


# Florida Department of Environmental Protection

## Memorandum

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TO: Joseph Kahn, Division of Air Resource Management  
THROUGH: Trina Vielhauer, Bureau of Air Regulation  
FROM: Jeff Koerner, New Source Review Section   
DATE: June 22, 2009  
SUBJECT: Final Air Construction Permit Revision  
Permit No. 0694801-010-AC  
Lake Investment, Ltd.  
Lake Cogeneration Plant

The final permit revision is attached for your approval and signature. This project made the following changes to the existing combined cycle Units 1 and 2: increase the maximum heat input rate when firing natural gas; authorize installation of continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>); revise the averaging period for the NO<sub>x</sub> standard; and identify that combustion turbines will now be subject to the applicable New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) including Subpart A (General Provisions) and Subpart KKKK (Stationary Combustion Turbines) instead of Subpart GG (Stationary Combustion Turbines).

The attached Final Determination identifies issuance of the draft Title V air operation permit and summarizes the publication process. I recommend your approval of the attached final permit for this project.

Attachments

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## FINAL DETERMINATION

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### PERMITTEE

Lake Investment, Ltd.  
39001 Golden Gem Drive  
Umatilla, FL 32784

### PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)  
Division of Air Resource Management  
Bureau of Air Regulation, New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

### PROJECT

Air Permit No. PSD-FL-176C  
Project No. 0694801-010-AC  
Lake Cogeneration Plant

The Lake Cogeneration Plant is an electrical generating plant located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida 32784. For existing combined cycle Units 1 and 2, this project authorizes the following revisions to existing air construction Permit No. PSD-FL-176B: increase the maximum heat input rate when firing natural gas; authorize installation of continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>); revise the averaging period for the NO<sub>x</sub> standard; and identify that combustion turbines will now be subject to the applicable New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) including Subpart A (General Provisions) and Subpart KKKK (Stationary Combustion Turbines) instead of Subpart GG (Stationary Combustion Turbines).

### NOTICE AND PUBLICATION

The Department distributed an Intent to Issue a Title V Air Operation Permit Revision (Draft/Proposed) Permit package on April 23, 2009. The applicant published the Public Notice in the Orlando Sentinel (Orange County Edition) on May 1, 2009. The Department received the proof of publication on May 8, 2009.

### COMMENTS

No comments on the Draft/Proposed Permit were received from the public or the EPA Region 4 Office. The applicant had one minor comment regarding the draft air construction permit revision. The following summarizes the comment and the Department's response.

Comment (Section IIIA. No Renumbered Condition): The applicant requests confirmation that annual NO<sub>x</sub> testing and subsequent NO<sub>x</sub> testing of leased engines during maintenance periods will no longer be necessary. The continuous emissions monitoring system (CEMS) will undergo an annual relative accuracy test audit.

Response: The Department confirms that the required CEMS shall be used to demonstrate compliance with the NO<sub>x</sub> standards. No additional stack testing for NO<sub>x</sub> emissions is required. No changes to the permit are necessary.

### CONCLUSION

As noted above, only minor revisions were made to the draft permit. The final action of the Department is to issue the permit as drafted.



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## NOTICE OF FINAL PERMIT

*Sent by Electronic Mail – Received Receipt Requested*

Mr. James Miller, Plant Manager  
Lake Investment, Ltd  
39001 Golden Gem Drive  
Umatilla, FL 32784

Air Permit No. PSD-FL-176C  
Project No. 0694801-010-AC  
Lake Cogeneration Plant, Units 1 and 2  
SPRINT Project Capacity Increase  
Lake County, Florida

Dear Mr. Miller:

Enclosed is the final air construction permit revision for the Lake Cogeneration Plant, which authorizes the following for existing Units 1 and 2: increase the maximum heat input rate when firing natural gas; authorize installation of continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>); revise the averaging period for the NO<sub>x</sub> standard; and identify that combustion turbines will now be subject to the applicable New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) including Subpart A (General Provisions) and Subpart KKKK (Stationary Combustion Turbines) instead of Subpart GG (Stationary Combustion Turbines). The existing facility is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida 32784. As noted in the attached Final Determination, no changes were made to the permit as drafted. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief  
Bureau of Air Regulation

TLV/jfk/ttm

# NOTICE OF FINAL PERMIT

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that either this Notice of Final Air Permit (including the Final Air Permit, Appendices and Final Determination), 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 6/23/09 to the persons listed below.

Mr. James Miller, Lake Cogeneration Plant ([jmiller@caithnessenergy.com](mailto:jmiller@caithnessenergy.com))

Mr. Thomas Grace, Caithness Energy ([tgrace@caithnessenergy.com](mailto:tgrace@caithnessenergy.com))

Mr. Scott Osbourn, Golder Associates ([sosbourn@golder.com](mailto:sosbourn@golder.com))

Mr. Alan Zahm, DEP CD Office ([alan.zahm@dep.state.fl.us](mailto:alan.zahm@dep.state.fl.us))

Mr. Mike Halpin, DEP Siting Office ([mike.halpin@dep.state.fl.us](mailto:mike.halpin@dep.state.fl.us))

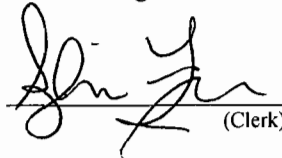
Ms. Kathleen Forney, EPA Region 4 ([forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov))

Ms. Heather Abrams, EPA Region 4 ([abrams.heather@epamail.epa.gov](mailto:abrams.heather@epamail.epa.gov))

Ms. Vickie Gibson, BAR Reading File ([victoria.gibson@dep.state.fl.us](mailto: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.

  
(Clerk)

6/23/09  
(Date)



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## PERMITTEE

Lake Investment, Ltd.  
39001 Golden Gem Drive  
Umatilla, FL 32784

### *Authorized Representative:*

Mr. James Miller, Plant Manager

Air Permit No. PSD-FL-176C  
Project No. 0694801-010-AC  
Lake Cogeneration Plant  
Facility ID No. 0694801  
SPRINT Capacity Increase

## PROJECT AND LOCATION

For existing combined cycle Units 1 and 2, this project authorizes the following revisions to existing air construction Permit No. PSD-FL-176B: increase the maximum heat input rate when firing natural gas; authorize installation of continuous emissions monitoring systems (CEMS) for monitoring nitrogen oxides (NO<sub>x</sub>); revise the averaging period for the NO<sub>x</sub> standard; and identify that combustion turbines will now be subject to the applicable New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) including Subpart A (General Provisions) and Subpart KKKK (Stationary Combustion Turbines) instead of Subpart GG (Stationary Combustion Turbines). The proposed project is for the existing Lake Cogeneration Plant, which is an electrical generating plant (SIC No. 4931). The facility is located in Lake County at 39001 Golden Gem Drive in Umatilla, Florida 32784. The UTM coordinates are Zone 17, 434 km East, and 3198.80 km North.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. The existing facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is a modification of the original PSD permit; however, the project remains minor with respect to the resulting projected emissions increases.

## CONTENTS

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Executed in Tallahassee, Florida

*Joseph Kahn*

Joseph Kahn, Director

Division of Air Resource Management

*6/23/09*

(Date)

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## SECTION 1. GENERAL INFORMATION

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### FACILITY AND PROJECT DESCRIPTION

The existing facility consists of emergency generators (EU-001), an oil storage tank (EU-002) and two combined cycle combustion turbines (EU-003 and EU-004). For combined cycle Units 1 and 2, this permit authorizes the following revisions to existing air construction Permit No. PSD-FL-176B: increase the maximum heat input rate when firing natural gas from 435 to 450 million British thermal units (MMBtu) per hour at a compressor inlet temperature of 51° F based on the installed capabilities of the new spray inter-cooling (SPRINT) combustion turbine technology; authorize installation of CEMS for monitoring NO<sub>x</sub>; and revise the averaging period for the NO<sub>x</sub> BACT standard with compliance demonstrated by CEMS instead of annual stack tests. No new construction is authorized by this permit. In addition, the existing combined cycle combustion turbines become subject to the applicable federal NSPS standards in Subpart A (General Provisions) and Subpart KKKK (Stationary Combustion Turbines) instead of Subpart GG (Stationary Combustion Turbines) of 40 CFR 60.

### REGULATORY CLASSIFICATION

- The existing facility is not a major source of hazardous air pollutants (HAP).
- The existing facility has no units subject to the acid rain provisions.
- The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The existing facility is a major stationary source of air pollution pursuant to Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

### HISTORY OF PREVIOUS PSD PERMIT AND REVISIONS

#### Permit No. PSD-FL-176 / AC35-196459 (November 20, 1991)

The original air construction permit authorized initial construction of the combined cycle combustion turbine cogeneration plant.

