gas for cold startups. NO<sub>X</sub> emissions are controlled with dry low-NO<sub>X</sub> combustion technology when firing natural gas. Each combustion turbine is also permitted to fire distillate oil as a restricted alternate fuel. NO<sub>X</sub> emissions are controlled with water injection when firing distillate oil. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. Each combustion turbine has a single exhaust stack that is 125 feet tall and 19.0 feet in diameter. When firing natural gas, exhaust gases exit the stack with a volumetric flow rate of approximately 1,196,162 acfm at 220° F. Each stack is equipped with a CEMS to measure and record NO<sub>X</sub> emissions.
- There are several miscellaneous diesel-fired and propane-fired engines (EU-004).
- The facility includes two evaporative equipment coolers (EU-013), one for each repowered unit.

The facility operates other miscellaneous equipment including an emergency diesel generator, two propane tanks and four oil storage tanks.

#### Subsection B. Summary of Emissions Units.

The facility includes the following emissions units.

EU No.	Brief Description			
Regulate	d Emissions Units			
001	Electric Utility Steam Generating Unit 3			
004	Miscellaneous Engines			
005	Combined Cycle Combustion Turbine Unit 4A			
006	Combined Cycle Combustion Turbine Unit 4B			
007	Combined Cycle Combustion Turbine Unit 4C			
008	Combined Cycle Combustion Turbine Unit 4D			
009	Combined Cycle Combustion Turbine Unit 5A			
010	Combined Cycle Combustion Turbine Unit 5B			
011	Combined Cycle Combustion Turbine Unit 5C			
012	012 Combined Cycle Combustion Turbine Unit 5D			
Unregula	Unregulated Emissions Units			
013	Two evaporative equipment coolers			

#### Subsection C. Applicable Regulations.

The facility is regulated in accordance with the following primary categories.

<u>Title III</u>: 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 (EU-001 and EU-005 through EU-012).

<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 major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

<u>CAIR</u>: The facility operates units subject to the Clean Air Interstate Rule (CAIR) in accordance with Rule 62-296.470, F.A.C. (EU-001 and EU-005 through EU-012).

<u>CAM</u>: The combustion turbines in repowered Unit 5 use an add-on control technology (water injection) to reduce NO<sub>X</sub> emissions when firing distillate oil. However, each combustion turbine is equipped with a CEMS to continuously demonstrate compliance with the NO<sub>X</sub> limit. Therefore, a Compliance Assurance Monitoring (CAM) Plan is not required for any of the emissions units.

A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
Federal Rule Citations	
40 CFR 60, Subpart A: NSPS General Provisions	005 - 012
40 CFR 60, Subpart GG: Standards of Performance for Stationary gas Turbines	005 - 012
40 CFR 63, Subpart ZZZZ: NESHAP Reciprocating Internal Combustion Engines	004
40 CFR 72: Acid Rain Program Permit Regulations	001; 005 - 012
40 CFR 75: Acid Rain Program Continuous Emissions Monitoring	001; 005 - 012

## SECTION I. FACILITY INFORMATION.

Regulation	EU Nos.
40 CFR 77: Acid Rain Program Excess Emissions	001 and 005 - 012
40 CFR 78: Acid Rain Program Appeal Procedures	001 and 005 - 012
40 CFR 96: Clean Air Interstate Rule	001 and 005 - 012
40 CFR 271 Hazardous Waste Programs (Used Oil Fuel)	001
State Rule Citations	
Chapter 62-4.160, F.A.C.: General Conditions for Permits	All Units
Rule 62-204.800, F.A.C.: Federal Regulations Adopted by Reference	001, 004 and 005 - 012
Rule 62-210.200, F.A.C.: Definitions	Facility-wide
Rule 62-210.370, F.A.C.: Emissions Computation and Reporting	Facility-wide
Rule 62-210.650, F.A.C.: Circumvention	009 - 012
Rule 62-210.700, F.A.C.: Excess Emissions	All Units
Rule 62-210.900, F.A.C.: Forms and Instructions	All Units
Rule 62-212.300, F.A.C.: General Preconstruction Review Requirements	All Units
Rule 62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD) of Air Quality	005 - 012
Chapter 62-213, F.A.C.: Operation Permits for Major Sources of Air Pollution	Facility-wide
Chapter 62-214, F.A.C.: Requirements for Sources Subject to the Federal Acid Rain Program	001 and 005 - 012
Rule 62-296.320, F.A.C.: General Pollutant Emission Limiting Standards	Facility-wide
Rule 62-296.405, F.A.C.: Fossil Fuel Steam Generators > 250 MMBtu per Hour Heat Input Rate	001
Rule 62-296.470, F.A.C.: Clean Air Interstate Rule (CAIR)	001 and 005 - 012
Rule 62-297.310, F.A.C.: General Compliance Test Requirements	All Units
Rule 62-297.401, F.A.C.: Compliance Test Methods	All Units
Rule 62-297.440, F.A.C.: Supplementary Test Procedures	All Units
Rule 62-297.520, F.A.C.: EPA Continuous Monitor Performance Specifications	001 and 005 - 012

#### Subsection A. The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section VI, 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. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- FW3. 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), F.A.C.]
- **FW4.** 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.]
- FW5. <u>Unconfined Particulate Matter</u>. 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:

The following requirements are federally enforceable:

- a. Paving of roads, parking areas and equipment yards.
- b. Landscaping and planting of vegetation.
- c. Using dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

#### The following requirements are not federally enforceable:

- d. Use of hoods, and/or fans and filters and/or poly flaps to contain and capture sand in the sandblast facility. The facility shall construct temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
- e. Limiting access to plant property by unnecessary vehicles.
- f. Bagged chemical products are stored in weather tight buildings until they are used.
- g. Spills of powdered chemical products shall be cleaned up as soon as practicable.
- h. Vehicles are restricted to slow speeds on the plant site

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 20, 2009

#### Annual Reports and Fees.

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

- **FW6.** 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 1<sup>st</sup> of each year. [Rule 62-210.370(3), F.A.C.]
- FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1<sup>st</sup> 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: <a href="http://www.dep.state.fl.us/Air/emission/tvfee.htm">http://www.dep.state.fl.us/Air/emission/tvfee.htm</a>. [Rule 62-213.205, F.A.C.]
- FW8. 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.]
- FW9. 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 10162, Fairfax, VA 22038, Telephone: 703/227-7650.
  - 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]

#### Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

The specific conditions in this subsection apply to the following emissions unit.

EU No.	Brief Description	
001	Electric Utility Steam Generating Unit 3	

Unit 3 is an existing Babcock & Wilcox wall-fired electric utility steam generating unit rated at a nominal 156 megawatt (MW). The unit began commercial operation in 1959 and fires natural gas, No. 6 fuel oil, No. 2 fuel oil and on-specification used oil from FPL operations. It has flue gas recirculation to improve unit performance and efficiency. The unit is equipped with a fuel additive system to inject small quantities of additives (e.g., magnesium oxide, magnesium hydroxide and related compounds) periodically to prevent soot from sticking to the boiler tubes and aid in the removal of these deposits. Unit 3 has a single exhaust stack that is 302 feet tall and 9.5 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 608,999 actual cubic feet per minute (acfm) at 374° F. The stack is equipped with CEMS to measure and record NO<sub>X</sub> and SO<sub>2</sub> emissions and a COMS to determine the stack opacity.

{Permitting Notes: This emissions unit is regulated under the following primary programs: Phase II of the federal Acid Rain Program; the Clean Air Interstate Rule (CAIR) pursuant to Rule 62-296.470, F.A.C.; and Rule 62-296.405, F.A.C. for Fossil Fuel Steam Generators with more than 250 million Btu (MMBtu) per Hour of Heat Input.}

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

**A.1.** Permitted Capacity. The maximum allowable heat input rate is as follows:

Fuel Type Maximum Heat Input Rate
Natural Gas 1762 MMBtu per hour
Fuel Oil 1650 MMBtu per hour

{Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted at the appropriate operating rate specified in Rule 62-297.310(2), F.A.C.} [Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-296.405, F.A.C.; 40 CFR 75 and Permit No. AO64-217877]

- A.2. 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.]
- **A.3.** Methods of Operation Fuels.
  - a. *Startup*. The only fuels allowed to be fired during startup are propane, natural gas or No. 2 fuel oil for the ignition cycle followed by any combination of natural gas, No. 2 fuel oil or No. 6 fuel oil. During the startup process, best operating practices shall be used to minimize emissions.
  - b. *Normal*. The only fuels allowed to be fired for normal operation are natural gas, No. 2 fuel oil, No. 6 residual fuel oil or on-specification used oil from FPL operations.
  - c. Requirements for On-specification Used Oil: This permit allows the burning of used oil fuel consisting only of used lubricating oils resulting from the Sanford Power Plant's maintenance activities, and mineral oil from the FPL's system-wide maintenance operations on transformers. FPL shall control the collection of these waste oils by the use of placards at used oil collection sites, and by informing plant personnel of the restrictions above, to insure that other liquids (waste solvents, paints, and hazardous wastes) are not mixed with the used oils fired in the boilers. This used oil shall meet EPA "on-specification" criteria and have a polychlorinated biphenyl (PCB) concentration of less than 50 ppm. Used oil that does not meet the specifications for on-specification used oil shall not be burned at this facility.

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

- (1) On-specification used oil shall meet the following specifications from Subpart B in 40 CFR 279:
  - (a) Arsenic shall not exceed 5.0 ppm;
  - (b) Cadmium shall not exceed 2.0 ppm;
  - (c) Chromium shall not exceed 10.0 ppm;
  - (d) Lead shall not exceed 100.0 ppm;
  - (e) Total halogens shall not exceed 1000 ppm;
  - (f) Flash point shall not be less than 100 degrees F.
- (2) The annual quantity of used lubricating oil that may be burned in the boilers shall not exceed the quantity of new lubricating oils consumed at the Sanford plant in any consecutive 12-month period. The annual quantity of used mineral oil burned in the boilers shall not exceed the quantity generated from FPL system wide maintenance activities.
- (3) Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- (4) On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures.

[Permit No. AO64-217877; Rules 62-4.070(3), 62-213.410 and 62-213.440(1), F.A.C.; 40 CFR 279.61 and CFR 761.20(e); and Application No. 1270009-018-AV]

A.4. Hours of Operation. Unit 3 may operate continuously (8760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards.**

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

Unless otherwise specified, the averaging times for the following emission standards are based on the specified averaging time of the applicable test method.

- A.5. <u>Visible Emissions Steady State.</u> Except during soot-blowing and load change, visible emissions shall not exceed 40% opacity. Emissions units governed by this visible emissions standard shall conduct compliance tests for particulate matter emissions at least annually. [Rule 62-296.405(1)(a), F.A.C. and OGC Case No. 92-0890]
- A.6. <u>Visible Emissions Soot-blowing and Load Change.</u> Visible emissions during soot-blowing and load change shall not exceed 60% opacity during the 3-hour period in any 24-hour period of excess emissions allowed for soot-blowing and load change providing: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized.
  - a. A load change occurs when the operational capacity of a unit is in the 10% to 100% capacity range, other than startup or shutdown, which exceeds 10% of the rated unit capacity and which occurs at a rate of 0.5% per minute or more.
  - b. Visible emissions above 60% opacity shall be allowed for not more than four, 6-minute periods during the 3-hour period of excess emissions allowed by this condition provided that continuous opacity monitors are used to report excess emissions.
  - c. The permittee shall record the date, the start time and the end times of all soot-blowing and load change periods which correspond to periods of emissions that are above the steady-state opacity limit.

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

[Rules 62-4.070(3), 210.700(3) and 62-213.440, F.A.C.]

- A.7. Particulate Matter Steady State. As determined by EPA Methods 5, 5B or 17, particulate matter emissions during steady-state operations shall not exceed 0.1 lb/MMBtu of heat input. [Rule 62-296.405(1)(b), F.A.C.]
- A.8. Particulate Matter Soot-blowing and Load Change. As determined by EPA Methods 5, 5B or 17, particulate matter emissions during soot-blowing and load change shall not exceed an average of 0.3 lb/MMBtu of heat input during the 3-hour period of excess emissions allowed for soot-blowing and load change in any 24-hour period. [Rule 62-210.700(3), F.A.C.]
- A.9. Sulfur Dioxide. SO<sub>2</sub> emissions shall not exceed 2.75 lb/MMBtu of heat input as determined by EPA Methods 6, 6A or 6C and data collected from the CEMS based on a 3-hour rolling average. [Rule 62-296.405(1)(c)1, F.A.C.]
- **A.10.** Facility-wide Emission Caps. The entire facility (including Unit 3 and repowered Units 4 and 5) shall be limited to emission caps of 500 tons per year of particulate matter (PM/PM<sub>10</sub>), 4500 tons per year of NO<sub>X</sub> and 4000 tons per year of SO<sub>2</sub>. The emissions caps become effective in 2003, following the initial startup, testing and commencement of commercial operation of repowered Units 4 and 5.
  - a. For the purpose of complying with the facility-wide emission cap, PM/PM<sub>10</sub> emissions shall be calculated as follows:

Facility-wide Particulate Matter Emissions ( $PM_{Total}$ ) = Unit 3 PM emissions ( $PM_3$ ) + Unit 4 PM emissions ( $PM_4$ ) + Unit 5 PM emissions ( $PM_5$ ), where:

 $PM_3 = PM_{3oil} + PM_{3gas}$ 

PM<sub>3oil</sub> = Annual oil heat input (MMBtu) x normalized annual stack test results (Fp), where:

Fp = [(steady state PM test result x 16 hours) + (soot blowing PM test result x 8 hours)]/24 hrs

PM<sub>3gas</sub> = Annual gas operation heat input (MMBtu) x 0.0076 lb/MMBtu

 $PM_4 = \text{annual heat input (MMBtu)} \times 0.006 \text{ lb/MMBtu}$ 

 $PM_5 = PM_{5gas} + PM_{5oil}$ 

PM<sub>5gas</sub> = annual gas operation heat input (MMBtu) x 0.006 lb/MMBtu

PM<sub>soil</sub> = annual oil operation heat input (MMBtu) x 0.01 lb/MMBtu

- b. For the purpose of complying with the facility-wide emission cap, NO<sub>X</sub> emissions shall be calculated by annually summing the data collected in the CEMS required by Title IV of the Clean Air Act.
- c. For the purpose of complying with the facility-wide emission cap, SO<sub>2</sub>emissions shall be calculated by annually summing the data collected in the CEMS required by Title IV of the Clean Air Act.

[Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 1270009-004-AC]

#### **Excess Emissions for State Regulations.**

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

- **A.11.** Excess Emissions Allowed Startup and Shutdown. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- **A.12.** Excess Emissions Allowed Malfunction. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing: (a) best operational practices to minimize emissions are adhered to and (b)

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the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period. [Rule 62-210.700(1), F.A.C.]

A.13. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

#### Monitoring of Operations.

- **A.14.** Fuel Oil Sampling and Analysis. The following fuel sampling and analysis protocol may be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:
  - a. The permittee shall identify and dedicate each storage tank containing fuels with sulfur content of no more than 2.5% by weight.
  - b. For each fuel oil delivery with a sulfur content of 2.5% by weight or less, the permittee shall record the date of delivery, amount of fuel oil delivered, the fuel sulfur content, the higher heating value and the analytical methods used. The fuel sulfur content and higher heating value shall be determined by:
    - (1) Vendor certification, or
    - (2) Analyzing a representative sample of the fuel oil.
  - c. For each delivery of fuel oil with a sulfur content of more than 2.5% by weight, the permittee shall analyze a representative "as-fired" sample of fuel oil from the blend tank for the fuel sulfur content and the higher heating value.
  - d. The following analytical methods shall be used: ASTM D2622-94; ASTM D4294-90(95); ASTM D1552-95; ASTM D1266-91; or both ASTM D4057-88 and ASTM D129-95. The latest editions of these test methods or other methods determined to be equivalent by the U.S. EPA or the Department are acceptable.

[Rules 62-4.070(3), 62-213.440(1), 62-296.405(1)(e), 62-296.405(1)(f) and 62-297.440, F.A.C.]