#### Modification, Permit No. PSD-FL-176A (March 15, 1994)

- Specific Condition No. 1: Revised emissions table to Table 1A.
- Specific Condition No. 2: Deleted condition referencing acceptable ambient concentrations for beryllium, lead and mercury.
- Specific Condition No. 6: Revised the last three bullets related to maximum heat input rates and duct firing.
- Specific Condition No. 13: Deleted condition that referenced an adjustment of NO<sub>x</sub> emissions to ISO conditions and includes the calculation. This condition was met with the initial source test.
- Specific Condition No. 16: Revised condition requiring combustion control and a space to accommodate future oxidation catalyst.
- Specific Condition No. 20: Revised condition that specified NSPS Subpart Dc and GG provisions.

#### Amendment to Permit No. PSD-FL-176A (May 2, 1994)

This amendment identified a custom fuel monitoring schedule pursuant to NSPS Subpart GG provisions.

#### Amendment to Permit No. PSD-FL-176A (May 24, 1994)

This amendment extended the expiration date of the permit.

#### Modification, Permit No. PSD-FL-176B / Project No. 0694801-008-AC (June 11, 2007)

The project authorized initial installation of the SPRINT technology with a slight increase in the heat input rate from 423 to 435 MMBtu/hour at a compressor inlet temperature of 51° F when firing natural gas.

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: Applications for permits regarding PSD preconstruction review shall be submitted to the New Source Review Section of the Department's Bureau of Air Regulation at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Applications for permits regarding operation or the construction of minor sources shall be submitted to the Air Resources Section of the Department's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resources Section of the Department's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.
3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms), Appendix B (CEMS Requirements) and Appendix C (NSPS Subparts A and KKKK Provisions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(c), F.A.C.]
8. Application for Title V Permit: A concurrent Title V revision (No. 1010071-007-AV) was processed as part of this project. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]
9. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
  - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
  - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

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## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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- 1) The name, address and telephone number of the owner or operator of the major stationary source;
  - 2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
  - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
  - 4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the Department requires the annual reporting of actual CO and NO<sub>x</sub> emissions for combined cycle Units 1 (EU-003) and 2 (EU-004). The applicant estimated the baseline emissions for these pollutants as: 350.3 tons/year of CO emissions and 404.7 tons/year of NO<sub>x</sub> emissions.

[Rules 62-4.070(3), 62-212.300(1)(e) and 62-210.370, F.A.C.]

### 10. Emissions 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 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



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## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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alternative approach is more accurate.

### (2) Continuous Emissions Monitoring System.

- (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
  - 1) 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 flowmeter 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:
  - 1) 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
  - 2) 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 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

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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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.

- 1) 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.

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

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Combined Cycle Units 1 and 2

##### Emissions Units 003 and 004

**Description:** Each unit consists of a General Electric Model LM6000 combustion turbine, heat recovery steam generator (HRSG) with duct firing, chiller system, and SPRINT spray inter-cooling. Steam generated in the HRSG is directed to a common steam turbine-electrical generator, which is rated at 26.5 MW.

**Fuel:** Each unit fires pipeline natural gas as the primary fuel and distillate oil as a restricted alternate fuel.

**Capacity:** At a turbine inlet temperature of 51° F, the maximum heat input rate from gas firing based on the lower heating value (LHV) is: 423 MMBtu per hour without SPRINT, which produces approximately 39.5 MW; or 450 MMBtu per hour with SPRINT, which produces approximately 52 MW.

**NOx Controls:** A water injection system is used to reduce NOx emissions. The water-to-fuel ratio is monitored continuously and adjusted by the automatic control system based on load conditions.

**Stack Parameters:** The stack is a maximum of 11 feet in diameter and at least 100 feet tall. At base load conditions and a compressor inlet temperature of 51° F, exhaust gas exits the stack at approximately 250° F with a volumetric flow rate of approximately 320,253 acfm.

**CEMS:** This permit revision adds a CEMS to monitor NO<sub>x</sub> emissions.

#### MODIFIED PERMIT CONDITIONS

The following changes refer to original Permit No. PSD-FL-176 and the subsequent modifications and amendments. The specific conditions were directly modified in Permit Nos. PSD-FL-176A and PSD-FL-176B. In addition, Permit PSD-FL-176B established several new conditions. For this new project, Permit PSD-FL-176C (Project 0694801-010-AC) will identify each specific condition as currently modified and show the new revisions. For clarity, all conditions of Permit PSD-FL-176B (Project No. 0694801-008-AC) will be superseded by this new permitting action. New text will be shown with double underline and deleted text will be shown with ~~strikethrough~~.

**Placard Page:** Revise description to, “For the construction of a ~~108~~ 110.5 MW combined cycle cogeneration facility to be located ~~adjacent to the Golden Gem Citrus Processing Plant~~ in Lake County, Florida.”

**Specific Condition No. 1:** Revise Table 1A as follows.

1. The maximum allowable emissions from this facility shall not exceed the emission rates listed in Table 1A. Table 1A (Revised). Allowable Emissions Limits Combined Cycle Combustion Turbine Cogeneration Facility

Pollutant	Source <sup>a</sup>	Fuel <sup>b</sup>	Allowable Emissions Limits <sup>#</sup>				
			Basis of Limits <sup>a</sup>	Maximum Allowable Emissions Rates <sup>h</sup>			
				@ 59° F		@ 51° F <sup>g,f</sup>	
				lb/hour	TPY <sup>g</sup>	lb/hour <sup>d,f</sup>	TPY <sup>e</sup>
NO <sub>x</sub> <sup>c</sup>	CT	NG	BACT <u>Limit</u> : 25 ppmvd at 15% O <sub>2</sub> <u>as determined by a 24-hour CEMS block average</u>	82.7	393.6	85.5	404.7
	CT	DFO	BACT <u>Limit</u> : 42 ppmvd at 15% O <sub>2</sub> <u>as determined by a 24-hour CEMS block average</u>	143.9		148.3	
	DB	NG	BACT <u>Limit</u> : 0.1 lb/MMBtu	18.0		18.0	
	CT&DB	NG	BACT <u>Limit</u> : 25 ppmvd at 15% O <sub>2</sub> <u>as determined by a 24-hour CEMS block average</u>	100.7		103.5	

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Combined Cycle Units 1 and 2

Pollutant	Source <sup>a</sup>	Fuel <sup>b</sup>	Allowable Emissions Limits <sup>g</sup>				
			Basis of Limits <sup>a</sup>	Maximum Allowable Emissions Rates <sup>h</sup>			
				@ 59° F		@ 51° F <sup>g,f</sup>	
				lb/hour	TPY <sup>g</sup>	lb/hour <sup>d,f</sup>	TPY <sup>e</sup>
CO	CT	NG	BACT <u>Limit</u> : 28 ppmvd	54.6	350.3	56.0	350.3
	CT	DFO	BACT <u>Limit</u> : 18 ppmvd	33.0		34.5	
	DB	NG	BACT <u>Limit</u> : 0.2 lb/MMBtu	36.0		36.0	
	CT&DB	NG	---	90.6		92.0	
PM/PM <sub>10</sub>	CT	NG	BACT <u>Limit</u> : 0.0065 lb/MMBtu	5.0	27.0	5.0	27.0
	CT	DFO	BACT <u>Limit</u> : 0.026 lb/MMBtu	20.0		20.0	
	DB	NG	BACT <u>Limit</u> : 0.006 lb/MMBtu	2.6		2.6	
	CT&DB	NG	---	7.6		7.6	
SO <sub>2</sub> <sup>g</sup>	CT&DB	NG	NG <u>Limit</u> : 1 grain/100 scf, annual average based on vendor data	---	21.0 15.0 <sup>g</sup>	---	21.0 15.8 <sup>g</sup>
	CT	DFO	Estab. By Applicant 0.1% S DFO <u>Limit</u> : 0.05% sulfur by weight	80.0 ---		87.6 ---	
VOC	CT	NG	Established <u>Requested</u> by Applicant <u>to avoid PSD</u>	3.3	30.8	3.4	30.8
	CT	DFO	Established <u>Requested</u> by Applicant <u>to avoid PSD</u>	8.3		8.7	
	DB	NG	Established <u>Requested</u> by Applicant <u>to avoid PSD</u>	5.4		5.4	
	CT&DB	NG	---	8.7		8.8	
Mercury (Hg)	CT	DFO	Established by Applicant	—	0.0003	—	0.0003
Lead (Pb)	CT	DFO	Established by Applicant	—	0.0008	—	0.0008
Beryllium (Be)	CT	DFO	Established by Applicant	—	0.0002	—	0.0002
Sulfuric Acid Mist	CT	DFO	Established <u>Estimate</u> by Applicant <u>to avoid PSD</u>	---	0.80	---	0.80

- a. CT = 2 combustion turbines, DB = 2 duct burners. The emissions limits apply to each unit and also apply when utilizing the SPRINT technology.
- b. NG = natural gas, DFO = distillate fuel oil
- c. NO<sub>x</sub> limits for 59° F are at 60% relative humidity (ISO conditions). The CEMS-based BACT and NSPS NO<sub>x</sub> limits apply to each unit. The 24-hour block average for the BACT limit shall be determined from valid CEMS operating data collected for each calendar day. Emissions from each combustion turbine and duct burner system are also subject to the NSPS Subpart KKKK provisions in 40 CFR 60. For these units, the NO<sub>x</sub> standards based on a 30-day rolling average of CEMS data are 42 ppmvd at 15% O<sub>2</sub> when firing natural gas and 96 ppmvd at 15% O<sub>2</sub> when firing distillate oil.
- d. As specified by this permit, Compliance with the Maximum Allowable Emissions Limits shall be demonstrated for CT limits and CT&DB limits based on data from stack tests or data from the annual RATA.

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Combined Cycle Units 1 and 2

- e. The Maximum Allowable TPY of emissions, based on a worst case scenario, are the sum of the CT emissions while firing NG for 355 days, the CT emissions while firing DFO for 10 days, and DB emissions at the maximum heat input for the previous combinations of CT firing. The DB will only fire NG and only while the CT is firing NG.
- f. These are the Maximum Allowable Emissions Limits that shall never be exceeded at any temperature and/or operating configuration.
- g. The maximum sulfur content of distillate oil shall not exceed 0.05% by weight. The maximum sulfur content of natural gas shall not exceed 1 grain/100 scf based on an annual average of pipeline vendor data. Pursuant NSPS Subpart KKKK provisions in 40 CFR 60, the maximum sulfur content of any fuel fired in the combustion turbine shall not exceed 0.06 lb SO<sub>2</sub>/MMBtu. This data shall be submitted with the annual operating report.
- h. The “maximum allowable emissions rates” are the total emissions from Units 1 and 2.

**Note:** All temperatures cited in this table refer to turbine inlet temperatures.

[BACT dated November 20, 1991 ~~and~~ construction permit AC35-196459 and construction permit 0694801-010-AC (PSD-FL-176C)]

**Specific Condition No. 6:** Revise condition as follows.

6. The permitted materials and utilization rates for the combined cycle gas turbine shall not exceed the values as follows:

- Maximum distillate fuel oil consumption shall not exceed either of the following limitations: 2,921 gals/hr/CT; 701,050 gals/yr/CT.
- Maximum annual firing using fuel oil shall not exceed an equivalent of 10 days per year at full load.
- Maximum sulfur (S) content in the oil shall not exceed ~~0.1~~ 0.05 percent by weight. The maximum sulfur content of natural gas shall not exceed 1 grain/100 scf based on an annual average of pipeline vendor data. Pursuant NSPS Subpart KKKK, the maximum sulfur content of any fuel fired in the combustion turbine shall not exceed 0.06 lb SO<sub>2</sub>/MMBtu.
- Maximum heat input, based on the lower heating value (LHV) while burning gas shall not exceed ~~435~~ 450 MMBtu/hr/CT at 51° F or ~~403~~ 429 MMBtu/hr/CT when corrected to ISO conditions. The maximum heat input, based on the LHV while burning distillate fuel oil shall not exceed 424 MMBtu/hr/CT at 51° F or 406 MMBtu/hr/CT when corrected to ISO conditions.
- Duct firing shall be limited to natural gas firing only with a maximum heat input rate of 90 MMBtu/hr, based on the higher heating value of approximately 1054.5 Btu/cubic feet.
- Duct firing shall be limited to 525,000 MMBtu/year/HRSG-duct burner.

**Specific Condition No. 9:** Revise condition as follows.

9. Initial (I) compliance tests shall be performed on each CT using both fuels. The stack test for each turbine shall be performed within 10 percent of the maximum heat input rate for the tested operating temperature. Annual (A) compliance tests shall be performed on each CT with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with the ~~November 2, 1989, version of~~ 40 CFR 60 Appendix A.

- a. 5 or 17 for PM (I, A, for oil only)

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Combined Cycle Units 1 and 2

- b. 10 for CO (I, A)
- c. 9 for VE (I, A)
- d. 20 for NO<sub>x</sub> (I, A) Compliance with the 24-hour block standard and annual limit shall be demonstrated by CEMS data. Compliance with the maximum allowable mass emissions rates (lb/hour) shall be demonstrated by converting NO<sub>x</sub> CEMS data collected during the required annual CO tests.

Other ~~DER approved~~ methods may be used for compliance testing after prior Department approval.

**Specific Condition No. 13 (Permit No. PSD-FL-176):** Replace entire condition regarding NSPS Subpart GG provisions with the following.

13. Each combined cycle combustion turbine is subject to the applicable requirements of NSPS Subparts A and KKKK in 40 CFR 60. {Permitting Note: The applicable provisions of NSPS Subparts A and KKKK have already been included in the current Title V air operation permit and are not repeated here.}

**Specific Condition No. 20 (Permit No. PSD-FL-176):** Replace entire condition regarding NSPS Subpart GG provisions with the following.

20. Each combined cycle combustion turbine is subject to the applicable requirements of NSPS Subparts A and KKKK in 40 CFR 60. {Permitting Note: The applicable provisions of NSPS Subparts A and KKKK have already been included in the current Title V air operation permit and are not repeated here.}

#### NEW PERMIT CONDITIONS – SPRINT PROJECT

- 26. SPRINT Upgrade: The permittee is authorized to add General Electric's "SPRINT" spray inter-cooling technology. In general, the equipment consists of a system that will automatically meter approximately 9 to 12 gpm of de-mineralized water to a series of 24 spray nozzles. [Design]
- 27. CEMS Required: To demonstrate compliance with the NO<sub>x</sub> emissions concentration limits, the permittee shall install and operate a NO<sub>x</sub> CEMS in accordance with the provisions of 40 CFR 75, NSPS Subparts A and KKKK, and the requirements in Appendix A (CEMS Requirements) of this permit. [40 CFR 75, NSPS Subparts A and KKKK, and Rule 62-4.070(3), F.A.C.]
- 28. The owner or operator 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 combustion turbine. This monitoring data shall be used to demonstrate compliance during periods when the CEMS data is not available or not valid. This monitoring shall be conducted consistent with the NSPS KKKK provisions in Appendix C of this permit.
- 29. Previous Permits: For the affected emissions units, the conditions of this permit revision supplement all previously issued air construction and operation permits, which include operational restrictions, permitted capacities, and emissions standards as well as requirements for testing, monitoring, record keeping, reporting, etc. Unless specifically modified by this permit, the affected emissions units remain subject to all other applicable conditions specified in original Permit No. PSD-FL-176 as well as the subsequent Modification A and applicable amendments. This permit supersedes all of the conditions of Permit PSD-FL-176B (Project No. 0694801-008-AC). [Rule 62-4.070, F.A.C.]