- **A.15.** Fuel Oil Usage. The permittee shall maintain hourly records of the amount of each liquid fuel fired, the ratio of fuel oil to natural gas (if co-fired), the heating value and fuel oil sulfur content. These records must be of sufficient detail to identify the appropriate operating rate for conducting the required compliance tests for particulate matter in accordance with Condition A.21 of this subsection. [Rules 62-4.070(3), 62-213.440(1), 62-296.405(1)(e), 62-296.405(1)(f) and 62-297.440, F.A.C.]
- A.16. On-Specification Used Oil Analyses. The permittee shall sample and analyze each batch of used oil to be burned for the following parameters: arsenic, cadmium, chromium, lead, total halogens, flash point and PCB. Testing (sampling, extraction and analysis) shall be performed using the latest approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods). Split samples of the used oil shall be labeled with the batch analysis date, when the batch was fired and in which boiler the batch was fired. Split samples shall be retained for three months after analysis and made available to Department upon request for further testing if necessary. [Permit No. AO64-217877; Rules 62-4.070(3), 62-213.410 and 62-213.440(1), F.A.C.; 40 CFR 279.61 and CFR 761.20(e); and Application No. 1270009-018-AV]

#### Continuous Emissions Monitoring Requirements.

**A.17.** CEMS/COMS Required. The permittee shall operate CEMS to monitor and record SO<sub>2</sub> and NO<sub>X</sub> emissions and a COMS to monitor and record stack opacity. Data shall be calculated and recorded in units of the applicable standards. Data collected from these systems shall be used to demonstrate compliance with the applicable standards. The CEMS and COMS shall be installed, certified, operated and maintained in

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

accordance with the requirements of Rule 62-297.520, F.A.C. and the quality assurance provisions of Appendix A in 40 CFR 75, adopted by reference in Rule 62-204.800, F.A.C. However, relative accuracy test assessments (RATA) shall be conducted on at least an annual basis. [Rules 62-204.800, 62-210.700 and 62-296.405(1)(f), F.A.C.; and 40 CFR 75]

- **A.18.** Backup SO<sub>2</sub> Monitoring. In the event that the SO<sub>2</sub> CEMS becomes temporarily inoperable or interrupted, the permittee shall:
  - a. Operate the unit with the fuel oil sulfur concentration and the maximum fuel oil to natural gas firing ratio that was last used to demonstrate compliance prior to the loss of the CEMS, or
  - b. Switch to a fuel containing a maximum sulfur content of 2.5% by weight.

[Rules 62-204.800, 62-213.440(1) and 62-296.405(1)(c)3, F.A.C.]

## Test Methods and Procedures.

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

**A.19.** Test Methods. When required, tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments		
1-4 Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content			
5, 5B, 17	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM <sub>10</sub> .)		
6, 6A, 6B, 6C	Method for Determining Sulfur Dioxide		
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: The method shall use a continuous sampling train.		
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography: EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.		
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		
25A Method for Determining Gaseous Organic Concentrations (Flame Ionization)			
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method)		

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. [Rules 62-213.440, 62-296.405 and 62-297.401, F.A.C.; and Application No. 1270009-018-AV]

- **A.20.** 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.21.** Annual Tests Required. During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct stack tests on Unit 3 to demonstrate compliance with the emissions standards for particulate matter and opacity. [Rules 62-213.440, 62-296.405 and 62-297.310(7), F.A.C.; and Application No. 1270009-018-AV]

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

- a. Test Conditions. Tests shall be conducted for both steady-state conditions and soot-blowing conditions.
- b. Opacity. Data collected from the COMS shall be used to report the opacity monitored during each test run for particulate matter.
- c. Particulate Matter. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor (computed according to EPA Method 19) is used in lieu of heat input. EPA Method 5 may be used with a filter temperature no more than 320° F. EPA Method 17 may be used with a stack temperature less than 375° F. An acetone wash shall be used with EPA Method 5 or 17.
- d. Test Waivers. Annual compliance testing for particulate matter is not required if:
  - (1) Only gaseous fuel is fired during the federal fiscal year; or
  - (2) Gaseous fuel in combination with any amount of liquid fuel is fired during the federal fiscal year for less than 400 hours per year; or
  - (3) Only liquid fuel is fired during the federal fiscal year for less than 400 hours per year.

See Appendix ASP.

- e. Test Fuel. Compliance testing during steady-state conditions and soot blowing conditions shall be conducted on the following fuel and under the following conditions.
  - (1) Oil with 2.5% Sulfur by Weight or Less. When only fuel oil containing 2.5% sulfur by weight or less is fired (or co-fired with natural gas), particulate matter compliance tests shall be conducted during both steady-state conditions and soot blowing conditions when firing solely fuel oil containing at least 90% of the average sulfur content of the fuel oil fired in the previous 12-month period. Such testing is not required during any year that testing is performed when firing oil with a sulfur content of more than 2.5% by weight or co-firing this oil with natural gas.
  - (2) Oil with More Than 2.5% Sulfur by Weight. If fuel oil containing more than 2.5% sulfur by weight is co-fired with natural gas, particulate matter compliance tests shall be conducted during both steady-state conditions and soot-blowing conditions as soon as practicable, but in no event more than 60 days after firing such fuel oil. The tests shall be conducted while co-firing such oil with the appropriate proportion of natural gas required to maintain SO<sub>2</sub> emissions between 90% and 100% of the SO<sub>2</sub> emission limit (i.e., 2.475 to 2.75 lb/MMBtu). Such testing shall be repeated if fuel oil is later fired containing greater than 0.20% sulfur by weight above the sulfur content fired during the most recent co-firing test. The retests shall be conducted as soon as practicable, but in no event more than 60 days after firing the higher sulfur fuel oil. If tests are conducted, then the frequency testing base date shall be reset to 12-months after the date of completing the last tests.

[Rules 62-4.070(3), 62-213.440(1), 62-296.405(1), 62-297.310(7) and 62-297.401, F.A.C.; ASP Number 97-B-01; and AO64-217877]

A.22. Compliance Tests Prior To Renewal. Prior to obtaining a renewed operating permit, the permittee shall conduct stack tests on Unit 3 to demonstrate compliance with the emissions standards for particulate matter and opacity. Except for the test waivers, tests shall be conducted in accordance with the same requirements as the annual tests. The most recent annual compliance test conducted during the 5-year term of the permit may be used to satisfy this requirement. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

#### Recordkeeping and Reporting Requirements.

**A.23.** Not Federally Enforceable. Additive Injection. In the event the tested additive injection rate is exceeded by 10% or more, the permittee shall notify the Compliance Authority in writing within 10 days of the date that the higher rate was initiated. The notification shall include the date the higher injection rate

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

began, the magnitude of the higher rate, and, if applicable, the approximate date by which the higher rate would cease. [AO64-217877]

- A.24. Excess Emissions Malfunctions. 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 (within one working day) 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 permittee's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. In the case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
- A.25. Excess Emissions Reports. Within 30 days following each calendar quarter, the permittee shall submit to the Compliance Authority a written report of emissions in excess of the emissions limiting standards specified in Rule 62-296.405(1), F.A.C. The report shall identify the nature and cause of the excess emissions. This report does not relieve the owner or operator of the legal liability for violations. [Rule 62-296.405(1)(g), F.A.C.]
- A.26. Sulfur Dioxide Emission Report. Within 30 days following a calendar quarter in which fuel oil with more than 2.5% sulfur by weight are received or fired, submit an excess emissions report to the Compliance Authority identifying each period with SO<sub>2</sub> emissions exceeding 2.75 lb/MMBtu based on a 3-hour rolling average. The report shall identify the steps taken to minimize the magnitude and duration of SO<sub>2</sub> emissions during these episodes and any preventative measures implemented to avoid recurrence of these episodes. This report is not required unless SO<sub>2</sub> emissions exceed 2.75 lb/MMBtu based on a 3-hour rolling average. [Rules 62-4.070(3), 62-213.440(1) and 62-213.440(1)b, F.A.C.]
- **A.27.** Electronic Data Report. The Continuous Emissions Monitoring Electronic Data Report shall be submitted quarterly for all applicable parameters pursuant to Subpart F in 40 CFR 75.50. [Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; and 40 CFR 75]
- A.28. On-Specification Used Oil Records. The permittee shall maintain the following records related to the use of on-specification used oil in a form suitable for inspection at the facility by the Compliance Authority the gallons of on-specification used oil burned each month recorded no later than the 15<sup>th</sup> day of the following month in which the used oil is fired; and the date of analysis, the analytical results, the batch quantity fired and the date of firing. [Permit No. AO64-217877; Rules 62-4.070(3), 62-213.410 and 62-213.440(1), F.A.C.]
- A.29. On-Specification Used Oil Usage Report. The owner or operator shall submit with the Annual Operating Report form, a separate listing of the analytical results and the total amount of on-specification used oil burned during the previous calendar year. [Permit No. AO64-217877; Rules 62-4.070(3), 62-213.410 and 62-213.440(1), F.A.C.]
- **A.30.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority.

Report	Reporting Deadline	Related Conditions	
Notification when additive injection rate exceeds the tested rate by 10% or more	Within 10 days of the date that the higher rate was initiated, notify the Compliance Authority in writing. Include the date the higher injection rate began, the magnitude of the higher rate, and, if applicable, the approximate date by which the higher rate would cease.	A.23	
Notification of malfunctions resulting in excess emissions	Within one working day, report excess emissions due to malfunctions to the Compliance Authority.	A.24	

## Subsection A. Electric Utility Steam Generating Unit 3 (EU-001)

Report	Reporting Deadline	Related Conditions
Report of emissions in excess of the standards in Rule 62-296.405(1), F.A.C.	Within 30 days following each calendar quarter, submit an excess emissions report for the calendar quarter to the Compliance Authority.	A.25
Sulfur Dioxide Emission Report	Within 30 days following a calendar quarter in which fuel oil with more than 2.5% sulfur by weight are received or fired, submit an excess emissions report to the Compliance Authority identifying each period with SO <sub>2</sub> emissions exceeding 2.75 lb/MMBtu based on a 3-hour rolling average. Also, identify the problems and a plan of corrective actions.	A.26
CEMS Electronic Data Report	Submit each calendar quarter for all applicable parameters pursuant to Subpart F in 40 CFR 75.50.	A.27
On-Specification Used Oil Usage Report	By April 1st of each year, submit with the Annual Operating Report a separate listing of the analytical results and the total amount of on-specification used oil burned during the previous calendar year.	A.29

See also Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

#### Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

The specific conditions in this subsection apply to the following emissions units.

EII NI	Sanford Combustion Turbines (CT) Unit No. CT No. MW, Shaft		Unfired	Total		
EU No.			MW, Shaft	HRSG	Totai	
Repowered	Combined Cycle Unit No. 4		_			
005	Combined Cycle Combustion Turbine 4A	PSNCT4A	170 MW			
006	Combined Cycle Combustion Turbine 4B	PSNCT4B	170 MW	320 MW	1000 MW	
007	Combined Cycle Combustion Turbine 4C	PSNCT4C	170 MW	320 W W	1000 1717	
008	Combined Cycle Combustion Turbine 4D	PSNCT4D	170 MW			
Repowered	Repowered Combined Cycle Unit No. 5					
009	Combined Cycle Combustion Turbine 5A	PSNCT5A	170 MW			
010	Combined Cycle Combustion Turbine 5B	PSNCT5B	170 MW	320 MW	1000 MW	
011	011 Combined Cycle Combustion Turbine 5C		170 MW	320 W W	1000 MIM	
012	Combined Cycle Combustion Turbine 5D	PSNCT5D	170 MW			

Repowered Unit 4 (EU-005 - EU-008) and Repowered Unit 5 (EU-009 - EU-012) are a "4-on-1" combined cycle combustion turbine systems consisting of four combustion turbines, four unfired heat recovery steam generators (HRSG) and the repowered steam-electrical generator sets. Each combustion turbine is a General Electric Model No. MS7241FA rated at a nominal 170 MW and the repowered steam-electrical generator set is rated at 490 MW. Combined, each set of four HRSG recover enough waste heat to produce a nominal 320 MW of steam-generated power from the repowered steam-electrical set. Each combustion turbine fires natural gas and is equipped with electric fuel heaters to preheat the natural gas for cold startups. When firing natural gas, NO<sub>X</sub> emissions are controlled with dry low-NO<sub>X</sub> combustion technology. Each combustion turbine in repowered Unit 5 is also permitted to fire distillate oil as a restricted alternate fuel. When firing distillate oil, NO<sub>X</sub> emissions are controlled by water injection. Each combustion turbine is equipped with a fogger system to reduce the compressor inlet temperature on hot days, which can increase power generation. In addition, each combustion turbine may operate in a high-temperature peaking mode when firing natural gas to generate additional direct, shaft-driven electrical power to respond to peak demands. Each combustion turbine has a single exhaust stack that is 125 feet tall and 19.0 feet in diameter. Exhaust gases exit the stack with a volumetric flow rate of approximately 1,196,162 acfm at 220° F. Each stack is equipped with a CEMS to measure and record NO<sub>X</sub> emissions.

{Permitting Notes: These emissions units are regulated under: Phase II of the federal Acid Rain Program; NSPS Subpart GG (Standards of Performance for Stationary Gas Turbines) in 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400(PSD), F.A.C. (Permit No. PSD-FL-270); Rule 62-212.400, F.A.C., Best Available Control Technology (BACT) Determinations for volatile organic compounds (VOC).}

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

## **B.1.** Turbine Capacity.

- a. Natural Gas.
  - (1) Base Load. When firing natural gas, the maximum heat input rate is 1776 MMBtu per hour for each combustion turbine. Base load means the load level at which a gas turbine is normally operated.
  - (2) High-Temperature Peaking Mode (HTPM). When firing natural gas and operating in a high-temperature peaking mode, the maximum heat input rate 1838 MMBtu per hour for each combustion turbine. High-temperature peaking load means a computer-controlled increase in the firing temperature with allowing a greater heat input and resulting in a greater generator output. Each gas

#### Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

turbine may operate in a high-temperature peaking mode when firing natural gas to generate additional direct, shaft-driven electrical power to respond to peak demands. {Permitting Note: For the high-temperature peaking mode, the increase in power and heat input rate is about 3.8% at ISO conditions.}

b. Distillate Oil. When firing distillate oil, the maximum heat input rate is 1930 MMBtu per hour for Repowered Unit 5 when firing distillate oil.

The maximum heat input rates are based on 100% load, the higher heating value (HHV) of each fuel, and compressor inlet conditions of 59°F, 60% relative humidity and 14.7 psia. Heat input rates will vary depending upon the compressor inlet conditions and characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other compressor inlet conditions shall be maintained on site. [Rule 62-210.200(PTE), F.A.C., Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC]

- **B.2.** 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.]
- **B.3.** Methods of Operation.
  - a. Fuels.
    - (1) *Primary Fuel*: The primary fuel for each combustion turbine is pipeline natural gas. For the purposes of this subsection of the permit, "pipeline natural gas" means natural gas with a sulfur content of less than 20 grains per 100 scf that is provided by the natural gas pipeline transmission company.
    - (2) Restricted Alternate Fuel. When natural gas is not available, the permittee is authorized to fire up to 28,600,000 gallons per year of distillate fuel oil in the combustion turbines (total combined) associated with repowered Unit 5 (EU-009 EU-012). The distillate oil shall have a maximum sulfur content of 0.05% by weight.
  - b. Loads.
    - (1) Base Load. Base load means the load level at which a gas turbine is normally operated.
    - (2) HTPM. Each combustion turbine shall operate in HTPM for no more than 400 hours during any consecutive 12 months of operation.
- **B.4.** Hours of Operation. Subject to the conditions of this permit, the combustion turbines may operate continuously (8760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC]

#### Control Technology and Techniques.

- **B.5.** <u>Dry Low-NOx Combustion.</u> Consistent with normal operation and maintenance practices, the permittee shall operate and maintain the dry low-NO<sub>X</sub> combustion system to minimize CO and NO<sub>X</sub> emissions. [Rules 62-4.070(3) and 62-210.650, F.A.C.; and Permit No. 1270009-004-AC (PSD-FL-270)]
- **B.6.** Water-to-Fuel Ratio Monitoring. The permittee shall operate and maintain a water injection system to reduce NO<sub>X</sub> emissions on each combustion turbine permitted to fire distillate oil. The permittee shall operate the system at a water-to-fuel injection rate that ensures compliance with the applicable NO<sub>X</sub> standards when firing distillate oil. [Rules 62-4.070(3) and 62-210.650, F.A.C.; and Permit No. 1270009-004-AC (PSD-FL-270)]
- **B.7.** 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

## Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C. and Permit No. 1270009-004-AC (PSD-FL-270)]

#### Emission Limitations and Standards.

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

Unless otherwise specified, the averaging times for the following emissions standards are based on the averaging time specified in the applicable test method.

**B.8.** Emission Limitations for Firing Natural Gas. Each combustion turbine (EU-005 through EU-012) shall comply with the following emissions standards.