## **SECTION 4. APPENDICES**

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Appendix A. Citation Formats and Glossary of Common Terms

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Appendix C. NSPS Subparts A and KKKK Provisions

## SECTION 4. APPENDIX A

### Citation Formats and Glossary of Common Terms

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#### CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

##### Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit  
“AO” identifies the permit as an Air Operation Permit  
“123456” identifies the specific permit project number

##### New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located  
“2222” represents the specific facility ID number for that county  
“001” identifies the specific permit project number  
“AC” identifies the permit as an air construction permit  
“AF” identifies the permit as a minor source federally enforceable state operation permit  
“AO” identifies the permit as a minor source air operation permit  
“AV” identifies the permit as a major Title V air operation permit

##### PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality  
“FL” means that the permit was issued by the State of Florida  
“317” identifies the specific permit project number

##### Florida Administrative Code (F.A.C.)

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

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

##### Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

#### GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations



## SECTION 4. APPENDIX A

### Citation Formats and Glossary of Common Terms

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<b>CO:</b> carbon monoxide	<b>MW:</b> megawatt
<b>COMS:</b> continuous opacity monitoring system	<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants
<b>DEP:</b> Department of Environmental Protection	<b>NO<sub>x</sub>:</b> nitrogen oxides
<b>Department:</b> Department of Environmental Protection	<b>NSPS:</b> New Source Performance Standards
<b>dscfm:</b> dry standard cubic feet per minute	<b>O&amp;M:</b> operation and maintenance
<b>EPA:</b> Environmental Protection Agency	<b>O<sub>2</sub>:</b> oxygen
<b>ESP:</b> electrostatic precipitator (control system for reducing particulate matter)	<b>Pb:</b> lead
<b>EU:</b> emissions unit	<b>PM:</b> particulate matter
<b>F.A.C.:</b> Florida Administrative Code	<b>PM<sub>10</sub>:</b> particulate matter with a mean aerodynamic diameter of 10 microns or less
<b>F.D.:</b> forced draft	<b>PSD:</b> prevention of significant deterioration
<b>F.S.:</b> Florida Statutes	<b>psi:</b> pounds per square inch
<b>FGR:</b> flue gas recirculation	<b>PTE:</b> potential to emit
<b>Fl:</b> fluoride	<b>RACT:</b> reasonably available control technology
<b>ft<sup>2</sup>:</b> square feet	<b>RATA:</b> relative accuracy test audit
<b>ft<sup>3</sup>:</b> cubic feet	<b>SAM:</b> sulfuric acid mist
<b>gpm:</b> gallons per minute	<b>scf:</b> standard cubic feet
<b>gr:</b> grains	<b>scfm:</b> standard cubic feet per minute
<b>HAP:</b> hazardous air pollutant	<b>SIC:</b> standard industrial classification code
<b>Hg:</b> mercury	<b>SNCR:</b> selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
<b>I.D.:</b> induced draft	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>ID:</b> identification	<b>TPH:</b> tons per hour
<b>kPa:</b> kilopascals	<b>TPY:</b> tons per year
<b>lb:</b> pound	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>MACT:</b> maximum achievable technology	<b>VE:</b> visible emissions
<b>MMBtu:</b> million British thermal units	<b>VOC:</b> volatile organic compounds
<b>MSDS:</b> material safety data sheets	

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## SECTION 4. APPENDIX B

### CEMS Requirements

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#### CEMS OPERATION PLAN

1. Affected Units: The permittee is required to install and operate a NO<sub>x</sub> CEMS on each of the two combined cycle gas turbines (EU-003 and EU-004).
2. CEMS Operation Plan: The owner or operator shall maintain a facility-wide plan for the proper installation, calibration, maintenance and operation of each NO<sub>x</sub> CEMS required by this permit. Copies of this plan shall be provided to the Compliance Authority and kept on site for review. The owner or operator shall revise this plan as necessary and provide updates to the Compliance Authority.

#### INSTALLATION, PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE

3. Installation Deadline: The owner or operator shall install and operate a NO<sub>x</sub> CEMS in accordance with the provisions of 40 CFR 75 and NSPS Subparts A and KKKK in 40 CFR 60. For this project, each NO<sub>x</sub> CEMS has already been installed and certified.
4. Installation: All CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The owner or operator shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR Part 60, Appendix B.
5. Span Values and Dual Range Monitors: The owner or operator shall set appropriate span values for the CEMS. The owner or operator shall install dual range monitors if required by and in accordance with the CEMS Operation Plan.
6. Continuous Flow Monitor: For compliance with mass emission rate standards, the owner or operator shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR Part 60, Appendix B, Performance Specification 6. Alternatively, the owner or operator may install a fuel flow monitor and use an appropriate F-Factor computational approach to calculate stack exhaust flow rate.
7. Diluent Monitor: If it is necessary to correct the CEMS output to the oxygen concentrations specified in this permit's emission standards, the owner or operator shall either install an oxygen monitor or install a CO<sub>2</sub> monitor and use an appropriate F-Factor computational approach.
8. Moisture Correction: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0%moisture). *{Permitting Note: The CEMS Operation Plan will contain additional CEMS-specific details and procedures for installation.}*
9. Performance Specifications: The owner or operator shall evaluate the acceptability of each CEMS by conducting the appropriate performance specification, as follows. CEMS determined to be unacceptable shall not be considered installed for purposes of meeting the timelines of this permit. For NO<sub>x</sub> monitors, the owner or operator shall conduct Performance Specification 2 of 40 CFR Part 60, Appendix B.
10. Quality Assurance: The owner or operator shall follow the quality assurance procedures of 40 CFR Part 60, Appendix F. The required RATA tests for NO<sub>x</sub> shall be performed using EPA Method 7E in Appendix A of 40 CFR Part 60. NO<sub>x</sub> emissions shall be expressed "as NO<sub>2</sub>."
11. Substituting RATA Tests for Compliance Tests: Data collected during CEMS quality assurance RATA tests can substitute for annual stack tests, and vice versa, at the option of the owner or operator, provided the owner or operator indicates this intent in the submitted test protocol and follows the procedures outlined in the CEMS Operation Plan.

#### CALCULATION APPROACH

12. CEMS Used for Compliance: Once adherence to the applicable performance specification for each CEMS is demonstrated, the owner or operator shall use the CEMS to demonstrate compliance with the applicable emission standards as specified by this permit.
13. CEMS Data: Each CEMS shall monitor and record emissions during all periods of operation and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments and span adjustments, and except for allowable data exclusions as per Condition 19 of this Appendix.

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## SECTION 4. APPENDIX B

### CEMS Requirements

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14. Operating Hours and Operating Days: For purposes of this Appendix, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Unless otherwise specified by this permit, any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
15. Valid Hourly Averages: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
  - a. Hours that are not operating hours are not valid hours.
  - b. For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."
16. Compliance Averages: Compliance with the "24-hour block average" shall be determined for each calendar day of operation by calculating the arithmetic average of valid hourly averages collected during the calendar day.

### MONITOR AVAILABILITY

17. Monitor Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

### EXCESS EMISSIONS

18. Definitions:
  - a. *Startup* is defined as 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* means the cessation of the operation of an emissions unit for any purpose.
  - c. *Malfunction* means 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.
19. 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.
20. Data Exclusion Procedures for SIP Compliance: As per the procedures in this condition, limited amounts of CEMS emissions data may be excluded from the corresponding compliance demonstration, provided that best operational practices to minimize emissions are adhered to and the duration of data excluded is minimized. The data exclusion procedures of this condition apply only to SIP-based emission limits.
  - a. *Excess Emissions*. Data in excess of the applicable emission standard may be excluded from compliance calculations if the data are collected during periods of permitted excess emissions (for example, during startup, shutdown or malfunction). The maximum duration of excluded data is 2 hours in any 24-hour period, unless some other duration is specified by this permit.
  - b. *Limited Data Exclusion*. If the compliance calculation using all valid CEMS emission data, as defined in Condition 14 of this Appendix, indicates that the emission unit is in compliance, then no CEMS data shall be excluded from the compliance demonstration.

## SECTION 4. APPENDIX B

### CEMS Requirements

- c. *Event Driven Exclusion.* The underlying event (for example, the startup, shutdown or malfunction event) must precede the data exclusion. If there is no underlying event, then no data may be excluded. Only data collected during the event may be excluded.
  - d. *Reporting Excluded Data.* The data exclusion procedures of this condition are not necessarily the same procedures used for excess emissions as defined by federal rules. Quarterly or semi-annual reports required by this permit shall indicate not only the duration of data excluded from SIP compliance calculations but also the number of excess emissions as defined by federal rules.
21. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate noncompliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. For malfunctions, notification is sufficient for the owner or operator to exclude CEMS data.

### ANNUAL EMISSIONS

22. CEMS Used for Calculating Annual Emissions: All valid data, as defined in Condition 14 of this Appendix, shall be used when calculating annual emissions.
- a. Annual emissions shall include data collected during startup, shutdown and malfunction periods.
  - b. Annual emissions shall include data collected during periods when the emission unit is not operating but emissions are being generated (for example, when firing fuel to warm up a process for some period of time prior to the emission unit's startup).
  - c. Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit or RAA. These periods of time shall be considered missing data for purposes of calculating annual emissions.
  - d. Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered missing data for purposes of calculating annual emissions.
23. Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average. For each hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the owner or operator shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.
24. Emissions Calculation: Hourly emissions shall be calculated for each hour as the product of the 1-hour block average and the duration of pollutant emissions during that hour. Annual emissions shall be calculated as the sum of all hourly emissions occurring during the year.

**SECTION 4. APPENDIX C**  
**NSPS Subparts A and KKKK Provisions**

In accordance with Rule 62-204.800, F.A.C., the following federal regulations in Title 40 of the Code of Federal Regulations were adopted by reference: 40 CFR 60, Subpart A, General Provisions; and 40 CFR 60, Subpart KKKK, Stationary Combustion Turbines. The original federal rule numbering has been retained. The applicable provisions of these federal regulations apply to the following emissions units.

ID No.	Emission Unit Description
003	Unit 1 Combined Cycle Combustion Turbine with HRSG and Duct Burner
004	Unit 2 Combined Cycle Combustion Turbine with HRSG and Duct Burner

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

The following emissions units are subject to the applicable provisions in NSPS Subpart A, KKKK and Kb of 40 CFR 60.

**§ 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.

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**SECTION 4. APPENDIX C**  
**NSPS Subparts A and KKKK Provisions**

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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 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

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**SECTION 4. APPENDIX C**  
**NSPS Subparts A and KKKK Provisions**

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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.

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.

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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]

**§ 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:

A—ampere	cfm—cubic feet per minute
g—gram	cu ft—cubic feet
Hz—hertz	dcf—dry cubic feet
J—joule	dcm—dry cubic meter
K—degree Kelvin	dscf—dry cubic feet at standard conditions
kg—kilogram	dscm—dry cubic meter at standard conditions
m—meter	eq—equivalent
m <sup>3</sup> —cubic meter	°F—degree Fahrenheit
mg—milligram—10 <sup>-3</sup> gram	ft—feet
mm—millimeter—10 <sup>-3</sup> meter	gal—gallon
Mg—megagram—10 <sup>6</sup> gram	gr—grain
mol—mole	g-eq—gram equivalent
N—newton	hr—hour
ng—nanogram—10 <sup>-9</sup> gram	in—inch
nm—nanometer—10 <sup>-9</sup> meter	k—1,000
Pa—pascal	l—liter
s—second	lpm—liter per minute
V—volt	lb—pound
W—watt	meq—milliequivalent
Ω—ohm	min—minute
μg—microgram—10 <sup>-6</sup> gram	ml—milliliter

(b) Other units of measure:

Btu—British thermal unit	mol. wt.—molecular weight
°C—degree Celsius (centigrade)	ppb—parts per billion
cal—calorie	ppm—parts per million
	psia—pounds per square inch absolute



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psig—pounds per square inch gage

°R—degree Rankine

scf—cubic feet at standard conditions

scfh—cubic feet per hour at standard conditions

scm—cubic meter at standard conditions

sec—second

sq ft—square feet

std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide

CO—carbon monoxide

CO<sub>2</sub>—carbon dioxide

HCl—hydrochloric acid

Hg—mercury

H<sub>2</sub>O—water

H<sub>2</sub>S—hydrogen sulfide

H<sub>2</sub>SO<sub>4</sub>—sulfuric acid

N<sub>2</sub>—nitrogen

NO—nitric oxide

NO<sub>2</sub>—nitrogen dioxide

NO<sub>x</sub>—nitrogen oxides

O<sub>2</sub>—oxygen

SO<sub>2</sub>—sulfur dioxide

SO<sub>3</sub>—sulfur trioxide

SO<sub>x</sub>—sulfur oxides

(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

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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.

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- (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.

Figure 1—Summary Report—Gaseous and Opacity Excess Emission and Monitoring System Performance  
Pollutant (Circle One—SO<sub>2</sub>/NO<sub>x</sub>/TRS/H<sub>2</sub>S/CO/Opacity)

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Company: \_\_\_\_\_

Emission Limitation \_\_\_\_\_

Address: \_\_\_\_\_

Monitor Manufacturer and Model No. \_\_\_\_\_

Date of Latest CMS Certification or Audit \_\_\_\_\_

Process Unit(s) Description: \_\_\_\_\_

Total source operating time in reporting period 1 \_\_\_\_\_

Emission data summary 1      CMS performance summary 1

1. Duration of excess emissions in reporting period due to:      1. CMS downtime in reporting period due to:

a. Startup/shutdown      a. Monitor equipment malfunctions

b. Control equipment problems      b. Non-Monitor equipment malfunctions

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- 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. Total duration of excess emissions  $\times (100) [\text{Total source operating time}] \%2$  3. [Total CMS Downtime]  $\times (100) [\text{Total source operating time}] \%2$

- 1 For opacity, record all times in minutes. For gases, record all times in hours.  
2 For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

(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

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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 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

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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 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.

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- (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 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

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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 determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 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 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



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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 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,

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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 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

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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 O<sub>2</sub> or 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]

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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).

**§ 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

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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 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.

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- (2) The location of the existing facility.
- (3) A brief description of the existing facility and the components which are to be replaced.
- (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
- (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
- (6) The estimated life of the existing facility after the replacements.
- (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by 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](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, MI 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



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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)e1, 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 7, 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 26A, Section 7.1.2; and 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.



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- (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), 60.664(e)(2)(ii), 60.664(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

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- (Diethyl 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

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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.

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- (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

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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.
- (l) 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 (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

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Finding Aids section of the printed volume and on GPO Access.

**§ 60.18 General control device requirements.**

Not applicable.

**§ 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.
- (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

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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]

**40 CFR 60, SUBPART KKKK, STATIONARY COMBUSTION TURBINES**

**Source:** 71 FR 38497, July 6, 2006, unless otherwise noted.

**INTRODUCTION**

**§ 60.4300 What is the purpose of this subpart?**

This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

**APPLICABILITY**

**§ 60.4305 Does this subpart apply to my stationary combustion turbine?**

- (a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.
- (b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

**§ 60.4310 What types of operations are exempt from these standards of performance?**

- (a) Emergency combustion turbines, as defined in §60.4420(i), are exempt from the nitrogen oxides (NO<sub>x</sub>) emission limits in §60.4320.
- (b) Stationary combustion turbines engaged by manufacturers in research and development of equipment for both combustion turbine emission control techniques and combustion turbine efficiency improvements are exempt from the NO<sub>x</sub> emission limits in §60.4320 on a case-by-case basis as determined by the Administrator.
- (c) Stationary combustion turbines at integrated gasification combined cycle electric utility steam generating units that are subject to subpart Da of this part are exempt from this subpart.
- (d) Combustion turbine test cells/stands are exempt from this subpart.

**EMISSION LIMITS**

**§ 60.4315 What pollutants are regulated by this subpart?**

The pollutants regulated by this subpart are nitrogen oxide (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>).

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**§ 60.4320 What emission limits must I meet for nitrogen oxides (NO<sub>x</sub>)?**

- (a) You must meet the emission limits for NO<sub>x</sub> specified in Table 1 to this subpart.
- (b) If you have two or more turbines that are connected to a single generator, each turbine must meet the emission limits for NO<sub>x</sub>.

**§ 60.4325 What emission limits must I meet for NO<sub>x</sub> if my turbine burns both natural gas and distillate oil (or some other combination of fuels)?**

You must meet the emission limits specified in Table 1 to this subpart. If your total heat input is greater than or equal to 50 percent natural gas, you must meet the corresponding limit for a natural gas-fired turbine when you are burning that fuel. Similarly, when your total heat input is greater than 50 percent distillate oil and fuels other than natural gas, you must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that you burn that particular fuel.

**§ 60.4330 What emission limits must I meet for sulfur dioxide (SO<sub>2</sub>)?**

- (a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.
  - (1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO<sub>2</sub> in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output, or
  - (2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.
- (b) If your turbine is located in a noncontinental area or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit, you must comply with one or the other of the following conditions:
  - (1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO<sub>2</sub> in excess of 780 ng/J (6.2 lb/MWh) gross output, or
  - (2) You must not burn in the subject stationary combustion turbine any fuel which contains total sulfur with potential sulfur emissions in excess of 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

**GENERAL COMPLIANCE REQUIREMENTS**

**§ 60.4333 What are my general requirements for complying with this subpart?**

- (a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
- (b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:
  - (1) Determine compliance with the applicable NO<sub>x</sub> emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or
  - (2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.



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**MONITORING**

**§ 60.4335 How do I demonstrate compliance for NO<sub>x</sub> if I use water or steam injection?**

- (a) If you are using water or steam injection to control NO<sub>x</sub> emissions, you must 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 when burning a fuel that requires water or steam injection for compliance.
- (b) Alternatively, you may use continuous emission monitoring, as follows:
  - (1) Install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO<sub>x</sub> monitor and a diluent gas (oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>)) monitor, to determine the hourly NO<sub>x</sub> emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu); and
  - (2) For units complying with the output-based standard, install, calibrate, maintain, and operate a fuel flow meter (or flow meters) to continuously measure the heat input to the affected unit; and
  - (3) For units complying with the output-based standard, install, calibrate, maintain, and operate a watt meter (or meters) to continuously measure the gross electrical output of the unit in megawatt-hours; and
  - (4) For combined heat and power units complying with the output-based standard, install, calibrate, maintain, and operate meters for useful recovered energy flow rate, temperature, and pressure, to continuously measure the total thermal energy output in British thermal units per hour (Btu/h).