Pollutant <sup>a</sup>	Mode	Emissions Standards
	Base Load	≤ 12 ppmvd @ 15% O <sub>2</sub> as determined by EPA Method 10
СОр		≤ 43 lb/hour (ISO conditions) as determined by EPA Method 10
CO	НТРМ	≤ 9 ppmvd @ 15% O <sub>2</sub> as determined by EPA Method 10
		≤ 29 lb/hour (ISO conditions) as determined by EPA Method 10
	Base Load <sup>c</sup>	≤ 9 ppmvd @ 15% O <sub>2</sub> , 30-day rolling CEMS average
		≤ 65 lb/hour (ISO conditions) as determined by EPA Method 7E or 20
$NO_X$	HTPM <sup>d</sup>	≤ 15 ppmvd @ 15% O <sub>2</sub> , 24-hour block CEMS average
		≤ 102 lb/hour (ISO conditions) as determined by EPA Method 7E or 20
	NSPS Subpart GG e	≤ 75 ppmvd @ 15% O₂ (ISO conditions), 4-hour rolling CEMS average
PM/PM <sub>10</sub> f	All Modes	Visible emissions shall not exceed 10% opacity as determined by EPA Method 9.
SO <sub>2</sub> <sup>g</sup>	All Modes	SO <sub>2</sub> emissions shall be minimized by firing natural gas as the primary fuel.
_	Base Load	≤ 1.4 ppmvd as determined by EPA Methods 18 or 25A
VOC <sup>b</sup>		≤ 2.9 lb/hour (ISO conditions) as determined by EPA Methods 18 or 25A
VOC	TATED) (	$\leq$ 1.4 ppmvd as determined by EPA Methods 18 or 25A
	НТРМ	≤3 lb/hour (ISO conditions) as determined by EPA Methods 18 or 25A

- a. Pollutant Control Technologies. CO and VOC emissions are minimized by the efficient combustion of natural gas. NO<sub>X</sub> emissions are minimized by dry low-NO<sub>X</sub> combustion technology when firing natural gas. PM/PM<sub>10</sub> and SO<sub>2</sub> are minimized by the firing of natural gas, which contains negligible amounts of ash and sulfur.
- b. Stack Tests. Compliance with the CO and VOC emissions standards shall be demonstrated by conducting three, 1-hour test runs in accordance with the applicable method. Compliance tests conducted at base load conditions also demonstrate compliance at HTPM conditions. The permittee satisfied the permit requirement to conduct initial stack tests (only) at base load conditions to determine compliance with the VOC standard.
- c. Normal and Base Load NO<sub>X</sub> Standard. The permittee satisfied the permit requirement to conduct initial stack tests to determine compliance with the mass emissions rate standards (lb/hour). Continuous compliance with the concentration-based NO<sub>X</sub> emission limit when firing natural gas under normal and base load conditions shall be demonstrated with data based on a 30-day rolling average from a CEMS certified pursuant to 40 CFR 75. A separate compliance determination shall be made at the end of each

## Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

operating day and a new 30-day rolling average rate shall be calculated from the arithmetic average of all valid hourly CEMS emission rates determined during the previous 30 operating days. Valid hourly emission rates shall not include periods of startup, shutdown or malfunction. CEMS data collected during HTPM conditions shall be excluded from the demonstration of compliance with this 30-day rolling CEMS average. When NO<sub>x</sub> monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 30-day rolling average.

- d. HTPM NO<sub>X</sub> Standard. The permittee satisfied the permit requirement to conduct initial stack tests to determine compliance with the mass emissions rate standards (lb/hour). Continuous compliance with the concentration-based NO<sub>X</sub> emission limit when firing natural gas under HTPM conditions shall be demonstrated with data based on a 24-hour block average from a CEMS certified pursuant to 40 CFR 75. A separate compliance determination shall be made at the end of each operating day. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block.
- e. NSPS Subpart GG NO<sub>X</sub> Standard. The permittee satisfied the permit requirement to conduct initial stack tests to determine compliance with the NSPS Subpart GG standard. Excess emissions shall now be reported based on a 4-hour rolling average NO<sub>X</sub> concentration from a CEMS certified pursuant to 40 CFR 75. Pursuant to 40 CFR 60.334, "... a "4-hour rolling average NO<sub>X</sub> concentration" is the arithmetic average of the average NO<sub>X</sub> concentration measured by the CEMS for a given hour (corrected to 15% O<sub>2</sub> and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO<sub>X</sub> concentrations immediately preceding that unit operating hour. However, the missing data substitution methodology provided in Subpart D of 40 CFR Part 75 is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data shall be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c). Upon request from Department, the CEMS emission rates for NO<sub>X</sub> shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332.
- f. Opacity Standard. The opacity standard serves as a surrogate standard for minimizing PM/PM<sub>10</sub> emissions.
- g. Fuel Specifications. The firing of natural gas as the primary fuel serves as surrogate standard for minimizing SO<sub>2</sub> emissions.

[Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC; Rules 62-204.800(7)(b) and 62-212.400, F.A.C; NSPS Subpart GG in 40 CFR 60; and 40 CFR 75]

**B.9.** Emission Limitations for Firing Distillate Oil. Each combustion turbine authorized to fire distillate oil (EU-009 through EU-012) shall comply with the following emissions standards.

Pollutant a	Mode	Emissions Standards	
СОр	Base Load	20 ppmvd @ 15% O2 as determined by EPA Method 10	
		71.6 lb/hour (ISO conditions) as determined by EPA Method 10	
	D I I C	42 ppmvd @ 15% O <sub>2</sub> , 24-hour block CEMS average	
NO <sub>X</sub>	Base Load <sup>c</sup>	355 lb/hour (ISO conditions) as determined by EPA Method 7E or 20	
	NSPS Subpart GG d	110 ppmvd @ 15% O <sub>2</sub> (ISO conditions), 4-hour rolling CEMS average	
PM/PM <sub>10</sub> e	Base Load	Visible emissions shall not exceed 20% opacity as determined by EPA Method9.	

## Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

Pollutant a	Mode	Emissions Standards
SO <sub>2</sub> f	Base Load	SO <sub>2</sub> emissions are minimized by complying with the fuel specifications.
VOC <sup>b</sup>	Base Load	7 ppmw as determined by EPA Methods 18 or 25A
VOC		16.1 lb/hour as determined by EPA Methods 18 or 25A

- a. Pollutant Control Technologies. CO and VOC emissions are minimized by the efficient combustion of distillate oil. NO<sub>X</sub> emissions are minimized by water injection when firing distillate oil. PM/PM<sub>10</sub> and SO<sub>2</sub> are minimized by the restricted firing of distillate oil, which contains minor amounts of ash and sulfur.
- b. Stack Tests. Compliance with the CO and VOC emissions standards shall be demonstrated by conducting three, 1-hour test runs in accordance with the applicable method. The permittee satisfied the permit requirement to conduct initial stack tests (only) at base load conditions to determine compliance with the VOC standard.
- c. Normal and Based Load NO<sub>X</sub> Standard. The permittee satisfied the permit requirement to conduct initial stack tests to determine compliance with the mass emissions rate standards (lb/hour). Continuous compliance with the NO<sub>X</sub> emission limit when firing distillate oil shall be demonstrated with data based on a 24-hour block average from a CEMS certified pursuant to 40 CFR 75. A separate compliance determination shall be made at the end of each operating day. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block.
- d. NSPS Subpart GG NO<sub>X</sub> Standard. The permittee satisfied the permit requirement to conduct initial stack tests to determine compliance with the NSPS Subpart GG standard. Continuous compliance with the NSPS Subpart GG NO<sub>X</sub> emissions standard when firing distillate oil shall be demonstrated by data collected from a CEMS certified pursuant to 40 CFR 75. Excess emissions shall be reported based on a 4-hour rolling average NO<sub>X</sub> concentration. Pursuant to 40 CFR 60.334, "... a "4-hour rolling average NO<sub>X</sub> concentration" is the arithmetic average of the average NO<sub>X</sub> concentration measured by the CEMS for a given hour (corrected to 15% O<sub>2</sub> and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO<sub>X</sub> concentrations immediately preceding that unit operating hour. However, the missing data substitution methodology provided in Subpart D of 40 CFR Part 75 is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data shall be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c). Upon request from Department, the CEMS emission rates for NO<sub>X</sub> shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>X</sub> standard established in 40 CFR 60.332.
- e. Opacity Standard. The opacity standard serves as a surrogate standard for minimizing PM/PM<sub>10</sub> emissions.
- f. Fuel Specifications. The restricted firing of distillate oil meeting the fuel sulfur specifications of this permit serves as surrogate standard for minimizing SO<sub>2</sub> emissions.

[Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC; Rules 62-212.400 and 62-204.800(7)(b), F.A.C.; and NSPS Subpart GG in 40 CFR 60; and 40 CFR 75]

#### Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

#### **Emissions Cap.**

- **B.10.** Facility-wide Emission Caps. The entire facility (including Unit 3 and repowered Units 4 and 5) shall be limited to emission caps of 500 tons per year of particulate matter (PM/PM<sub>10</sub>), 4500 tons per year of NO<sub>X</sub> and 4000 tons per year of SO<sub>2</sub>. The emissions caps become effective in 2003, following the initial startup, testing and commencement of commercial operation of repowered Units 4 and 5.
  - a. For the purpose of complying with the facility-wide emission cap, PM/PM<sub>10</sub> emissions shall be calculated as follows:

Facility-wide Particulate Matter Emissions ( $PM_{Total}$ ) = Unit 3 PM emissions ( $PM_3$ ) + Unit 4 PM emissions ( $PM_4$ ) + Unit 5 PM emissions ( $PM_5$ ), where:

$$PM_3 = PM_{3oil} + PM_{3gas}$$

PM<sub>3oil</sub> = Annual oil heat input (MMBtu) x normalized annual stack test results (Fp), where:

Fp = [(steady state PM test result x 16 hours) + (soot blowing PM test result x 8 hours)]/24 hrs

PM<sub>3eas</sub> = Annual gas operation heat input (MMBtu) x 0.0076 lb/MMBtu

 $PM_4$  = annual heat input (MMBtu) x 0.006 lb/MMBtu

 $PM_5 = PM_{5eas} + PM_{5oil}$ 

 $PM_{Seas}$  = annual gas operation heat input (MMBtu) x 0.006 lb/MMBtu

PM<sub>5oil</sub> = annual oil operation heat input (MMBtu) x 0.01 lb/MMBtu

- b. For the purpose of complying with the facility-wide emission cap, NO<sub>X</sub> emissions shall be calculated by annually summing the data collected in the CEMS required by Title IV of the Clean Air Act.
- c. For the purpose of complying with the facility-wide emission cap, SO<sub>2</sub>emissions shall be calculated by annually summing the data collected in the CEMS required by Title IV of the Clean Air Act.

[Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 1270009-004-AC]

## **Excess Emissions - Federal Provisions.**

**B.11.** Requirement to Minimize Emissions. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

#### **Excess Emissions - State Requirements.**

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

- **B.12.** <u>Definitions.</u> The state regulations define startup, shutdown and malfunction as follows:
  - a. Startup is the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
  - b. Shutdown is the cessation of the operation of an emissions unit for any purpose.
  - c. *Malfunction* is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

#### Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

[Rule 62-210.200(Definitions), F.A.C.]

- **B.13.** Allowable Excess Emissions. Subject to the following conditions, excess emissions resulting from startup, shutdown and malfunction of the combustion turbines shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized.
  - a. Except during "cold startup to combined cycle operation", "shutdown from combined cycle operation" or startup of the steam turbine system, excess emissions occurrences shall not exceed two hours in any 24-hour period.
  - b. Cold startup to combined cycle operation is defined as operation when the HRSG high-pressure drum has been below 450 psig for at least one hour. During cold startup to combined cycle operation, up to four hours of excess emissions are allowed.
  - c. During shutdown from combined cycle operation, up to three hours of excess emissions are allowed.
  - d. During cold startup of the steam turbine system (combustion turbines, HRSG and steam turbine electrical generator), up to 12 hours per combustion turbine per cold startup of the steam turbine system are allowed. Cold startup of the steam turbine system shall be completed within 12 hours.
  - e. Subject to the following conditions, the Department authorizes limited periods of excess emissions resulting from tuning of the dry low-NO<sub>x</sub> combustion systems and/or full speed no load (FSNL) testing:
    - (1) The permittee notifies the Compliance Authority for each day that tuning or FSNL testing is required;
    - (2) The duration of excess emissions shall not exceed 15 hours for the entire tuning period or entire FSNL test period; and
    - (3) The permittee submits a report to the Compliance Authority summarizing the hourly NO<sub>X</sub> emissions during the tuning period or FSNL test period.
    - (4) This authorization does not waive any applicable federal requirements of NSPS Subparts A or GG.

[Rules 62-210.700(1) and 62-4.130, F.A.C.; Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-008-AC]

**B.14.** Excess Emissions Prohibited. Excess emissions 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. [Rule 62-210.700(4), F.A.C.]

#### Monitoring of Operations.

- **B.15.** Natural Gas Monitoring Schedule. The permittee may use the following approved custom monitoring schedule for natural gas or following the requirements in 40 CFR 60.334(b)(2).
  - a. The permittee shall use a primary fuel of pipeline natural gas with a maximum sulfur content less than 20 grains per 100 scf pursuant to 40 CFR 75.11(d)(2).
  - b. The permittee shall monitor SO<sub>2</sub> emissions from each combustion turbine using methods consistent with the requirements of 40 CFR 75 and certified by the U.S. EPA.
  - c. This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as the primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 75 and Permit No. 1270009-004-AC (PSD-FL-270)]

**B.16.** Fuel Oil Monitoring Schedule. For each bulk shipment of distillate oil received, the permittee shall obtain an analysis from the fuel vendor identifying the sulfur content and nitrogen content of the fuel. The vendor analysis shall also specify the methods by which the analyses were conducted. The fuel sulfur content

## SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

# Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

shall be determined by the methods (or equivalent methods) specified in 40 CFR 60.335(d). See Appendix GG. [Permit No. 1270009-004-AC (PSD-FL-270)]

**B.17.** Water-to-Fuel Ratio Monitoring. The permittee shall continuously monitor and record the water-to-fuel injection rate for each combustion turbine when firing distillate oil. Data from the water-to-fuel monitoring system shall be used to demonstrate compliance with the NO<sub>X</sub> standards for oil firing when the CEMS is down or otherwise unavailable. [Rule 62-4.070(3), F.A.C.]

# Continuous Monitoring Requirements.

B.18. NOx CEMS. The permittee shall install, certify, operate and maintain a CEMS in the stack to measure and record NO<sub>X</sub> emissions from each combustion turbine in accordance with the requirements of Rule 62-297.520, F.A.C., 40 CFR 60.334(b)(3)(iii) and 40 CFR 75. At the request of the Department, the NO<sub>X</sub> CEMS emission data shall be corrected to ISO conditions to demonstrate compliance with the NSPS Subpart GG standard established in 40 CFR 60.332. Except for system breakdowns, repairs, calibration checks, and zero and required span adjustments, the CEMS shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>X</sub> concentrations are obtained at least 15 minutes apart. See Appendix GG of this permit. [Permit No. 1270009-004-AC (PSD-FL-270); Rule 62-297.520, F.A.C.; NSPS Subpart GG in 40 CFR 60; and 40 CFR 75]

# Test Methods and Procedures.

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

**B.19.** Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7, 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.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
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
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

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. [Rule 62-213.440, 62-296.405, 62-297.401, F.A.C., and Application No. 1270009-018-AV]

- **B.20.** 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.]
- **B.21.** Annual Compliance Tests Required. During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), each combustion turbine shall be tested on each fuel to demonstrate compliance with the standards for CO and visible emissions. For each CO test run, the permittee shall report the NO<sub>X</sub> emissions as determined by the

# SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

# Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

- CEMS. Annual CO testing may be conducted at less than capacity when compliance testing is conducted concurrent with the annual NO<sub>X</sub> RATA, which is performed pursuant to 40 CFR 75. For the visible emissions compliance test under HTPM conditions, only one representative combustion turbine must be tested. [Rule 62-297.310(7), F.A.C.; and Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC]
- B.22. Compliance Tests Prior To Renewal. Prior to obtaining a renewed operating permit, each combustion turbine shall be tested on each fuel to demonstrate compliance with the standards for CO and visible emissions. For each CO test run, the permittee shall report the NO<sub>X</sub> emissions as determined by the CEMS. For the visible emissions compliance test under HTPM conditions, only one representative combustion turbine must be tested. The most recent annual compliance test conducted during the 5-year term of the permit may be used to satisfy this requirement. [Rule 62-297.310(7), F.A.C.; and Permit Nos. 1270009-004-AC (PSD-FL-270) and 1270009-009-AC]

# Recordkeeping and Reporting Requirements.

- **B.23.** Excess Emissions Malfunction Notification.
  - (a) 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. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
  - (b) 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 (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
- **B.24.** Reporting Excess NOx Emissions State Standards. Within one working day of discovery, the permittee shall notify the Compliance Authority of actual NO<sub>x</sub> emissions determined by the CEMS exceeding the 24-hour block average or the 30-day rolling average. A written report explaining the exceedance shall be submitted to the Compliance Authority within three working days (letter, facsimile or electronic mail). If requested, a full written report shall be submitted identifying the exceedance, the cause and the action taken to regain compliance with the emissions standard. [Rule 62-4.070(3), F.A.C.]
- **B.25.** Reporting Excess NOx Emissions NSPS Subpart GG. Within 30 days following each 6-mmonth reporting period, the permittee shall submit the "Excess Emissions and Monitoring System Performance Reports" to report excess emissions in accordance with 40 CFR 60.334(j) in NSPS Subpart GG and 40 CFR 60.7(c) based on NO<sub>X</sub> data collected from the required CEMS. For oil firing, data from the water-to-fuel monitoring system shall be used when the NO<sub>X</sub> CEMS is down or otherwise unavailable. [Permit No. 1270009-004-AC (PSD-FL-270)]
- **B.26.** Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority.

Report	Reporting Deadline	Related Conditions
emissions resulting from	If excess emissions due to malfunction occur, notify the Compliance Authority within one working day of the cause of the excess emissions and the actions taken to correct the problem.	B.23
Reporting excess NOx	Within one working day, report emissions in excess of the	B.24

# SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

# Subsection B. Repowered Combined Cycle Units 4 and 5 (EU-005 to EU-012)

Report	Reporting Deadline	Related Conditions
emissions (state standards)	24-hour block average or the 30-day rolling average.	
Reporting excess NOx emissions (NSPS Subpart GG)	Within 30 days following each 6-month reporting period, report emissions in excess of NSPS Subpart GG	B.25

{Permitting Note: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.}

# SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS.

# Subsection C. Miscellaneous Engines (EU-004)

# Subsection C. The specific conditions in this subsection apply to the following emissions units.

EU No.	Brief Description	
004	Miscellaneous Engines	

Table C-1: The following engines are currently on site.

Engine	Qty.	In-Service Date	Engine Displacement	Engine Model Year	Rating	Rule Applicability
Diesel Emergency Generator	1	1972			670 bHP	NESHAP Subparts A and ZZZZ
Propane Spark Ignition Emergency Generator	2	2009	1.6 litre	2006	33.5 ЬНР	NESHAP Subparts A and ZZZZ

# New Source Performance Standards.

{Permitting Note: The two 33.5 bHP spark ignition emergency generators identified above in Table C-1 were manufactured in 2006. Pursuant to 40 CFR 60.4230, an engine manufactured prior to January 1, 2009 is not subject to NSPS Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines).}

# National Emission Standards for Hazardous Air Pollutants.

# C.1. NESHAP Subpart ZZZZ:

- a. The 670 bHP diesel-fired generator engine is an existing unit as defined by NESHAP Subpart ZZZZ; however, there are no unit-specific applicable requirements at this time.
- b. The two propane-fired spark ignition emergency generators (33.5 bHP) are new units as defined by NESAHP Subpart ZZZZ. Pursuant to 40 CFR63.6590, these units comply with NESHAP Subpart ZZZZ by complying with NSPS Subpart JJJJ. However, there are no requirements for these units in NSPS Subpart JJJJ.

Florida Power and Light Company Sanford Power Plant ORIS Code No. 0620

The emissions units listed below are regulated under Phase II of the federal Acid Rain Program.

EU No.	EPA Unit No.	Brief Description
001	PSN 3	Electric Utility Steam Generating Unit 3
002	PSN 4	Electric Utility Steam Generating Unit 4 (Retired)
003	PSN 5	Electric Utility Steam Generating Unit 5 (Retired)
005	SNCT4A	Combined Cycle Combustion Turbine Unit 4A
006	SNCT4B	Combined Cycle Combustion Turbine Unit 4B
007	SNCT4C	Combined Cycle Combustion Turbine Unit 4C
008	SNCT4D	Combined Cycle Combustion Turbine Unit 4D
009	SNCT5A	Combined Cycle Combustion Turbine Unit 5A
010	SNCT5B	Combined Cycle Combustion Turbine Unit 5B
011	SNCT5C	Combined Cycle Combustion Turbine Unit 5C
012	SNCT5D	Combined Cycle Combustion Turbine Unit 5D

{Permitting Note: Emissions Units 002 and 003 are permanently shut down, dismantled and removed from the site. Previously, the permittee submitted the appropriate Retired Emissions Units Acid Rain forms.}

- 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 following application: DEP Form No. 62-210.900(1)(a), F.A.C. dated 01/15/2009 and received 09/24/2009. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- A.2. <u>Sulfur dioxide (SO<sub>2</sub>) Emission Allowances</u>. SO<sub>2</sub> 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.]

# **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.

This submission is:	New	☐ Revised	Renewal

STEP 1

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

		1
		0620
Plant name Sanford	State Florida	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 SO<sub>2</sub> Opt-in units, enter the requested Information in columns "d" and "e."

	a	ь	С	d	е
n	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 <sub>2</sub> Opt-in Units Commence Operation Date	New or SO <sub>2</sub> Opt-in Units  Monitor Certification Deadline
	PSN3	NO	Yes	N/A	N/A
	PSN4	NO	Yes	N/A	N/A
	PSN5	NO	Yes	N/A	N/A
	PSNCT4A	NO	Yes	N/A	N/A
	PSNCT4B	NO	Yes	N/A	N/A
	PSNCT4C	NO	Yes	N/A	N/A
	PSNCT4D	NO	Yes	N/A	N/A
	PSNCT5A	NO	Yes	N/A	N/A
	PSNCT5B	NO	Yes	N/A	N/A
	PSNCT5C	NO	Yes	N/A	N/A
1	PSNCT5D	NO_	Yes	N/A	N/A
			Yes		

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

Plant Name (from STEP 1) Sanford

#### STEP 3

#### Read the standard requirements.

#### Acid Rain Part 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;

  (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and (ii) Have an Acid Rain Part.

#### Monitoring Regulrements.

- The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shell 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 SO<sub>2</sub> Opt-in unit, a monitoring plan for each SO<sub>2</sub> Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO<sub>2</sub> 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: The owners and operators of sector source and sector Actor Rain with at the source shall.
   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 Actd 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 sultrut dioxide for the previous calendar year from the unit; and
   Comply with the applicable Actd Rain emissions limitations for sultry dioxide.
   Each ton of sultrut dioxide emitted in excess of the Actd Rain emissions limitations for sultrut dioxide shall constitute a separate violation of
- An Acid Rein 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 tater 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 emong Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (6) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

  (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rein Part, or an exemption under 40 CFR 72.7 or 72.6 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

  (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

# Excess Emissions Requirements,

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as
- The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:

  (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and

  (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP;
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documer that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that that demonstrate the drun of the statements in the certificate of representation, in accordance with Rule 8-2-21-350, 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 recordiscepting, 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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#### STEP 3. Continued.

#### Recordkeeping and Reporting Requirements (cont)

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

#### Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Acit.

  (2) Any person who knowingly makes a lates, 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 Acid and 18 U.S.C. 1001.

  (3) No permit revision shall excuse any widebion of the requirements of the Acid Rain Program that occure prior to the date that the revision takes effect.

- 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 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.15, 71.7, and 75.19, the owners and operators or the designated representative of an Acid Rain unit shall not be listila for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative.

  (7) Exch violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operators or the designated representative of such source or unit, shall be a separate violation of the Acid.

#### Effect on Other Authorities.

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

- construed as:

  (1) Except as expressly provided in Bile 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 Rein unit from compliance with any other provision of the Act, including the provisions of the 1 of the Act retains to applicable Netional Ambient Air Quality Standards or State implementation Plans;

  (2) Limiting the number of stayuances a unit can hold, provided, that the number of allowances held by the unit shall not affect the source's
- (2) Limining the number of autovances a unit can now, provided, that the number of allowances never by the time shall not affect the active obligation be comply with any other provisions of the Act;

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

  (4) Modifying the Federal Power Act or effecting 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 SO<sub>2</sub> Opt-in units only.

in column "f" enter the unit ID# for every SO<sub>2</sub> 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 .	9	h (not required for renewal application)
	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
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	Plant Name (from ST	EP 1) Sanford				
STEP 5	i	j	k	1	m	n
For SO <sub>2</sub> Opt-In units only. (Not required for SO <sub>2</sub> Opt-in renewal applications.) In column "i" enter the unit ID# for	Unit IO#	Baseline or Alternative Baseline under 40 CFR 74.20 . (mmBtu)	Actual SO <sub>2</sub> Emissions Rate under 40 CFR 74.22 (lbs/mmBlu)	Allowable 1985 SO <sub>2</sub> Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO <sub>2</sub> Emissions Rate under 40 CFR 74.24 (lbs/mm8tu)	Current Promulgated SO <sub>2</sub> Emissions Rate under 40 CFR 74.25 (lbs/mmBlu)
every SO <sub>2</sub> Opt-in unit identified in column "a" (and in column "f").		· · · · · · · · · · · · · · · · · · ·	(lostimista)	(Joshin Day	(iosimmota)	,
For columns "j" through "n," enter the Information required under 40 CFR 74.20-74.25 and attach all						
supporting documentation required by 40 CFR						
74.20-74.25.						
STEP 6  For SO <sub>2</sub> Opt-In units only.  Attach additional requirements, certify and sign.	<ul> <li>A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.</li> <li>B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.</li> <li>C. A statement that the combustion unit Is not an affected unit under 40 CFR 72.5 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.</li> <li>D. Attach a complete compliance plan for SO<sub>2</sub> under 40 CFR 72.40.</li> <li>E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).</li> <li>F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."</li> </ul>					
	Signature (	MULLUNOS	$\sim$	Date	1/15/09	
STEP 7	<u> </u>	designated representa	ative or alternate	designated repres	entative only)	
Read the certification statement; provide name, title, owner company name,				ents and information su or obtaining the informa am aware that there are	bmitted in this tion, I certify that the significant penalties	
phone, and e-mail address; sign, and date.	Name Shella M Wilkinson Title PGD Technical Services General Manager					
	Owner Company Name Florida Power & Light					
	Phone 561-691-2287 E-mail address Shella.M.Wilkinson@fpl.com					
	Signature	Smilin	Woo	Date	1/15/09	
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Florida Power and Light Company Sanford Power Plant ORIS Code No. 0620

The following emissions units are regulated under the Clean Air Interstate Rule.

EU No.	EPA Unit No.	Brief Description
001	PSN 3	Electric Utility Steam Generating Unit 3
002	PSN 4	Electric Utility Steam Generating Unit 4 (Retired)
003	PSN 5	Electric Utility Steam Generating Unit 5 (Retired)
005	SNCT4A	Combined Cycle Combustion Turbine Unit 4A
006	SNCT4B	Combined Cycle Combustion Turbine Unit 4B
007	SNCT4C	Combined Cycle Combustion Turbine Unit 4C
800	SNCT4D	Combined Cycle Combustion Turbine Unit 4D
009	SNCT5A	Combined Cycle Combustion Turbine Unit 5A
010	SNCT5B	Combined Cycle Combustion Turbine Unit 5B
011	SNCT5C	Combined Cycle Combustion Turbine Unit 5C
012	SNCT5D	Combined Cycle Combustion Turbine Unit 5D

{Permitting Note: Emissions Units 002 and 003 are permanently shut down, dismantled and removed from the site.}

1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated March 16, 2008, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

# Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

	This submission is:	Revised	Renewal		
STEP 1  Identify the source by plant name and ORIS or EIA plant code	Plant Name: Sanford			State: Florida	ORIS or EIA Plant Code:

# STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source

In columns "b," "c," and "d," indicate to which CAIR program(s each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

_						
	a	b	С	đ	е	f
e R		Unit will hold nitrogen oxides (NO <sub>x</sub> )	Unit will hold sulfur dioxide (SO <sub>2</sub> )	Unit will hold NO <sub>X</sub> Ozone Season	New Units	New Units
è.		allowances in accordance with 40 CFR	allowances in accordance with 40 CFR	allowances in accordance with 40 CFR	Expected Commence Commercial	Expected Monitor Certification
ŀ	Unit ID#	96.106(c)(1)	96.206(c)(1)	96.306(c)(1)	Operation Date	Deadline
3)	PSN 3	х	X	х		
<b>'</b> [	PSN 4	x	х	×		
	PSN 5	x	X	х		
ne [	SNCT4A	х	x	х		
	SNCT4B	x	x	x		
	SNCT4C	х	х	x		
	SNCT4D	x	x	x		
	SNCT5A	X	x	х		
	SNCT5B	х	х	_x		
	SNCT5C	x	Χ΄.	x		
	SNCT5D	х	х	х		
				_		

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#### STEP 3

Plant Name (from STEP 1) Sanford

## Read the standard requirements.

# CAIR NO<sub>X</sub> ANNUAL TRADING PROGRAM

#### CAIR Part Requirements.

- The CAIR designated representative of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall:
  (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rute 62-296.470, F.A.C., In accordance with the adlines specified in Rule 62-213.420, F.A.C.; and
- The owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR

#### Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordiceping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-298.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO<sub>x</sub> source with the following CAIR NO<sub>x</sub> Emissions Requirements.

#### NO<sub>x</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> ellowances available for compliance deductions for the control period under 40 CFR 98.154(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as
- 40 CHR 98.154(a) in an amount not less than the tons or total NO<sub>X</sub> emissions for the control period from all CAIR NO<sub>X</sub> units at the source, as determined in accordance with 40 CFR Part 98, Subpart HH.

  (2) A CAIR NO<sub>X</sub> unit shall be subject to the requirements under paragraph (1) of the NO<sub>X</sub> Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 98.170(b)(1) or (2) and for each control period thereafter.

  (3) A CAIR NO<sub>X</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>X</sub> Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>X</sub> allowance was allocated.

  (4) CAIR NO<sub>X</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>X</sub> Allowance Tracking System accounts in
- (a) CAIR NO<sub>X</sub> allowances snain be nein in, evoluced into in, or definition of all other into or allow over the CAIR NO<sub>X</sub> allowance is a limited authorization to emit one ton of NO<sub>X</sub> in accordance with the CAIR NO<sub>X</sub> annual Trading Program. No provision of the CAIR NO<sub>X</sub> annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

  (7) Upon recordation by the Administrator under 40 CFR Part 98, Subpart EE, FF, or GG, every attocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR

#### Excess Emissions Requirements.

- If a CAIR NO<sub>X</sub> source emits NO<sub>X</sub> during any control period in excess of the CAIR NO<sub>X</sub> emissions limitation, then:
  (1) The owners and operators of the source and each CAIR NO<sub>X</sub> unit at the source shall surrender the CAIR NO<sub>X</sub> allowances required for
- doduction under 40 CFR 98, 154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and
  (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 98, Subpart AA,
- the Clean Air Act, and applicable state law.

## Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>X</sub> source and each CAIR NO<sub>X</sub> 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 before the end of 5 years, in writing by the DEP or the Administrator.

  (i) The certificate of representation under 40 CFR 98.113 for the CAIR designated representative for the source and each CAIR NO<sub>X</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under 40 CFR 98.113 changing the CAIR designated representative.

  (ii) All emissions monitoring information, in accordance with 40 CFR Part 98, Subpart HH, of this part, provided that to the extend that 40 CFR Part 98, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

  (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>X</sub> Annual Trading Program.
- Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NOx Annual Trading Program or to
- (v) Copies or all documents used to employee a CAIR FAIR Term and any other submission of the CAIR NO<sub>x</sub> Annual Trading Program.

  (2) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> until at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, including those under 40 CFR Part 98, Subpart HH.

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Plant Name (from STEP 1) Sanford

#### STEP 3. Continued

# Liability.

- (1) Each CAIR NO<sub>X</sub> source and each CAIR NO<sub>X</sub> unit shall meet the requirements of the CAIR NO<sub>X</sub> Annual Trading Program.
  (2) Any provision of the CAIR NO<sub>X</sub> Annual Trading Program that applies to a CAIR NO<sub>X</sub> source or the CAIR designated representative of a CAIR NO<sub>X</sub> source shall also apply to the owners and operators of such source and of the CAIR NO<sub>X</sub> units at the source.
  (3) Any provision of the CAIR NO<sub>X</sub> Annual Trading Program that applies to a CAIR NO<sub>X</sub> unit or the CAIR designated representative of a CAIR
- NO<sub>x</sub> unit shall also apply to the owners and operators of such unit.

#### Effect on Other Authorities.

No provision of the CAIR NO<sub>X</sub> Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 98.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>X</sub> source or CAIR NO<sub>X</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### CAIR SO<sub>2</sub> TRADING PROGRAM

#### CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall:
  (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 98.222 and Rule 62-296.470, F.A.C., In accordance with the adlines specified in Rule 82-213.420, F.A.C.; and (ii) (Reserved):
- The owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 98, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

# Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO<sub>2</sub> source and each SO<sub>2</sub> CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO<sub>2</sub> source with the following CAIR SO<sub>2</sub> Emission Requirements.

#### SO<sub>2</sub> Emission Regulrements

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tennage equivalent in CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total suffur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.

  (2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control
- period increaliter.

  (3) A CAIR SO, allowances shall be held in, deducted from, or transferred into or among CAIR SO, allowances was allocated.