**§ 60.4340 How do I demonstrate continuous compliance for NO<sub>x</sub> if I do not use water or steam injection?**

- (a) If you are not using water or steam injection to control NO<sub>x</sub> emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO<sub>x</sub> emission result from the performance test is less than or equal to 75 percent of the NO<sub>x</sub> emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO<sub>x</sub> emission limit for the turbine, you must resume annual performance tests.
- (b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:
  - (1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345, or
  - (2) Continuous parameter monitoring as follows:
    - (i) For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, you must define parameters indicative of the unit's NO<sub>x</sub> formation characteristics, and you must monitor these parameters continuously.
    - (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO<sub>x</sub> mode.
    - (iii) For any turbine that uses SCR to reduce NO<sub>x</sub> emissions, you must continuously monitor appropriate parameters to verify the proper operation of the emission controls.
    - (iv) For affected units that are also regulated under part 75 of this chapter, with state approval you can monitor the 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, the requirements of this paragraph (b) may be met by performing the parametric monitoring described in section 2.3 of part 75 appendix E or in §75.19(c)(1)(iv)(H).

**§ 60.4345 What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?**

If the option to use a NO<sub>x</sub>CEMS is chosen:

- (a) Each NO<sub>x</sub> diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to this part, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to this part is not required. Alternatively, a NO<sub>x</sub> diluent CEMS that is installed and certified

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according to appendix A of part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

- (b) As specified in §60.13(e)(2), during each full unit operating hour, both the NO<sub>x</sub> monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor 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 for each monitor to validate the NO<sub>x</sub> emission rate for the hour.
- (c) Each fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flow meters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.
- (d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.
- (e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to part 75 of this chapter.

**§ 60.4350 How do I use data from the continuous emission monitoring equipment to identify excess emissions?**

For purposes of identifying excess emissions:

- (a) All CEMS data must be reduced to hourly averages as specified in §60.13(h).
- (b) For each unit operating hour in which a valid hourly average, as described in §60.4345(b), is obtained for both NO<sub>x</sub> and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO<sub>x</sub> emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of this part. For any hour in which the hourly average O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub> (or the hourly average CO<sub>2</sub> concentration is less than 1.0 percent CO<sub>2</sub>), a diluent cap value of 19.0 percent O<sub>2</sub> or 1.0 percent CO<sub>2</sub> (as applicable) may be used in the emission calculations.
- (c) Correction of measured NO<sub>x</sub> concentrations to 15 percent O<sub>2</sub> is not allowed.  
  
Permitting Note: Based on correspondence with EPA's Office of Air Quality and Planning Standards, this requirement should have been removed when NSPS Subpart KKKK was revised to add concentration-based standards (ppmv corrected to 15% oxygen) in addition to the output-based standards (lb/MWh). The regulation is currently under reconsideration for several issues. In the mean time, EPA states that the intent is to allow sources complying with the optional concentration-based standards to correct to 15% oxygen.
- (d) If you have installed and certified a NO<sub>x</sub> diluent CEMS to meet the requirements of part 75 of this chapter, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under §60.7(c).
- (e) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.
- (f) Calculate the hourly average NO<sub>x</sub> emission rates, in units of the emission standards under §60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:

(1) For simple-cycle operation:

$$E = \frac{(\text{NO}_x)_b * (\text{HI})_b}{P} \quad (\text{Eq. 1})$$

Where:

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E = hourly NO<sub>x</sub> emission rate, in lb/MWh,

(NO<sub>x</sub>)<sub>h</sub> = hourly NO<sub>x</sub> emission rate, in lb/MMBtu,

(HI)<sub>h</sub> = hourly heat input rate to the unit, in MMBtu/h, measured using the fuel flow meter(s), e.g., calculated using Equation D-15a in appendix D to part 75 of this chapter, and

P = gross energy output of the combustion turbine in MW.

- (2) For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1 of this subpart, except that the gross energy output is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW, as in the following equations:

$$P = (Pe)_t + (Pe)_e + Ps + Po \quad (\text{Eq. 2})$$

Where:

P = gross energy output of the stationary combustion turbine system in MW.

(Pe)<sub>t</sub> = electrical or mechanical energy output of the combustion turbine in MW,

(Pe)<sub>e</sub> = electrical or mechanical energy output (if any) of the steam turbine in MW, and

$$Ps = \frac{Q * H}{3.413 \times 10^6 \text{ Btu/MWh}} \quad (\text{Eq. 3})$$

Where:

Ps = useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MW,

Q = measured steam flow rate in lb/h,

H = enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb, and  $3.413 \times 10^6$  = conversion from Btu/h to MW.

Po = other useful heat recovery, measured relative to ISO conditions, not used for steam generation or performance enhancement of the combustion turbine.

- (3) For mechanical drive applications complying with the output-based standard, use the following equation:

$$E = \frac{(NO_x)_m}{BL * AL} \quad (\text{Eq. 4})$$

Where:

E = NO<sub>x</sub> emission rate in lb/MWh,

(NO<sub>x</sub>)<sub>m</sub> = NO<sub>x</sub> emission rate in lb/h,

BL = manufacturer's base load rating of turbine, in MW, and

AL = actual load as a percentage of the base load.

- (g) For simple cycle units without heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 4-hour rolling average basis, as described in §60.4380(b)(1).
- (h) For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from paragraph (f) of this section to assess excess emissions on a 30 unit operating day rolling average basis, as described in §60.4380(b)(1).

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**§ 60.4355 How do I establish and document a proper parameter monitoring plan?**

- (a) The steam or water to fuel ratio or other parameters that are continuously monitored as described in §§60.4335 and 60.4340 must be monitored during the performance test required under §60.8, to establish acceptable values and ranges. You 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. You must 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 must:
- (1) Include the indicators to be monitored and show there is a significant relationship to emissions and proper operation of the NO<sub>x</sub> emission controls,
  - (2) Pick ranges (or designated conditions) of the indicators, or describe the process by which such range (or designated condition) will be established,
  - (3) Explain the process you will use to make certain that you obtain data that are representative of the emissions or parameters being monitored (such as detector location, installation specification if applicable),
  - (4) Describe quality assurance and control practices that are adequate to ensure the continuing validity of the data,
  - (5) Describe the frequency of monitoring and the data collection procedures which you will use (e.g., you are using a computerized data acquisition over a number of discrete data points with the average (or maximum value) being used for purposes of determining whether an exceedance has occurred), and
  - (6) Submit justification for the proposed elements of the monitoring. If a proposed performance specification differs from manufacturer recommendation, you must explain the reasons for the differences. You must submit the data supporting the justification, but you may refer to generally available sources of information used to support the justification. You may rely on engineering assessments and other data, provided you demonstrate factors which assure compliance or explain why performance testing is unnecessary to establish indicator ranges. When establishing indicator ranges, you may choose to simplify the process by treating the parameters as if they were correlated. Using this assumption, testing can be divided into two cases:
    - (i) All indicators are significant only on one end of range (e.g., for a thermal incinerator controlling volatile organic compounds (VOC) it is only important to insure a minimum temperature, not a maximum). In this case, you may conduct your study so that each parameter is at the significant limit of its range while you conduct your emissions testing. If the emissions tests show that the source is in compliance at the significant limit of each parameter, then as long as each parameter is within its limit, you are presumed to be in compliance.
    - (ii) Some or all indicators are significant on both ends of the range. In this case, you may conduct your study so that each parameter that is significant at both ends of its range assumes its extreme values in all possible combinations of the extreme values (either single or double) of all of the other parameters. For example, if there were only two parameters, A and B, and A had a range of values while B had only a minimum value, the combinations would be A high with B minimum and A low with B minimum. If both A and B had a range, the combinations would be A high and B high, A low and B low, A high and B low, A low and B high. For the case of four parameters all having a range, there are 16 possible combinations.
- (b) For affected units that are also subject to part 75 of this chapter and that have state approval to use the low mass emissions methodology in §75.19 or the NO<sub>x</sub> emission measurement methodology in appendix E to part 75, you may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a QA plan, as described in §75.19(e)(5) or in section 2.3 of appendix E to part 75 of this chapter and section 1.3.6 of appendix B to part 75 of this chapter.

**§ 60.4360 How do I determine the total sulfur content of the turbine's combustion fuel?**

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084,

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D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

**§ 60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for units located in continental areas and 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

- (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas; or
- (b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas or 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas. 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.