  (4) CAIR SO, allowances shall be held in, deducted from, or transferred into or among CAIR SO, allowance Tracking System accounts in
- (a) CARS SO, ellowances shall be need in, deducted from, or transferred into or among CARS SO<sub>2</sub> Anowance tracking system accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.

  (6) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit suffur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

  (7) Upon recordation by the Administrator under 40 CFR Part 98, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO<sub>2</sub> unit.

#### Excess Emissions Requirements.

- If a CAIR SO<sub>2</sub> source emits SO<sub>2</sub> during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

  (1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA. the Clean Air Act, and applicable state law.

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#### Recordkeeping and Reporting Requirements.

#### STEP 3, Continued

- (1) Unless otherwise provided, the owners and operators of the CAIR SO2 source and each CAIR SO2 unit at the source shall keep on site at the
- (i) 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 before the end of 5 years, in writing by the Department or the Administrator.

  (i) The certificate of representation under 40 CFR 98.213 for the CAIR designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under 40 CFR 96.213 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

  (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO<sub>2</sub> Trading

- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR SO<sub>2</sub> Trading Program. (2) The CAIR designated representative of a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> until at the source shall submit the reports required under the CAIR SO<sub>2</sub> Trading Program, including those under 40 CFR Part 98, Subpart HiHI.

- (1) Each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program.
  (2) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and of the CAIR SO<sub>2</sub> units at the source.
  (3) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.

#### Effect on Other Authorities.

No provision of the CAIR SO<sub>2</sub> Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### CAIR NO. OZONE SEASON TRADING PROGRAM

#### CAIR Part Requirements.

- The CAIR designated representative of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall: (f) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213,420, F.A.C.; and
- The owners and operators of each CAIR NOx Ozono Season source required to have a Title V operating permit or all construction permit. and each CAIR NO<sub>X</sub> Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

#### Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296,470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO<sub>X</sub> Ozone Season source with the following CAIR NO<sub>X</sub> Ozone Season Emissions Requirements.

#### NO<sub>x</sub> Ozone Season Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>X</sub> Ozone Season source and each CAIR NO<sub>X</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>X</sub> Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for the control period from all CAIR NO<sub>X</sub> Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.

  (2) A CAIR NO<sub>X</sub> Ozone Season units shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor continication requirements under 40 CFR 98.370(b)(1),(2), or (3) and for each control period thereafter.
- (3) A CAIR NO<sub>X</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>X</sub> Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>X</sub> Ozone Season allowance was
- allocated.

  (4) CAIR NO<sub>X</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>X</sub> Ozone Season Aflowance
  Tracking System accounts in accordance with 40 CFR Part 98, Subparts FFFF and GGGG.

  (5) A CAIR NO<sub>X</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>X</sub> in accordance with the CAIR NO<sub>X</sub> Ozone Season
  Trading Program. No provision of the CAIR NO<sub>X</sub> Ozone Season Trading Program, the CAIR NO<sub>X</sub> Ozone Season or Trading Program. The CAIR NO<sub>X</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>X</sub> Ozone Season Trading Program, the (6) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.

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Effective: 3/16/08

(7) Upon recordation by the Administrator under 40 CFR Part 98, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NOx Ozono Season unit.

Plant Name (from STEP 1) Sanford

#### STEP 3. Continued

#### Excess Emissions Regulrements.

If a CAIR NO<sub>X</sub> Ozone Season source emits NO<sub>X</sub> during any control period in excess of the CAIR NO<sub>X</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>X</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>X</sub> Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart

AAAA, the Clean Air Act, and applicable state law.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>X</sub> Ozone Season source and each CAIR NO<sub>X</sub> Ozone Season unit at the (1) Unless observes provided, the owners and operations of the CNR NO<sub>X</sub> Ozone Season Source and each CARN NO<sub>X</sub> Ozone Season 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 before the end of 5 years, in writing by the DEP or the Administrator.

  (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO<sub>X</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the
- Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year glob until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.

  (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHHH, provided for a 3-year period of or recordikeeping, the 3-year period shall apply.

  (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>X</sub> Ozone
- Season Trading Program.
- Season Trading Program.

  (iv) Coples of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>X</sub> Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>X</sub> Ozone Season Trading Program.

  (2) The CAIR designated representative of a CAIR NO<sub>X</sub> Ozone Season source and each CAIR NO<sub>X</sub> Ozone Season unit at the source shall submit the reports required under the CAIR NO<sub>X</sub> Ozone Season Trading Program, Including those under 40 CFR Part 98, Subpart HHHH.

#### Liability.

- (1) Each CAIR NO<sub>X</sub> Ozone Season source and each CAIR NO<sub>X</sub> Ozone Season unit shall meet the requirements of the CAIR NO<sub>X</sub> Ozone Season
- (2) Amy provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season source or the CAIR designated (2) Any provision of the CAIR NO<sub>X</sub> Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>X</sub> Ozone Season units at the source.

  (3) Any provision of the CAIR NO<sub>X</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>X</sub> Ozone Season unit or the the owners and operators of such unit.

#### Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Ozona Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Ozone Season source or CAIR NO<sub>x</sub>. Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### STEP 4

#### Certification (for designated representative or alternate designated representative only)

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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

Name Shella M Wilkinson	Title PGD Technical Services General Manager (DR)
Company Owner Name: Florida	Power & Light
Phone 561-691-2287	E-mail Address Shella.M.Wilkinson@fpi.com
Signature	MUllum Date 1/15/09

DEP Form No. 62-210.900(1)(b) - Form

Effective: 3/16/08

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# SECTION VI. APPENDICES.

Appendix A. Abbreviations, Acronyms, Citations and Identification Numbers

Appendix ASP. Alternate Sampling Procedure ASP No. 97-B-01

Appendix CR. Common Regulatory Requirements

Appendix GG: NSPS Subpart GG, Stationary Gas Turbines

Appendix I. Insignificant Activities

Appendix NS. NSPS Subpart A, General Provisions

Appendix RR. Facility-Wide Reporting Requirements

Appendix TR. Facility-Wide Testing Requirements

Appendix TV. Title V General Conditions

Appendix U. Unregulated Activities

Appendix ZZZZ. NESHAP Subpart ZZZZ for Reciprocating Internal Combustion Engines

#### APPENDIX A

# Abbreviations, Acronyms, Citations and Identification Numbers

# Abbreviations and Acronyms:

° F: degrees Fahrenheit

acfm: actual cubic feet per minute AOR: 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 Resource 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

EU: emissions unit

F.A.C.: Florida Administrative Code

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

FGR: flue gas recirculation

Fl: fluoride ft<sup>2</sup>: square feet ft<sup>3</sup>: 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

Ib/hr: pounds per hour LONG: 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<sub>x</sub>: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O<sub>2</sub>: oxygen

**ORIS:** Office of Regulatory Information Systems

OS: organic solvent

Pb: lead

PM: particulate matter

PM<sub>10</sub>: particulate matter with a mean aerodynamic

diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inchPTE: 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 SOA: Specific Operating Agreement

SO<sub>2</sub>: sulfur dioxide TPH: tons per hour TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

x: by or times

#### APPENDIX A

# Abbreviations, Acronyms, Citations and Identification Numbers

#### 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 Section 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 is the 3-digit number code identifying that the facility is located in Polk County

0221 is the 4-digit number assigned by state database

#### Permit Numbers:

Example:

1050221-002-AV or 1050221-001-AC

Where:

AC means Air Construction Permit

AV means Air Operation Permit (Title V Source)

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

0221 is the 4-digit number assigned by permit tracking database

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

Example:

PSD-FL-185 PA 95-01 AC53-208321

Where:

PSD means Prevention of Significant Deterioration of Air Quality Permit

PA refers to the certification under the Power Plant Siting Act

AC53 is an Air Construction Permit for a facility is located in Polk County (old style of numbering)

#### APPENDIX ASP

Alternate Sampling Procedure ASP No. 97-B-01

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	••
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
Petitioner.	)	

# ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

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

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

# FINDINGS OF FACT

- 1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]
- 2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.
- 3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

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

- 4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.
- 5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."
- 6. Rule 297.310(7)(a)3., F.A.C., states, "The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision.
- 7. Rule 297.310(7)(a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: a. Did not operate; or, b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours."
- 8. Rule 297.310(7)(a)4., F.A.C., states, "During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for: a. Visible emissions, if there is an applicable standard, b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."
- 9. Rule 297.310(7)(a)5., F.A.C., states, "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."
- 10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semiannual particulate matter emission compliance testing schedule, a compliance test shall not be

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

- 11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]
- 12. The fifth edition of the U. S. Environmental Protection Agency's <u>Compilation of Air Pollutant Emission Factors</u>, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]
- 13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

# **CONCLUSIONS OF LAW**

- 1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.
- 2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

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

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

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- 2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;
- 3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;
- 4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.
- 5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

# PETITION FOR ADMINISTRATIVE REVIEW

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

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

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#### APPENDIX ASP

# Alternate Sampling Procedure ASP No. 97-B-01

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

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
  - (d) A statement of the material facts disputed by each petitioner, if any;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

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

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

A request for mediation must contain the following information:

-Page 5 of 8-

- (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;
  - (b) A statement of the preliminary agency action;
  - (c) A statement of the relief sought; and
- (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
  - (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
  - (g) The signatures of all parties or their authorized representatives.

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

--Page 6 of 8-

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

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

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

The petition must specify the following information:

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

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

-Page 7 of 8-

# APPENDIX ASP

Alternate Sampling Procedure ASP No. 97-B-01

# CERTIFICATE OF SERVICE

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

Clerk Stamp

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

Florida Power and Light Company Sanford Power Station

#### APPENDIX ASP

# Alternate Sampling Procedure ASP No. 97-B-01

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
Florida Electric Power Coordinating Group, Inc.	) , )	ASP No. 97-B-01
Petitioner.	)	

# ORDER CORRECTING SCRIVENER'S ERROR

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

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

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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

# **Common Regulatory Requirements**

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

# **Emissions and Controls.**

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; 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 or the regulations.

[Rule 62-4.130, F.A.C.]

- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: 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.

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

- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. 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) and 62-210.200(Definitions), F.A.C.]

8. <u>General Visible Emissions</u>: 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. This regulation does not impose a specific testing requirement.

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

9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

[Rule 62-296.320(4)(c), F.A.C.]

# Records and Reports.

10. Records Retent ion: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

# **Common Regulatory Requirements**

# 11. E missions Computation and Reporting:

- a. Applicability. 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 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 this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.
- b. Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
  - (1) 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.
    - (a) 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.
    - (b) 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.
    - (c) 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.
  - (2) Continuous Emissions Monitoring System (CEMS).
    - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
      - 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
      - 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
    - (b) 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:
      - 1) A calibrated flow meter that records data on a continuous basis, if available; or
      - 2) 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.
    - (c) 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 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.
  - (3) Mass Balance Calculations.
    - (a) 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:
      - 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
      - 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.
    - (b) 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

# **Common Regulatory Requirements**

- another content within the range is more accurate.
- (c) 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.
- (4) Emission Factors.
  - a. 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.
    - 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.
    - 2) 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.
    - 3) 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.
  - b. 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.
- (5) 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
- (6) 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.
- (7) 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.
- (8) 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.
- c. Annual Operating Report for Air Pollutant Emitting Facility
  - (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
    - a. All Title V sources.
    - b. All synthetic non-Title V sources.
    - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
    - d. All facilities for which an annual operating report is required by rule or permit.
  - (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
  - (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

# **Common Regulatory Requirements**

- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370, F.A.C.]

#### APPENDIX GG

# NSPS Subpart GG for Stationary Gas Turbines

# Federal Regulations Adopted by Reference

In accordance with Rule 62-204.800, F.A.C., the following federal regulation in Title 40 of the Code of Federal Regulations (CFR) was adopted by reference. The original federal rule numbering has been retained.

Federal Revision Date: February 24, 2006 State Rule Effective Date: July 1, 2006

Standardized Conditions Revision Date: August 6, 2009

# 40 CFR Part 60, 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.

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

# § 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.
- (j) 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.

#### APPENDIX GG

# NSPS Subpart GG for Stationary Gas Turbines

- (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:
  - (I) The NO<sub>x</sub> emissions are higher than the applicable emission limit in §60.332;
  - (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §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.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

# § 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:

# NSPS Subpart GG for Stationary Gas Turbines

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

where:

- STD = allowable ISO corrected (if required as given in  $\S60.335(b)(1)$ ) NO<sub>X</sub> 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  $\S60.335(b)(1)$ ) NO<sub>X</sub> 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
- $F = NO_X$  emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.
- (3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO<sub>X</sub> 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<sub>X</sub> 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 §60.8 as follows:

Fuel-bound nitrogen (percent by weight)	F (NO <sub>X</sub> percent by volume)
N ≤ 0.015	0
0.015 < N≤ 0.1	0.04(N)
$0.1 < N \le 0.25$	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 §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.

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# NSPS Subpart GG for Stationary Gas Turbines

- (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<sub>X</sub> 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.
- (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.
- (1) 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.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

# § 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 contains 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).

[44 FR 52798, Sept. 10, 1979, as amended at 69 FR 41360, July 8, 2004]

# § 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<sub>X</sub> 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<sub>X</sub> 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<sub>X</sub> and O<sub>2</sub>

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monitors. As an alternative, a CO<sub>2</sub> monitor may be used to adjust the measured NO<sub>X</sub> concentrations to 15 percent O<sub>2</sub> by either converting the CO<sub>2</sub> hourly averages to equivalent O<sub>2</sub> concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O<sub>2</sub>, or by using the CO<sub>2</sub> 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, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO<sub>X</sub> 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<sub>X</sub>) and a percent O<sub>2</sub> basis for oxygen; or
  - (ii) On a ppm at 15 percent O<sub>2</sub> basis; or
  - (iii) On a ppm basis (for NO<sub>X</sub>) and a percent CO<sub>2</sub> basis (for a CO<sub>2</sub> monitor that uses the procedures in Method 20 to correct the NO<sub>X</sub> data to 15 percent O<sub>2</sub>).
- (2) As specified in §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 §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<sub>X</sub> and diluent, the data acquisition and handling system must calculate and record the hourly NO<sub>X</sub> emissions in the units of the applicable NO<sub>X</sub> emission standard under §60.332(a), i.e., percent NO<sub>X</sub> by volume, dry basis, corrected to 15 percent O<sub>2</sub> and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub>, a diluent cap value of 19.0 percent O<sub>2</sub> 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 (T<sub>a</sub>), and minimum combustor inlet absolute pressure (P<sub>o</sub>) into the ISO correction equation.
  - (iii) If the owner or operator has installed a NO<sub>x</sub> 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 §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 NO<sub>X</sub> 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 NO<sub>X</sub> emission limit under §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<sub>X</sub> 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<sub>X</sub> 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 NO<sub>X</sub> emissions, may, but is not required to, elect to use a NO<sub>X</sub> 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 NO<sub>X</sub> 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<sub>X</sub> 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-NO<sub>X</sub> mode.
  - (3) For any turbine that uses SCR to reduce NO<sub>X</sub> 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<sub>X</sub> emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §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 §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 §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<sub>x</sub> 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 §75.19 of this chapter or the NO<sub>x</sub> 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 §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 §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 §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 §60.332). The nitrogen content of the fuel shall be determined using methods described in §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 §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 §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.
      - (D) If a sulfur content measurement exceeds 0.8 weight percent (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 §60.331(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 §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 §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 §60.332, as established during the performance test required in §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 §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §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 §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<sub>X</sub> and diluent CEMS:
      - (A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO<sub>X</sub> concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO<sub>X</sub> concentration" is the arithmetic average of the average NO<sub>X</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub> and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO<sub>X</sub> concentrations immediately preceding that unit operating hour.

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- (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<sub>x</sub> 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 §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §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 NO<sub>X</sub> 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 §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41360, July 8, 2004; 71 FR 9457, Feb. 24, 2006]

## § 60.335 Test methods and procedures.

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

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- (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO<sub>X</sub> 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<sub>X</sub> 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  $O_2$ , is within  $\pm 10$  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<sub>X</sub> concentrations, normalized to 15 percent O<sub>2</sub>, 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 §60.332 and shall meet the performance test requirements of §60.8 as follows:
  - (1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO<sub>Xo</sub>) corrected to 15 percent O<sub>2</sub> shall be corrected to 1SO 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:

$$NO_X = (NO_{Xo})(P_r/P_o)^{0.5} elg (Ho-0.00633)(288°K/T_a)^{1.53}$$

#### Where:

 $NO_X$  = emission concentration of  $NO_X$  at 15 percent  $O_2$  and ISO standard ambient conditions, ppm by volume, dry basis,

 $NO_{X_0}$  = mean observed  $NO_X$  concentration, ppm by volume, dry basis, at 15 percent  $O_2$ ,

P<sub>r</sub> = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,

P<sub>o</sub> = observed combustor inlet absolute pressure at test, mm Hg,

 $H_0$  = observed humidity of ambient air, g  $H_2O/g$  air,

e = transcendental constant, 2.718, and

 $T_a$  = ambient temperature, °K.