**§ 60.4370 How often must I determine the sulfur content of the fuel?**

The frequency of determining the sulfur content of the fuel must be as follows:

- (a) *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).
- (b) *Gaseous fuel.* If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.
- (c) *Custom schedules.* Notwithstanding the requirements of paragraph (b) 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 (c)(1) and (c)(2) 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 §60.4330.
  - (1) The two custom sulfur monitoring schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of this section are acceptable, without prior Administrative approval:
    - (i) 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 (c)(1)(ii), (iii), or (iv) of this section, as applicable.
    - (ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, 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 greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.
    - (iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:

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- (A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(B) of this section.
  - (B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(C) of this section.
  - (C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, continue to monitor at this frequency.
  - (iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (c)(1)(ii) or (iii) of this section shall be followed.
- (2) 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:
- (i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
  - (ii) 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 half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.
  - (iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iii) of this section.
  - (iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iv) of this section.

**REPORTING**

**§ 60.4375 What reports must I submit?**

- (a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
- (b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

**§ 60.4380 How are excess emissions and monitor downtime defined for NOX?**

For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

- (a) For turbines using water or steam to fuel ratio monitoring:
  - (1) An excess emission is any unit operating hour for which the 4-hour rolling 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 §60.4320, 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 when a fuel is being burned that requires water or steam injection for NO<sub>x</sub> control will also be considered an excess emission.
  - (2) A period of monitor downtime is 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.

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- (3) Each report must include the average steam or water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.
- (b) For turbines using continuous emission monitoring, as described in §§60.4335(b) and 60.4345:
  - (1) An excess emissions is any unit operating period in which the 4-hour or 30-day rolling average NO<sub>x</sub> emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a “4-hour rolling average NO<sub>x</sub> emission rate” is the arithmetic average of the average NO<sub>x</sub> emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO<sub>x</sub> emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO<sub>x</sub> emission rate is obtained for at least 3 of the 4 hours. For the purposes of this subpart, a “30-day rolling average NO<sub>x</sub> emission rate” is the arithmetic average of all hourly NO<sub>x</sub> emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO<sub>x</sub> emissions rates for the preceding 30 unit operating days if a valid NO<sub>x</sub> emission rate is obtained for at least 75 percent of all operating hours.
  - (2) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO<sub>x</sub> concentration, CO<sub>2</sub> or O<sub>2</sub> concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes.
  - (3) For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.
- (c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NO<sub>x</sub> emission controls:
  - (1) An excess emission is 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.
  - (2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

**§ 60.4385 How are excess emissions and monitoring downtime defined for SO<sub>2</sub>?**

If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

- (a) 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 combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (b) If the option to sample each delivery of fuel oil has been selected, you must 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 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to paragraph (a) of this section. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option.
- (c) 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 ends on the date and hour of the next valid sample.

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**§ 60.4390 What are my reporting requirements if I operate an emergency combustion turbine or a research and development turbine?**

- (a) If you operate an emergency combustion turbine, you are exempt from the NO<sub>x</sub> limit and must submit an initial report to the Administrator stating your case.
- (b) Combustion turbines engaged by manufacturers in research and development of equipment for both combustion turbine emission control techniques and combustion turbine efficiency improvements may be exempted from the NO<sub>x</sub> limit on a case-by-case basis as determined by the Administrator. You must petition for the exemption.

**§ 60.4395 When must I submit my reports?**

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

**Performance Tests**

**§ 60.4400 How do I conduct the initial and subsequent performance tests, regarding NO<sub>x</sub>?**

- (a) You must conduct an initial performance test, as required in §60.8. Subsequent NO<sub>x</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).
  - (1) There are two general methodologies that you may use to conduct the performance tests. For each test run:
    - (i) Measure the NO<sub>x</sub> concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO<sub>x</sub> emission rate:

$$E = \frac{1.194 \times 10^{-7} * (NO_x)_c * Q_{std}}{P} \quad (\text{Eq. 5})$$

Where:

E = NO<sub>x</sub> emission rate, in lb/MWh

$1.194 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(NO<sub>x</sub>)<sub>c</sub> = average NO<sub>x</sub> concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

- (ii) Measure the NO<sub>x</sub> and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flow meter (or flow meters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO<sub>x</sub> emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO<sub>x</sub> emission rate in lb/MWh.
- (2) Sampling traverse points for NO<sub>x</sub> and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must 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.
- (3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:
  - (i) You may perform a stratification test for NO<sub>x</sub> and diluent pursuant to



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- (A) [Reserved], or
  - (B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.
- (ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NO<sub>x</sub> concentrations is within  $\pm 10$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 5$ ppm or  $\pm 0.5$  percent CO<sub>2</sub>(or O<sub>2</sub>) from the mean for all traverse points, then you may use three 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 three points must be located along the measurement line that exhibited the highest average NO<sub>x</sub> concentration during the stratification test; or
  - (B) For turbines with a NO<sub>x</sub> standard greater than 15 ppm @ 15% O<sub>2</sub>, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO<sub>x</sub> concentrations is within  $\pm 5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 3$ ppm or  $\pm 0.3$  percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points; or
  - (C) For turbines with a NO<sub>x</sub> standard less than or equal to 15 ppm @ 15% O<sub>2</sub>, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO<sub>x</sub> concentrations is within  $\pm 2.5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 1$ ppm or  $\pm 0.15$  percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points.
- (b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.
- (1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.
  - (2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO<sub>x</sub> emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.
  - (3) If water or steam injection is used to control NO<sub>x</sub> with no additional post-combustion NO<sub>x</sub> control and you choose to monitor the steam or water to fuel ratio in accordance with §60.4335, then that monitoring system must be operated concurrently with each EPA Method 20 or EPA Method 7E run and must be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.4320 NO<sub>x</sub> emissions limit.
  - (4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO<sub>x</sub> emissions rate at each tested level meets the applicable emission limit in §60.4320.
  - (5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.
  - (6) The ambient temperature must be greater than 0 °F during the performance test.

**§ 60.4405 How do I perform the initial performance test if I have chosen to install a NO<sub>x</sub>-diluent CEMS?**

If you elect to install and certify a NO<sub>x</sub>-diluent CEMS under §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

- (a) Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs.

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- (b) For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit.
- (c) Use the test data both to demonstrate compliance with the applicable NO<sub>x</sub> emission limit under §60.4320 and to provide the required reference method data for the RATA of the CEMS described under §60.4335.
- (d) Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NO<sub>x</sub> emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

**§ 60.4410 How do I establish a valid parameter range if I have chosen to continuously monitor parameters?**

If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NO<sub>x</sub> emission controls in accordance with §60.4340, the appropriate parameters must 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 §60.4355.

**§ 60.4415 How do I conduct the initial and subsequent performance tests for sulfur?**

- (a) You must conduct an initial performance test, as required in §60.8. Subsequent SO<sub>2</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.
  - (1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
    - (i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453 (all of which are incorporated by reference, see §60.17); or
    - (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).
  - (2) Measure the SO<sub>2</sub> concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO<sub>2</sub> emission rate:

$$E = \frac{1.664 \times 10^{-7} * (SO_2)_c * Q_{std}}{P} \quad (\text{Eq. 6})$$

Where:

E = SO<sub>2</sub> emission rate, in lb/MWh

$1.664 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(SO<sub>2</sub>)<sub>c</sub> = average SO<sub>2</sub> concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

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- (3) Measure the SO<sub>2</sub> and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC19-10-1981-Part 10 (incorporated by reference, see §60.17). Concurrently measure the heat input to the unit, using a fuel flow meter (or flow meters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO<sub>2</sub> emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the SO<sub>2</sub> emission rate in lb/MWh.

(b) [Reserved]

**DEFINITIONS**

**§ 60.4420 What definitions apply to this subpart?**

As used in this subpart, all terms not defined herein will have the meaning given them in the Clean Air Act and in subpart A (General Provisions) of this part.

*Combined cycle combustion turbine* means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to generate steam that is only used to create additional power output in a steam turbine.

*Combined heat and power combustion turbine* means any stationary combustion turbine which recovers heat from the exhaust gases to heat water or another medium, generate steam for useful purposes other than additional electric generation, or directly uses the heat in the exhaust gases for a useful purpose.

*Combustion turbine model* means a group of combustion turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.

*Combustion turbine test cell/stand* means any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) combustion turbines.

*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.

*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary combustion 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.

*Efficiency* means the combustion turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output—based on the higher heating value of the fuel.