(2) The 3-run performance test required by §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 \$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<sub>X</sub> 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<sub>X</sub> emission limit in §60.332 for the combustion turbine must still be met.
- (4) If water or steam injection is used to control NO<sub>X</sub> with no additional post-combustion NO<sub>X</sub> control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with §60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see §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 §60.332 NO<sub>X</sub> emission limit.
- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in §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 §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<sub>X</sub> CEMS under §60.334(e), then the initial performance test required under §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<sub>X</sub> emission limit under §60.332 and to provide the required reference method data for the RATA of the CEMS described under §60.334(b).
  - (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator elects under §60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO<sub>X</sub> 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 §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 §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 §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 §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 §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.
- (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.

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- (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 §60.8 to ISO standard day conditions.

[69 FR 41363, July 8, 2004, as amended at 71 FR 9458, Feb. 24, 2006]

#### APPENDIX I

## Appendix I. Insignificant Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 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 Rules 62-210.300(3)(a) and (b)1., 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 Rules 62-210.300(3)(a) and (b)1., 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 following activities and equipment are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

- 1. Building Vents
- 2. Air Compressor
- 3. Products Storage in Sealed Containers
- 4. Vacuum Cleaning, Solvent Storage, Office Supplies/Equipment
- 5. CEMS Building Testing Equipment
- Sealed Drums and Containers
- 7. Miscellaneous piping, drains, sumps, tanks, drums, vents and valves associated with the Combustion Turbines, Heat Recovery Steam Generators and Steam Turbines
- 8. Miscellaneous tank vents and valves associated with the Steam Generator, Turbine Generator, Boiler Feed, Condensate and Heater Drain System, Oil System, and Service/Cooling Water
- 9. Gas Metering Area, Liquefied Petroleum Gas, Fuel Oil and Lube Oil Tanks, Vents and Valves
- 10. Monitorin g Gases of CEMS Equipment
- 11. Internal Combustion Engines in boats, aircraft, vehicles, back hoes, tractors, forklifts, cranes, etc. used for transportation of passengers or freight
- 12. Portable A ir Conditioning Unit
- 13. Vacu um Pumps used in Laboratory Operations
- 14. Equip ment used for Steam Cleaning
- 15. Belt or d rum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
- 16. Equip ment used exclusively for space heating, other than boilers
- 17. Laboratory equ ipment used exclusively for chemical or physical analysis
- 18. Brazing, solderin g or welding equipment
- 19. La undry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents
- 20. Fire and Safet y equipment
- 21. Transfor mers, switches and switchgear, processing and venting
- 22. Electrically heated equipment used for heat treating, tracing, drying, soaking, case hardening or surface conditioning
- 23. Air co mpressors and centrifuges used for compressing air storage of product in sealed containers
- 24. Miscella neous mobile equipment operations (compressors, chain saws, small generators, less than 100 KW welding machines, electric saws and drills, etc.)
- 25. Miscella neous welding and cutting operations

# APPENDIX 1

# Appendix I. Insignificant Activities

26. Sodiu m Hydroxide Caustic Feed Tank, Sulfuric Acid Feed	I Drums and pH Adjustment Tank associated with the Storm
Water Treatment System	

27. Tank ven ts for the Collection Basin, Storm Water Basins and Ash Disposal Basin

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The combustion turbines (EU-005 through 012) are subject to the following federal regulations in Title 40 of the Code of Federal Regulations, which are adopted by reference in Rule 62-204.800, F.A.C. The original federal rule numbering has been retained.

### 40 CFR 60, SUBPART A, GENERAL PROVISIONS

## § 60.1 Applicability.

- (a) Except as provided in 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 control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
- (d) Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia. {Not Applicable}

## § 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq.)

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

- Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.
- Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).
- Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.
- Clean coal technology demonstration project means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.
- Commenced means, with respect to the definition of new source in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or

## NSPS Subpart A, General Provisions

process parameters.

- Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
- Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.
- Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.
- Force majeure means, for purposes of §60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.
- Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.
- Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.
- Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.
- Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.
- Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.
- One-hour period means any 60-minute period commencing on the hour.
- Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
- Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.
- Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.
- Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.
- Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

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### Permitting authority means:

- (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or
- (2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- (1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment:
- (2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
- (3) Is equipped with low-NOX burners prior to the time of commencement of operations following reactivation; and
- (4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

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### § 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

Hz—hertz ng—nanogram— $10^{-9}$  gram

J—joule nm—nanometer— $10^{-9}$  meter

K—degree Kelvin Pa—pascal kg—kilogram s—second m—meter V—volt  $m^3$ —cubic meter W—watt mg—milligram— $10^{-3}$  gram  $\Omega$ —ohm

mm—millimeter— $10^{-3}$  meter  $\mu$ g—microgram— $10^{-6}$  gram

Mg-megagram-10<sup>6</sup> gram

(b) Other units of measure:

Btu—British thermal unit l—liter

°C—degree Celsius (centigrade) lpm—liter per minute

cal—calorie lb—pound

cfm—cubic feet per minute meq—milliequivalent

cu ft—cubic feet min—minute
dcf—dry cubic feet ml—milliliter

dcm—dry cubic meter mol. wt.—molecular weight dscf—dry cubic feet at standard conditions ppb—parts per billion

dscm—dry cubic meter at standard conditions ppm—parts per million

eq—equivalent psia—pounds per square inch absolute
°F—degree Fahrenheit psig—pounds per square inch gage

ft—feet °R—degree Rankine gal—gallon scf—cubic feet at standard conditions

gr—grain scfh—cubic feet per hour at standard conditions

g-eq—gram equivalent scm—cubic meter at standard conditions

hr—hour sec—second in—inch sq ft—square feet

k—1,000 std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide NO—nitric oxide
CO—carbon monoxide NO2—nitrogen dioxide
CO2—carbon dioxide NOX—nitrogen oxides

HCI—hydrochloric acid

O<sub>2</sub>—oxygen

 $\begin{array}{ll} \text{Hg--mercury} & \text{SO}_2\text{--sulfur dioxide} \\ \text{H}_2\text{O}\text{--water} & \text{SO}_3\text{--sulfur trioxide} \end{array}$ 

 $H_2S$ —hydrogen sulfide  $SO_X$ —sulfur oxides  $H_2SO_4$ —sulfuric acid

N<sub>2</sub>—nitrogen

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#### (d) Miscellaneous:

A.S.T.M.—American Society for Testing and Materials

[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

## § 60.4 Address.

All addresses that pertain to Florida have been incorporated. To see the complete list of addresses please go to http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:6.0.1.1.1.1&idno=40.

Link to an amendment published at 73 FR 18164, Apr. 3, 2008.

- (a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.
- Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 345 Courtland Street, NE., Atlanta, GA 30365.
- (b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:
  - (K) Bureau of Air Quality Management, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, FL 32301.

[40 FR 18169, Apr. 25, 1975]

Editorial Note: For Federal Register citations affecting §60.4 see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.

## § 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.

[40 FR 58418, Dec. 16, 1975]

# § 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.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

## § 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 date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
  - (2) [Reserved]
  - (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
  - (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §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 §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 §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 §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. 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 device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or 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 §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 §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 §60.7(c) shall both be submitted.

Pollutant (Circle One): SO <sub>2</sub> / NO <sub>X</sub> / TRS / H <sub>2</sub> S		xcess Emission and Monitoring System Perform  Opacity)	
Reporting period dates: From to		· · ·	
Company:			
Emission Limitation:			
Address:			
Monitor Manufacturer and Model No.			
Date of Latest CMS Certification or Audit:			
Process Units Description:			
Total Source Operating Time in Reporting Period <sup>1</sup>			
Emission Data Summary <sup>1</sup>		CMS Performance Summary <sup>1</sup>	
Duration of excess emissions in reporting period due to:		CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	
3. <u>Total duration of excess emissions × (100%)</u> [Total source operating time]	% <sup>2</sup>	3. [Total CMS Downtime] × (100%) [Total source operating time]	% ·
	f excess em of the tota all be subn quarter in 0	issions is 1 percent or greater of the total operating I operating time, both the summary report form and nitted.	the
		Name	
		Signature	
		Title	
		Date	

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(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 report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 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

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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 paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.
- (h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

### § 60.8 Performance tests.

- (a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, 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, or at such other times specified by this part, 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).
  - (1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
  - (2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.
  - (3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.
  - (4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.
- (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 this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
- (c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- (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

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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 performance 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.
- (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.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999; 72 FR 27442, May 16, 2007]

## § 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.)

## § 60.10 State authority.

The provisions of this part 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.
- (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.

### § 60.11 Compliance with standards and maintenance requirements.

- (a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §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 paragraph (e)(5) of this section. 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

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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 §60.8 unless one of the following conditions apply. If no performance test under §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 §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 §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 §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 determing 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 paragraph (e)(5) of this section, 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 this part, 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 paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §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 §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 paragraph (e)(1) of this section shall apply.
- (4) An 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 §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.
- (5) An 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 §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 §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 §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 §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 §60.13(c) of this part, that the COMS has been properly maintained

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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 §60.8, the opacity observation results and observer certification required by §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 §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 §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
- (7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.
- (8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.
- (f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.
- (g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

#### § 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.

[39 FR 9314, Mar. 8, 1974]

### § 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 to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, 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 §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 §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of

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the COMS or continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under §60.8 and as described in §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 paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.
- (2) Except as provided in paragraph (c)(1) of this section, 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 must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the 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 must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.
- (e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, 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 paragraph (c) of this section 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 paragraph (c) of this section 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 this part shall be used.
- (g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator

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shall report the results as required from each continuous monitoring system.

(h)

- (1) 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 §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
- (2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:
  - (i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, i.e., one data point in each of the 15-minute quadrants of the hour.
  - (ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.
  - (iii) For any operating hour in which required maintenance or quality-assurance activities are performed:
    - (A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or
    - (B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.
  - (iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.
  - (v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.
  - (vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.
  - (vii)Owners and operators complying with the requirements of §60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.
  - (viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g. hours with < 30 minutes of unit operation under §60.47b(d)).
  - (ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2or ng/J of pollutant).
- (3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.
- (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

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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.
- (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 §60.8 of this subpart or other tests performed following the criteria in §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 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 that the source emissions are 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., §60.45(g) (2) and (3), §60.73(e), and §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.

[40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000; 66 FR 44980, Aug. 27, 2001; 71 FR 31102, June 1, 2006; 72 FR 32714, June 13, 2007]

Editorial Note: At 65 FR 61749, Oct. 17, 2000, §60.13 was amended by revising the words "ng/J of pollutant" to read "ng of pollutant per J of heat input" in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words "ng/J of pollutant" do not exist in the sixth sentence of paragraph (h).

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## § 60.14 Modification.

- (a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.
- (b) Emission rate shall be expressed as kg/hr 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 paragraph (b)(1) of this section 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 paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.
- (c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.
- (d) [Reserved]
- (e) The following shall not, by themselves, be considered modifications under this part:
  - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §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 §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
  - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
  - (6) The relocation or change in ownership of an existing facility.
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.
- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.
- (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

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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 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 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

## § 60.15 Reconstruction.

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

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- (e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
- (f) The Administrator's determination under paragraph (e) shall be based on:
  - (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
  - (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
  - (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
  - (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
- (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

## § 60.16 Priority list.

A list of prioritized major source categories may be found at the following EPA web site: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:6.0.1.1.1.1&idno=40

### § 60.17 Incorporations by reference.

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register on the date listed. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding address noted below, and all are available for inspection at the Library (C267–01), U.S. EPA, Research Triangle Park, NC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

- (a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, M1 48106.
  - (1) ASTM A99-76, 82 (Reapproved 1987), Standard Specification for Ferromanganese, incorporation by reference (IBR) approved for §60.261.
  - (2) ASTM A100-69, 74, 93, Standard Specification for Ferrosilicon, IBR approved for §60.261.
  - (3) ASTM A101-73, 93, Standard Specification for Ferrochromium, IBR approved for §60.261.
  - (4) ASTM A482-76, 93, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.
  - (5) ASTM A483-64, 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for §60.261.
  - (6) ASTM A495-76, 94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
  - (7) ASTM D86-78, 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), and 60.633(h).
  - (8) ASTM D129-64, 78, 95, 00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and Appendix A: Method 19, 12.5.2.2.3.
  - (9) ASTM D129–00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.4415(a)(1)(i).
  - (10) ASTM D240-76, 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and Appendix A: Method 19, Section 12.5.2.2.3.
  - (11) ASTM D270–65, 75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.1.

- (12) ASTM D323-82, 94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b(g), and 60.116b(f)(2)(ii).
- (13) ASTM D388-77, 90, 91, 95, 98a, 99 (Reapproved 2004)£1, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.24(h)(8), 60.41 of subpart D of this part, 60.45(f)(4)(i), 60.45(f)(4)(ii), 60.45(f)(4)(vi), 60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, and 60.4102.
- (14) ASTM D388-77, 90, 91, 95, 98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.251(b) and (c) of subpart Y of this part.
- (15) ASTM D396-78, 89, 90, 92, 96, 98, Standard Specification for Fuel Oils, IBR approved for §§60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, 60.111(b) of subpart K of this part, and 60.111a(b) of subpart Ka of this part.
- (16) ASTM D975-78, 96, 98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) of subpart K of this part and 60.111a(b) of subpart Ka of this part.
- (17) ASTM D1072-80, 90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b)(10)(ii).
- (18) ASTM D1072-90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.4415(a)(1)(ii).
- (19) ASTM D1137-53, 75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f)(5)(i).
- (20) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; Method 6, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; Method 26, Section 7.1.2; Method 29, Section 7.2.2.
- (21) ASTM D1266-87, 91, 98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
- (22) ASTM D1266-98 (Reapproved 2003)e1, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §60.4415(a)(1)(i).
- (23) ASTM D1475-60 (Reapproved 1980), 90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d)(1), Appendix A: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.
- (24) ASTM D1552-83, 95, 01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and Appendix A: Method 19, Section 12.5.2.2.3.
- (25) ASTM D1552-03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §60.4415(a)(1)(i).
- (26) ASTM D1826-77, 94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f)(5)(ii), 60.46(c)(2), 60.296(b)(3), and Appendix A: Method 19, Section 12.3.2.4.
- (27) ASTM D1835-87, 91, 97, 03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, and 60.41c of subpart Dc of this part.
- (28) ASTM D1945-64, 76, 91, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f)(5)(i).
- (29) ASTM D1946-77, 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f)(3), 60.45(f)(5)(i), 60.564(f)(1), 60.614(e)(2)(ii), 60.614(e)(4), 60.704(d)(2)(ii), and 60.704(d)(4).
- (30) ASTM D2013-72, 86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

- (31) ASTM D2015-77 (Reapproved 1978), 96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.
- (32) ASTM D2016-74, 83, Standard Test Methods for Moisture Content of Wood, IBR approved for Appendix A: Method 28, Section 16.1.1.
- (33) ASTM D2234-76, 96, 97b, 98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for Appendix A: Method 19, Section 12.5.2.1.1.
- (34) ASTM D2369-81, 87, 90, 92, 93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for Appendix A: Method 24, Section 6.2.
- (35) ASTM D2382–76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(e)(4), 60.664(e)(4), and 60.704(d)(4).
- (36) ASTM D2504-67, 77, 88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g)(5) and 60.485a(g)(5).
- (37) ASTM D2584-68 (Reapproved 1985), 94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c)(3)(i).
- (38) ASTM D2597-94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for §60.335(b)(9)(i).
- (39) ASTM D2622-87, 94, 98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
- (40) ASTM D2622-05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
- (41) ASTM D2879-83, 96, 97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e)(3)(ii), 60.116b(f)(2)(i), 60.485(e)(1), and 60.485a(e)(1).
- (42) ASTM D2880-78, 96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).
- (43) ASTM D2908-74, 91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).
- (44) ASTM D2986-71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for Appendix A: Method 5, Section 7.1.1; Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
- (45) ASTM D3173-73, 87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (46) ASTM D3176-74, 89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and Appendix A: Method 19, Section 12.3.2.3.
- (47) ASTM D3177-75, 89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (48) ASTM D3178-73 (Reapproved 1979), 89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f)(5)(i).
- (49) ASTM D3246-81, 92, 96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b)(10)(ii).
- (50) ASTM D3246-05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.4415(a)(1)(ii).
- (51) ASTM D3270-73T, 80, 91, 95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for Appendix A: Method 13A, Section 16.1.

- (52) ASTM D3286–85, 96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (53) ASTM D3370-76, 95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).
- (54) ASTM D3792-79, 91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.3.
- (55) ASTM D4017-81, 90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for Appendix A: Method 24, Section 6.4.
- (56) ASTM D4057–81, 95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.3.
- (57) ASTM D4057–95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
- (58) ASTM D4084–82, 94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h)(1).
- (59) ASTM D4084–05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
- (60) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.1.
- (61) ASTM D4177–95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
- (62) ASTM D4239-85, 94, 97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (63) ASTM D4294–02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.335(b)(10)(i).
- (64) ASTM D4294–03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
- (65) ASTM D4442-84, 92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for Appendix A: Method 28, Section 16.1.1.
- (66) ASTM D4444–92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for Appendix A: Method 28, Section 16.1.1.
- (67) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.5.
- (68) ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§60.335(b)(10)(ii) and 60.4415(a)(1)(ii).
- (69) ASTM D4629–02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§60.49b(e) and 60.335(b)(9)(i).
- (70) ASTM D4809–95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(d)(4), 60.664(e)(4), and 60.704(d)(4).
- (71) ASTM D4810-88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
- (72) ASTM D5287-97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for §60.4415(a)(1).
- (73) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for Appendix A: Method 24, Section 6.6.
- (74) ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels

- and Oils by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(i).
- (75) ASTM D5453-05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(i).
- (76) ASTM D5504-01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§60.334(h)(1) and 60.4360.
- (77) ASTM D5762-02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for §60.335(b)(9)(i).
- (78) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.
- (79) ASTM D6216–98, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved for Appendix B, Performance Specification 1.
- (80) ASTM D6228–98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §60.334(h)(1).
- (81) ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§60.4360 and 60.4415.
- (82) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, IBR approved for table 7 of Subpart IIII of this part and table 2 of subpart JJJJ of this part.
- (83) ASTM D6366-99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for §60.335(b)(9)(i).
- (84) ASTM D6420-99 (Reapproved 2004) Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for table 2 of subpart JJJJ of this part.
- (85) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §60.335(a).
- (86) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for table 2 of subpart JJJJ of this part.
- (87) ASTM D6667–01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(ii).
- (88) ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(ii).
- (89) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for Appendix B to part 60, Performance Specification 12A, Section 8.6.2.
- (90) ASTM E168-67, 77, 92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (91) ASTM E169-63, 77, 93, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (92) ASTM E260-73, 91, 96, General Gas Chromatography Procedures, IBR approved for §\$60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (b) The following material is available for purchase from the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.
  - (1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, pp. 11–12, IBR approved January 27, 1983 for §§60.204(b)(3), 60.214(b)(3), 60.224(b)(3), 60.234(b)(3).

- (c) The following material is available for purchase from the American Petroleum Institute, 1220 L Street NW., Washington, DC 20005.
  - (1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved January 27, 1983, for §\$60.111(i), 60.111a(f), 60.111a(f)(1) and 60.116b(e)(2)(i).
- (d) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), Dunwoody Park, Atlanta, GA 30341.
  - (1) TAPPI Method T624 os-68, IBR approved January 27, 1983 for §60.285(d)(3).
- (e) The following material is available for purchase from the Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.
  - (1) Method 209A, Total Residue Dried at 103–105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved February 25, 1985 for §60.683(b).
- (f) The following material is available for purchase from the following address: Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.
  - (1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance.
- (g) The following material is available for purchase from the following address: West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.
  - (1) West Coast Lumber Standard Grading Rules No. 16, pages 5–21 and 90 and 91, September 3, 1970, revised 1984.
- (h) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990.
  - (1) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185(c)(2), 60.1675(a), and 60.1675(c)(2).
  - (2) ASME PTC 4.1–1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b of subpart Db of this part, 60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(3) and 60.1810(a)(3).
  - (3) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)4), and 60.1810(a)(4).
  - (4) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], IBR approved for Tables 1 and 3 of subpart EEEE, Tables 2 and 4 of subpart FFFF, Table 2 of subpart JJJJ, and §§60.4415(a)(2) and 60.4415(a)(3) of subpart KKKK of this part.
- (i) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996). This document may be obtained from the U.S. EPA, Office of Solid Waste and Emergency Response, Waste Characterization Branch, Washington, DC 20460, and is incorporated by reference for appendix A to part 60, Method 29, Sections 7.5.34; 9.2.1; 9.2.3; 10.2; 10.3; 11.1.1; 11.1.3; 13.2.1; 13.2.2; 13.3.1; and Table 29-3.
- (j) "Standard Methods for the Examination of Water and Wastewater," 16th edition, 1985. Method 303F: "Determination of Mercury by the Cold Vapor Technique." This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for appendix A to part 60, Method 29, Sections 9.2.3; 10.3; and 11.1.3.
- (k) This material is available for purchase from the American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675–2683. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-124), Room M-1500, 1200 Pennsylvania Ave., NW., Washington, DC.
  - (1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for §60.35e and §60.55c.
- (i) This material is available for purchase from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at EPA's Air and Radiation Docket and Information Center

## NSPS Subpart A, General Provisions

(Docket A-91-61, Item IV-J-125), Room M-1500, 1200 Pennsylvania Ave., NW., Washington, DC.

- (1) OMB Bulletin No. 93–17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93–192–664. IBR approved for §60.31e.
- (m) This material is available for purchase from at least one of the following addresses: The Gas Processors Association, 6526 East 60th Street, Tulsa, OK, 74145; or Information Handling Services, 15 Inverness Way East, PO Box 1154, Englewood, CO 80150-1154. You may inspect a copy at EPA's Air and Radiation Docket and Information Center, Room B108, 1301 Constitution Ave., NW., Washington, DC 20460.
  - (1) Gas Processors Association Method 2377–86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, IBR approved for §§60.334(h)(1), 60.4360, and 60.4415(a)(1)(ii).
  - (2) [Reserved]
- (n) This material is available for purchase from IHS Inc., 15 Inverness Way East, Englewood, CO 80112.
  - (1) International Organization for Standards 8178–4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—Part 4: Test Cycles for Different Engine Applications, IBR approved for §60.4241(b).
  - (2) [Reserved]

[48 FR 3735, Jan. 27, 1983]

Editorial Note: For Federal Register citations affecting §60.17, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

## § 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, V max, as determined by the following equation:

Vmax=(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

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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, Vmax, 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.

(f)

- (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:

$$H_{T} = K \stackrel{n}{\underset{i=1}{\Sigma}} C_{i}H_{i}$$

where:

HT = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas 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  $(\frac{g \text{ mole}}{s \text{ cm}})$  is 20°C;

- 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

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the following equation.

Log10(Vmax) = (HT+28.8)/31.7

Vmax = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

 $H_T$  = 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

8.706 = Constant

0.7084 = Constant

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

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000]

# § 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 postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.
- (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.

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(f)

(1)

- (i) 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.
- (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.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

### **Facility-Wide Reporting Requirements**

**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 Deadlines	Related Conditions
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April I	RR5
Annual Emissions Fee Form and Fee	March I	RR'6
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 Specific Conditions, for any additional emission unitspecific 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.
- 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)]

# Facility-Wide Reporting Requirements

- 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. <u>Semi-Annual Monitoring Reports</u>. 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., 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.

## Facility-Wide Reporting Requirements

- 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.
  - 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. <u>EPA Report Submission</u>. 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.]

# **Facility-Wide Reporting Requirements**

- 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/rules/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)]

# Facility-Wide Testing Requirements

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. Calculation of Emission Rate. 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 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.

# **Facility-Wide Testing Requirements**

	TABLE 29	97.310-1 CALIBRATION SCHEDULE	
ltem	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	Calibration liquid 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 and 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.
- 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

### **Facility-Wide Testing Requirements**

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 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.

### Facility-Wide Testing Requirements

[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
    - (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-

# **Facility-Wide Testing Requirements**

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 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.]

- **TR8.** DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
  - 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a Florida DEP certified observer at sequential fifteen second intervals during the required period of observation.

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

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

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

#### Title V General Conditions

#### 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. Validity. 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 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.]

#### Title V General Conditions

- **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. <u>Final Permit Action</u>. 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. Sudden and Unforeseeable Events Beyond the Control of the Source. 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.]
- TV16. Compliance with Federal Rules. A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

# **Permit Procedures**

- TV17. 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).
- TV18. 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, 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.]
- TV19. <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.
- **TV20.** 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.]

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#### TV21. 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.]

TV22. 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.]

# TV23. 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.]

TV24. 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.]

## Rights, Title, Liability, and Agreements

- TV25. 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.]
- TV26. <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.]
- TV27. <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

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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.]

# TV28. 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

TV29. 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.]

# TV30. 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;
  - (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.]

TV31. 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.

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

#### Title V General Conditions

- 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 flow meter 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 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.

#### Title V General Conditions

- (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.
- 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.]

#### Responsible Official

**TV32.** <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

- TV33. <u>Asbestos.</u> 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.]
- TV34. 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.
- TV35. Open Burning Prohibited. Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

# APPENDIX U

#### **Unregulated Activities**

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

The following emissions units and activities are neither "regulated emissions units" nor "insignificant emissions units".

- 1. Sandblasting Units
- Non-Halogenated Solvent Cleaning Operations
- 3. Lawn Maintenance Engine Emissions, Fertilizers
- 4. Cleaning, Painting, Welding, Coating Hand Held Tools and Equipment
- 5. Application of Fungicide; Herbicide and Pesticide
- 6. Miscellaneous Gasoline and Diesel Engine Portable Tools and Equipment
- 7. Removal of paint and rust with baking soda blaster (high Pressure water and baking soda)
- 8. Internal combustion engines which drive compressors, generators, water pumps or other auxiliary equipment
- 9. Painting and plant equipment
- 10. Gas Bottle Storage (Nitrogen, Hydrogen, Helium, CO<sub>2</sub> cylinders, Cryogenic H<sub>2</sub> and CO<sub>2</sub> storage tank vents)
- 11. Fu gitive dust from unpaved roads
- 12. Oil y Wastewater Separators
- 13. Tanker Unloadin g Dock Area Fugitive Emissions
- 14. Storage Area Asbestos Equipment
- 15. Tank A: 268,000 ba rrels No. 6 fuel oil
- 16. Tank 3AD and 3BD: 6,000 barrels No. 6 fuel oil day tanks for Unit 3
- 17. Two Evaporative equipment coolers for Repowered Units 4 and 5 (EU-013)
- 18. Sur face coating facilities in ozone attainment areas (provided that no more than 6.0 gallons of coating per day are applied)
- 19. Degreasi ng units using heavier-than-air vapors exclusively, except any such unit using or emitting any substances classified as a hazardous air pollutant
- 20. Miscella neous routine maintenance and repair activities of the plant grounds, non-halogenated solvent cleaning operations and the use of spray cans and solvents

#### APPENDIX ZZZZ

# NESHAP Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines

In accordance with Rule 62-204.800, F.A.C., the following federal regulations in Part 63 of Title 40 of the Code of Federal Regulations were adopted by reference. The original federal rule numbering has been retained.

{Permitting Note: The engines covered by this permit in EU-004 (Miscellaneous Engines) are regulated as shown in the following table. Only the Section §63.6590 of Subpart ZZZZ is included because of the limited applicability and requirements.}

Table C-1: The following engines are currently on site.

Engine	Qty.	In-Service Date	Engine Displacement	Engine Model Year	Rating	Rule Applicability
Diesel Emergency Generator, Compression Ignition	1	1972			1 6/0 bHP	NESHAP Subparts A and ZZZZ
Propane Spark Ignition Emergency Generator	2	2009	1.6 litre	2006	33.5 bHP	NESHAP Subparts A and ZZZZ

Engine	Rule Applicability
Diesel Emergency Generator, Compression Ignition	Subject to NESHAP Subparts A and ZZZZ. Defined in Subpart ZZZZ as an "existing unit" that does not have to meet the requirements of Subpart ZZZZ and of Subpart A (General Provisions). No initial notification is necessary.
	Subject to NSPS Subparts A and JJJJ. Defined as "new units" with no applicable requirements.
Propane Spark Ignition Emergency Generator	NESHAP Subpart A and ZZZZ. Defined as "new units" that must meet the requirements of NESHAP Subpart ZZZZ by meeting the requirements NSPS Subpart JJJJ for spark ignition engines. No further requirements apply for such engines under this part.

### § 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
  - (1) Existing stationary RICE.
    - (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
    - (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
    - (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
    - (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
  - (2) New stationary RICE.
    - (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

#### APPENDIX ZZZZ

### NESHAP Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines

- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (3) Reconstructed stationary RICE.
  - (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
  - (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
  - (iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (b) Stationary RICE subject to limited requirements.
  - (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(h).
    - (i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; or
    - (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
  - (2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.
  - (3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source, an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008]

Table H. Permit Summary

Table I. Summary of Air Pollutant Standards and Terms

Table 2. Summary of Compliance Requirements

# Table H. Permit Summary

Air Permit No.	Effective Date	Expiration Date	Project Type 1,2	Emissions Units
1270009-001-AV	01/01/2000	12/31/2004	Initial	EU-001, Electric Utility Steam Generating Unit 3
1270009-008-AC	03/18/2003	12/31/2004	Construction Modification	EU-001, Electric Utility Steam Generating Unit 3 EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-007-AV	06/04/2003	12/31/2004	Revision	EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-009-AC	09/04/2003	12/31/2004	Construction Modification	EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-010-AV	01/02/2004	12/31/2004	Revision	EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-011-AV	01/01/2005	12/31/2009	Renewal	EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-012-AC	08/29/2006	09/23/2006	Construction Modification	EU-006, Combined Cycle Combustion Turbine Unit 4B
1270009-013-AC	12/29/2006	12/29/2011	Construction Modification	EU-010, Combined Cycle Combustion Turbine Unit 5B
1270009-014-AC	01/24/2007	01/24/2012	Construction Modification	EU-011, Combined Cycle Combustion Turbine Unit 5C
1270009-016-AV	02/19/2009	12/31/2009	Revision	EU-001, Electric Utility Steam Generating Unit 3 EU-005 - EU-008, Combined Cycle Combustion Turbines for Repowered Unit 4 EU-009 - EU-012, Combined Cycle Combustion Turbines for Repowered Unit 5
1270009-017-AC	04/23/2009	0/16/2009	Construction Modification	EU-006, Combined Cycle Combustion Turbine Unit 4B
1270009-019-AC	01/30/2007	01/30/2012	Construction Modification	EU-005, Combined Cycle Combustion Turbine Unit 4A

# Project Types:

- 1 Title V Permits: Initial, Revision, Renewal, Administrative Correction, Withdrawn or Denied
- 2 Construction Permits: New, Modification, Extension, Exemption, Withdrawn or Denied

# Table 1. Summary of Air Pollutant Standards and Terms

The following tables summarize information for convenience purposes only. The tables do not supersede any of the terms or conditions of the permit.

Ī	EU No.	Brief Description
	001	Electric Utility Steam Generating Unit 3

Pollutant	Fuel bours/year Allowable Emissions Standards Equivalent Emiss		Emissions <sup>1, 2</sup>	Deceletore Citations	Dawe it Canditions		
ronutant	ruei	nours/year	Anowable Emissions Standards	lb/hour	tons/year	Regulatory Citations	Permit Conditions
NO <sub>X</sub>	Oil	8760	Acid Rain Facility-wide NO <sub>X</sub> Cap		4500	40 CFR 75 Subpart B Permit No. 1270009-004-AC	A.10
PM Steady State	Oil	8760	0.1 lb/MMBtu	165	500	Rule 62-296.405(1)(b), F.A.C.	<b>A.</b> 7
PM <sup>3</sup> Soot Blow or Load Change	Oil	8760	0.3 lb/MMBtu	495	271	Rule 62-210.700(3), F.A.C.	A.8
PM (Opacity) Steady State	Oil	8760	40% opacity, 6-minute average		Rule 62-296.405(1)(a), F.A.C.	A.5	
PM (Opacity) Soot Blow or Load Change	Oil	8760	60% opacity, 6-minute average > 60% opacity for not more four, 6-minute periods during the 3-hour period of allowable excess emissions			Rule 62-210.700(3), F.A.C.	A.6
SO <sub>2</sub>	Oil	8760	2.75 lbs/MMBtu	4537.5	4000	Rules 62-213.440 and 62-296.405(1)(c)1, F.A.C.	A.9

- 1. "Equivalent Emissions" are listed for informational purposes only. The equivalent emissions are based on the unit firing No. 6 fuel oil. Equivalent PM emissions are based on an emission factor which reflects both steady state and soot blowing/load change emission rates.
- 2. The entire facility (including Unit 3 and repowered Units 4 and 5) are subject to the following emissions caps of: 500 tons/year of PM, 4500 tons/year of NO<sub>X</sub> and 4000 tons/year of SO<sub>2</sub>.
- 3. Annual PM emissions based on 3 hour/day and 365 day/year of soot blowing at limit.

Table 1. Summary of Air Pollutant Standards and Terms

EU Nos.	Brief Description	EU Nos.	Brief Description		
Repowered Unit 4			Repowered Unit 5		
005	Combined Cycle Combustion Turbine Unit 4A	009	Combined Cycle Combustion Turbine Unit 5A		
006	Combined Cycle Combustion Turbine Unit 4B	010	Combined Cycle Combustion Turbine Unit 5B		
007	Combined Cycle Combustion Turbine Unit 4C	011	Combined Cycle Combustion Turbine Unit 5C		
008	Combined Cycle Combustion Turbine Unit 4D	012	Combined Cycle Combustion Turbine Unit 5D		

## Natural Gas Firing Only - Each Combustion Turbine

Pollutant	Fuels	hourskieer	Allowable Emissions Standards	Equivalent	Emissions <sup>1, 5</sup>	Dogulatowy Citations	Permit Conditions
Ponutant	rueis	hours/year	Allowable Emissions Standards	lb/hour/CT	tons/year/CT	Regulatory Citations	Permit Conditions
NO <sub>X</sub>	Gas	8760 400 <sup>4</sup> 8760	9 ppm - Normal 15 ppmvd @ 15% $O_2$ - HTPM $^2$ 75 ppmvd @ 15% $O_2$ - NSPS Subpart GG	65 - Normal 102 - HTPM <sup>4</sup> 	284.7 - Normal 20.4 - HTPM <sup>4</sup> 	1270009-004-AC 1270009-009-AC 40 CFR 60.332	B.8
СО	Gas	8760 400 <sup>4</sup>	12 ppmvd - Normal 9 ppmvd - HTPM <sup>2</sup>	43 - Normal 29 - HTPM <sup>4</sup>	188.3 - Normal 5.8 - HTPM <sup>4</sup>	1270009-004-AC 1270009-009-AC	B.8
VOC	Gas	8760 400 <sup>4</sup>	1.4 ppmvd - Normal 1.4 ppmvd - HTPM <sup>2</sup>	2.9 - Normal 3 - HTPM <sup>4</sup>	12.7 - Normal 0.6 - HTPM <sup>4</sup>	1270009-004-AC 1270009-009-AC	В.8
SO <sub>2</sub> <sup>3</sup>	Gas	8760	< 20 gr/100 scf 0.8% sulfur by weight, maximum	97.6 	427.4 	1270009-004-AC 40 CFR 60.332	B.3, B.8
PM/PM <sub>10</sub> <sup>4</sup>	Gas	8760	10% Opacity – All	N/A	N/A	1270009-004-AC 1270009-009-AC	B.8

- 1 "Equivalent Emissions" are listed for informational purposes only. Annual emissions for normal operation are based on 8760 hours/year. Annual emissions for HTPM are based on only 400 hours/year.
- 2 "HTPM" means "high-temperature peaking mode", which is allowed for only 400 hours per year. NO<sub>X</sub> limit is based on a 24-hour block average.
- 3 Based on the actual sulfur content of the natural gas delivered, actual annual SO2 emissions are less than 22 tons per year.
- 4 No PM/PM<sub>10</sub> emissions limitations were established; however, an opacity standard was established as the surrogate for PM/PM<sub>10</sub>.
- The entire facility (including Unit 3 and repowered Units 4 and 5) are subject to the following emissions caps of: 500 tons/year of PM, 4500 tons/year of NO<sub>X</sub> and 4000 tons/year of SO<sub>2</sub>.

# Table 1. Summary of Air Pollutant Standards and Terms

EU Nos.	Brief Description			
Repowered Unit 5				
009	Combined Cycle Combustion Turbine Unit 5A			
010	Combined Cycle Combustion Turbine Unit 5B			
011	Combined Cycle Combustion Turbine Unit 5C			
012	Combined Cycle Combustion Turbine Unit 5D			

# Distillate Oil Firing Only- Each Combustion Turbine

Pollutant	Fuels	hours/year	Allowable Emissions Standards	Equivalent	Emissions <sup>1</sup>	Dogulatom, Citations	Permit Conditions
ronutant	rueis	nours/year	Anowable Emissions Standards	lb/hour/CT	tons/year/CT	Regulatory Citations	refinit Conditions
NO <sub>X</sub>	Oil	Limited <sup>2</sup>	42 ppmvd @ 15% O <sub>2</sub> - Normal 110 ppmvd @ 15% O <sub>2</sub> - NSPS Subpart GG	355	88.8	1270009-004-AC 1270009-009-AC 40 CFR 60.332	B.9
СО	Oil	Limited <sup>2</sup>	20 ppmvd	71.6	17.9	1270009-004-AC 1270009-009-AC	B.9
VOC	Oil	Limited <sup>2</sup>	7 ppmvw	16.1	4.0	1270009-004-AC 1270009-009-AC	B.9
SO <sub>2</sub> <sup>2</sup>	Oil	Limited <sup>2</sup>	0.05% sulfur by weight, maximum 0.8% sulfur by weight, maximum	100.8	25.2	1270009-004-AC 40 CFR 60.332	B.3, B.9
PM/PM <sub>10</sub> <sup>3</sup>	Oil	Limited <sup>2</sup>	VE ≤ 20% Opacity	N/A	N/A	1270009-004-AC 1270009-009-AC	B.9

- "Equivalent Emissions" are listed for informational purposes only. These units are permitted to fire up to 28,600,000 gallons per year, which is equivalent to 500 hours/year at full load operation. Annual emissions are based on this restricted level of operation.
- 2 Equivalent SO<sub>2</sub> emissions are based on the maximum sulfur content of 0.05% by weight for distillate oil.
- 3 No PM/PM<sub>10</sub> emissions limitations were established; however, an opacity standard was established as the surrogate for PM/PM<sub>10</sub>.

# Table 2. Summary of Compliance Requirements

The following tables summarize information for convenience purposes only. The tables do not supersede any of the terms or conditions of the permit.

EU	J <b>No.</b>	Brief Description
0	001	Electric Utility Steam Generating Unit 3

Pollutant	Fuels	Condition	Compliance Method	Testing Frequency	Minimum Compliance Test Duration	CEMS or COMS	Permit Conditions
SO <sub>2</sub> 1	Oil	All	CEMS	Continuous	3-hour rolling average	CEMS	A.17, A.18
NO <sub>x</sub>	Oil	All	CEMS	Continuous	Annual	CEMS	A.17
PM <sup>2</sup>	Oil	Normal	EPA Methods 5, 5B or 17	Annual	Three, 1 hour test runs		A.21
	Oil	Soot Blow or Load Change	EPA Methods 5, 5B or 17	Annual	Three, 1 hour test runs		A.21
PM <sup>3</sup> (Opacity)	Oil	Normal	COMS DEP Method 9	Continuous Annual	6-minute averages 6-minute averages, 1-hour test	COMS	A.21
	Oil	Soot Blow or Load Change	COMS DEP Method 9	Continuous Annual	6-minute averages 6-minute averages, 1-hour test	COMS	A.21

- 1. When SO<sub>2</sub> CEMS data is not available, the permittee shall use fuel analysis and monitoring.
- 2. Pursuant to ASP No.92-B-01, annual tests are not required when: only gaseous fuel is fired during the federal fiscal year; or gaseous fuel in combination with any amount of liquid fuel is fired during the federal fiscal year for less than 400 hours per year; or only liquid fuel is fired during the federal fiscal year for less than 400 hours per year.
- 3. In lieu of the annual DEP Method 9, data from the COMS shall be provided for each PM stack test run.

# Table 2. Summary of Compliance Requirements

EU Nos.	Brief Description		Brief Description
Repowered Unit 4		Repowered Unit 5	
005	Combined Cycle Combustion Turbine Unit 4A	009	Combined Cycle Combustion Turbine Unit 5A
006	Combined Cycle Combustion Turbine Unit 4B	010	Combined Cycle Combustion Turbine Unit 5B
007	Combined Cycle Combustion Turbine Unit 4C	011	Combined Cycle Combustion Turbine Unit 5C
008	Combined Cycle Combustion Turbine Unit 4D	012	Combined Cycle Combustion Turbine Unit 5D

# **Each Combustion Turbine**

Pollutant	Fuel	Condition	Compliance Method	Testing Frequency	Minimum Compliance Test Duration	CEMS or COMS	Permit Conditions
NO <sub>X</sub>	Gas	Normal	CEMS	Continuous	30-day rolling average	CEMS	B.18
		НТРМ	CEMS	Continuous	24-hour block average	CEMS	B.18
		NSPS Subpart GG	CEMS	Continuous	4-hour rolling average	CEMS	B.18
	Oil	Normal	CEMS	Continuous	24-hour block average	CEMS	B.18
со	Gas	Normal	EPA Method 10	Annual	Three, 1-hout test runs		B.21
		НТРМ	EPA Method 10		Satisfied by tests under normal conditions		B.21
	Oil	Normal	EPA Method 10	Annual	Three, 1-hout test runs		B.21
voc	Gas	Normal	EPA Methods 18 or 25A	Initial Only	Three, 1-hout test runs		B.8, B.9
		НТРМ	EPA Methods 18 or 25A	Initial Only	Three, 1-hout test runs		B.8, B.9
	Oil	Normal	EPA Methods 18 or 25A	Initial Only	Three, 1-hout test runs		B.8, B.9
SO <sub>2</sub>	Gas	All	Fuel analysis and monitoring		Pipeline natural gas contract		B.15
	Oil	Normal	Fuel analysis and monitoring	Shipment	Sulfur content for each bulk shipment		B.16
PM (Opacity)	Gas	Normal	EPA Method 9	Annual	6-minutes average, 30-minute test		B.21
		НТРМ	EPA Method 9	Annual	6-minutes average, 30-minute test (one representative combustion turbine)		B.21
	Oil	Normal	EPA Method 9	Annual	6-minutes average, 30-minute test		B.21

**To:** Gary\_Kowalczyk@fpl.com

Cc: 'Mary Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy, Holtom, Jonathan, Koerner, Jeff

Subject: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Attachments: 1270009-018-AVSignedWrittenNoticeofRenewal.pdf

## Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; 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".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents: <a href="http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf">http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf</a> permit zip files/1270009.018.AV.D pdf.zip

Attention: Tammy McWade

Owner/Company Name: FLORIDA POWER and LIGHT (PSN)

Facility Name: SANFORD POWER PLANT Project Number: 1270009-018-AV Permit Status: DRAFT/PROPOSED

Permit Activity: PERMIT RENEWAL

Facility County: VOLUSIA

"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 <a href="http://www.dep.state.fl.us/air/emission/apds/default.asp">http://www.dep.state.fl.us/air/emission/apds/default.asp</a> . "

Permit project documents that 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.

Barbara Friday Bureau of Air Regulation Division of Air Resource Management (DARM) (850)921-9524

From:

**Exchange Administrator** 

Sent:

Friday, October 30, 2009 8:54 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT313250.txt; FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT;

1270009-018-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.

Gary Kowalczyk@fpl.com
Mary.Archer@fpl.com

From:

To:

Sent:

Subject:

Kowalczyk, Gary [Gary.Kowalczyk@fpl.com]
Friday, Barbara
Friday, October 30, 2009 9:13 AM
Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-

ΑV

Your message

Gary.Kowalczyk@fpl.com

Subject:

was read on 10/30/2009 9:13 AM.

From: Kowalczyk, Gary [Gary.Kowalczyk@fpl.com]

**Sent:** Friday, October 30, 2009 9:16 AM

To: Friday, Barbara

Cc: Archer, Mary; KKosky@Golder.com; Shine, Caroline; Forney.Kathleen@epamail.epa.gov;

Oquendo. Ana@epamail.epa.gov; Gibson, Victoria; McWade, Tammy; Holtom, Jonathan;

Koerner, Jeff; Hopkins, Randy

Subject: RE: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

I have received the documents and can view them. Thank you.

Gary Kowalczyk, PE FPL Power Generation Division General Manager Sanford Plant

Office: 386-575-5211 Cell: 386-566-8757

Email: gary kowalczyk@fpl.com

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

Sent: Friday, October 30, 2009 8:54 AM

To: Kowalczyk, Gary

Cc: Archer, Mary; KKosky@Golder.com; Shine, Caroline; Forney.Kathleen@epamail.epa.gov;

Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

## Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; 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".

<u>Note:</u> We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents: http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/1270009.018.AV.D\_pdf.zip\_

Attention: Tammy McWade

Owner/Company Name: FLORIDA POWER and LIGHT (PSN)

Facility Name: SANFORD POWER PLANT

Project Number: 1270009-018-AV Permit Status: DRAFT/PROPOSED Permit Activity: PERMIT RENEWAL

Facility County: VOLUSIA

"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 <a href="http://www.dep.state.fl.us/air/emission/apds/default.asp">http://www.dep.state.fl.us/air/emission/apds/default.asp</a> . "

Permit project documents that 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.

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 <a href="https://doi.org/10.1001/jhis.link.no.nih.gov/">https://doi.org//>
the DEP Customer Survey</a>. Thank you in advance for completing the survey.

From: Sent: Archer, Mary [Mary.Archer@fpl.com] Friday, October 30, 2009 8:54 AM

To:

Friday, Barbara

Subject:

Out of Office: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT;

1270009-018-AV

Mary Archer will be out of the office on business Oct 28 through Oct 30. If you need to speak with me please call my cell phone at 561-758-3760.

Thanks, Mary

Archer, Mary [Mary.Archer@fpl.com] Friday, Barbara From:

To:

Sent:

Friday, October 30, 2009 10:10 AM Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-Subject:

ΑV

Your message

Mary.Archer@fpl.com

Subject:

was read on 10/30/2009 10:10 AM.

From: Mail Delivery System [MAILER-DAEMON@mx1.golder.com]

**Sent:** Friday, October 30, 2009 8:54 AM

To: Friday, Barbara

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

This is the mail system at host mx1.golder.com.

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>KKosky@Golder.com</u>>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 4AEAE1EE\_16645\_354083\_1 7ACBB1CF0BF2

From:

To:

Sent:

Subject:

Kosky, Ken [Ken\_Kosky@golder.com]
Friday, Barbara
Friday, October 30, 2009 9:21 AM
Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-

ΑV

Your message

Ken Kosky@golder.com

Subject:

was read on 10/30/2009 9:21 AM.

From:

System Administrator

To:

Shine, Caroline

Sent:

Friday, October 30, 2009 8:54 AM

Subject:

Delivered FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT;

1270009-018-AV

Your message

To: Gary Kowalczyk@fpl.com

Cc:

'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject:

FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

was delivered to the following recipient(s):

Shine, Caroline on 10/30/2009 8:54 AM

From: Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]

**Sent:** Friday, October 30, 2009 8:54 AM

To: Friday, Barbara

Subject:Successful Mail Delivery ReportAttachments:Delivery report; Message Headers

This is the mail system at host mseive01.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 4AEAE1E0\_19187\_61815\_2 9868B44522

<Quendo.Ana@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK,
sent 4AEAE1E0 19187 61815 2 9868B44522

From:

System Administrator

To:

McWade, Tammy; Koerner, Jeff; Gibson, Victoria

Sent:

Friday, October 30, 2009 8:54 AM

Subject:

Delivered:FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT:

1270009-018-AV

# Your message

To: Gary Kowalczyk@fpl.com

Cc:

'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject:

FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

# was delivered to the following recipient(s):

McWade, Tammy on 10/30/2009 8:54 AM Koerner, Jeff on 10/30/2009 8:54 AM Gibson, Victoria on 10/30/2009 8:54 AM

From:

Koerner, Jeff

To:

Friday, Barbara

Sent:

Friday, October 30, 2009 9:53 AM

Subject:

Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-

ΑV

# Your message

To: Gary Kowalczyk@fpl.com

Cc:

'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subiect:

FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

was read on 10/30/2009 9:53 AM.

From:

Gibson, Victoria Friday, Barbara

To: Sent:

Friday, October 30, 2009 9:31 AM

Subject:

Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-

ΑV

# Your message

To: Gary Kowalczyk@fpl.com

Cc:

'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject:

FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

was read on 10/30/2009 9:31 AM.

From: System Administrator To: Holtom, Jonathan

**Sent:** Friday, October 30, 2009 8:54 AM

Subject: Delivered FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT;

1270009-018-AV

Your message

To: Gary Kowalczyk@fpl.com

Cc: 'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

was delivered to the following recipient(s):

Holtom, Jonathan on 10/30/2009 8:54 AM

From:

Holtom, Jonathan

To: Sent: Friday, Barbara

Sent:

Friday, October 30, 2009 8:58 AM

Subject:

Read: FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-

AV

# Your message

To: Gary Kowalczyk@fpl.com

Cc:

'Mary.Archer@fpl.com'; 'KKosky@Golder.com'; Shine, Caroline;

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

McWade, Tammy; Holtom, Jonathan; Koerner, Jeff

Subject:

FLORIDA POWER & LIGHT COMPANY - SANFORD POWER PLANT; 1270009-018-AV

Sent: 10/30/2009 8:54 AM

was read on 10/30/2009 8:58 AM.