*Emergency combustion turbine* means any stationary combustion turbine which operates in an emergency situation. Examples include stationary combustion turbines used to produce power for critical networks or equipment, including power supplied to portions of a facility, when electric power from the local utility is interrupted, or stationary combustion turbines used to pump water in the case of fire or flood, etc. Emergency stationary combustion turbines do not include stationary combustion turbines used as peaking units at electric utilities or stationary combustion turbines at industrial facilities that typically operate at low capacity factors. Emergency combustion turbines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are required by the manufacturer, the vendor, or the insurance company associated with the turbine. Required testing of such units should be minimized, but there is no time limit on the use of emergency combustion turbines.

*Excess emissions* means a specified averaging period over which either (1) the NO<sub>x</sub> emissions are higher than the applicable emission limit in §60.4320; (2) the total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.4330; 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.

*Gross useful output* means the gross useful work performed by the stationary combustion turbine system. For units using the mechanical energy directly or generating only electricity, the gross useful work performed is the gross electrical or mechanical output from the turbine/generator set. For combined heat and power units, the gross useful work performed is the gross electrical or mechanical output plus the useful thermal output (i.e., thermal energy delivered to a process).

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*Heat recovery steam generating unit* means a unit where the hot exhaust gases from the combustion turbine are routed in order to extract heat from the gases and generate steam, for use in a steam turbine or other device that utilizes steam. Heat recovery steam generating units can be used with or without duct burners.

*Integrated gasification combined cycle electric utility steam generating unit* means a coal-fired electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. No solid coal is directly burned in the unit during operation.

*ISO conditions* means 288 Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.

*Lean premix stationary combustion turbine* means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture before delivery to the combustor. Mixing may occur before or in the combustion chamber. A lean premixed turbine may operate in diffusion flame mode during operating conditions such as startup and shutdown, extreme ambient temperature, or low or transient load.

*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. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 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.

*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, the Northern Mariana Islands, or offshore platforms.

*Peak load* means 100 percent of the manufacturer's design capacity of the combustion turbine at ISO conditions.

*Regenerative cycle combustion turbine* means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine.

*Simple cycle combustion turbine* means any stationary combustion turbine which does not recover heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine, or which does not recover heat from the combustion turbine exhaust gases for purposes other than enhancing the performance of the combustion turbine itself.

*Stationary combustion turbine* means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine based system. Stationary means that the combustion turbine is not self propelled or intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability.

*Unit operating day* means a 24-hour period between 12 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.

*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.

*Useful thermal output* means the thermal energy made available for use in any industrial or commercial process, or used in any heating or cooling application, i.e., total thermal energy made available for processes and applications other than electrical or mechanical generation. Thermal output for this subpart means the energy in recovered thermal output measured against the energy in the thermal output at 15 degrees Celsius and 101.325 kilopascals of pressure.

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**Table 1—to Subpart KKKK of Part 60 - Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines**

<b>Combustion turbine type</b>	<b>Combustion turbine heat input at peak load (HHV)</b>	<b>NO<sub>x</sub> emission standard</b>
Modified or reconstructed turbine firing natural gas	> 50 MMBtu/h and ≤ 850 MMBtu/h	42 ppm at 15 percent O <sub>2</sub> or 250 ng/J of useful output (2.0 lb/MWh).
Modified or reconstructed turbine firing fuels other than natural gas	> 50 MMBtu/h and ≤ 850 MMBtu/h	96 ppm at 15 percent O <sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh).

## Livingston, Sylvia

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**From:** Livingston, Sylvia  
**Sent:** Tuesday, June 23, 2009 4:57 PM  
**To:** 'jmiller@caithnessenergy.com'; 'tgrace@caithnessenergy.com'; 'sosbourn@golder.com'; Zahm, Alan; Halpin, Mike; 'forney.kathleen@epa.gov'; 'abrams.heather@epamail.epa.gov'; Gibson, Victoria; Walker, Elizabeth (AIR); Koerner, Jeff; McWade, Tammy  
**Subject:** Lake Investment, LTD. - LAKE COGEN; 0694801-010-AC

Dear Sir/ Madam:

Attached is the official **Notice of Final 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:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0694801.010.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0694801.010.AC.F_pdf.zip)

**Owner/Company Name:** LAKE INVESTMENT, LTD.

**Facility Name:** LAKE COGEN

**Project Number:** 0694801-010-AC

**Permit Status:** FINAL

**Permit Activity:** CONSTRUCTION

**Facility County:** LAKE

**Processor:** Tammy McWade

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

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

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

## Livingston, Sylvia

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**From:** Jim Miller [jmill@caithnessenergy.com]  
**Sent:** Monday, August 03, 2009 4:37 PM  
**To:** Livingston, Sylvia  
**Cc:** 'Thomas Grace'  
**Subject:** RE: Lake Investment, LTD. - LAKE COGEN; 0694801-010-AC

I was able to open the document.

Thank you

Jim Miller

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**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Monday, August 03, 2009 4:26 PM  
**To:** James Miller  
**Subject:** FW: Lake Investment, LTD. - LAKE COGEN; 0694801-010-AC

Dear Mr. Miller:

We have not received confirmation that you were able to access the documents attached to this June 23rd Notice of Final construction permit e-mail. Please confirm receipt by opening the attachment and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Thanks,

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

*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 [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.*

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**From:** Livingston, Sylvia  
**Sent:** Tuesday, June 23, 2009 4:57 PM  
**To:** 'jmill@caithnessenergy.com'; 'tgrace@caithnessenergy.com'; 'sosbourn@golder.com'; Zahm, Alan; Halpin, Mike; 'forney.kathleen@epa.gov'; 'abrams.heather@epamail.epa.gov'; Gibson, Victoria; Walker, Elizabeth (AIR); Koerner, Jeff; McWade, Tammy  
**Subject:** Lake Investment, LTD. - LAKE COGEN; 0694801-010-AC

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*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).*

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[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0694801.010.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0694801.010.AC.F_pdf.zip)

**Owner/Company Name:** LAKE INVESTMENT, LTD.

**Facility Name:** LAKE COGEN

**Project Number:** 0694801-010-AC

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**Facility County:** LAKE

**Processor:** Tammy McWade

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at

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

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

Sylvia Livingston

Bureau of Air Regulation

Division of Air Resource Management (DARM)

850/921-9506

[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.



**Golder Associates Inc.**  
5100 West Lemon Street  
Suite 114  
Tampa, FL USA 33609  
Telephone: (813) 287-1717  
Fax: (813) 287-1716



August 11, 2008

Mr. Jonathon Holtom  
FDEP/DARM  
Division of Air Resource Management  
2600 Blair Stone Road, MS 5500  
Tallahassee, FL 32399-2400

**RECEIVED**

Our Ref.: 08389568

**RECEIVED**

AUG 12 2008

AUG 20 2008

BUREAU OF AIR REGULATION

DEP Central Dist.

**Re: LAKE COGENERATION FACILITY; REQUEST FOR AIR CONSTRUCTION  
PERMIT AND TITLE V REVISIONS  
FACILITY NO. 0694801**

Dear Mr. Holtom:

The enclosed air quality permit application package is submitted by Caithness Generation Services on behalf of Lake Cogeneration, Limited, L.P. ("Lake CoGen"), owners of a 110.5 MW (nominal) natural gas-fired cogeneration power plant in Umatilla, Florida. This facility operates under the authority of Title V Air Operation Permit Number 0694801-007-AV, which has an effective date of December 31, 2007. This Title V permit expires on December 31, 2012, and a renewal application is due by July 3, 2012. In addition, Air Construction Permit No. 0694801-008-AC was issued on June 11, 2007, for a SPRINT upgrade. This permit expires on December 31, 2008. Therefore, the purpose of this application package is to request the following:

- Incorporate the current construction permit SPRINT modification (0694801-008-AC) into the revised TV permit;
- Incorporate the newly installed CAIR program NOx CEMs as the designated method of NOx compliance, thus eliminating the need for a CAM Plan;
- Request the maximum heat input rate for firing with natural gas to be increased from 435 MMBtu/hr/CT to 450 MMBtu/hr/CT, based on better firing efficiency with the SPRINT upgrade and the reasonable assurance provided by the CEMs installation; and
- Eliminate the need for annual NOx source test and source test requirement resulting from use of temporary lease components during CT repair and/or service periods. The CEMs RATA testing would be conducted in lieu of annual NOx testing.

Lake CoGen appreciates the Department's timely consideration of this concurrent processing request for a minor source air construction permit and TV revisions. If you have any questions, please contact Tom Grace of Caithness Generation Services at (917) 472-4593 or me at (813) 287-1717.

Sincerely,

Scott Osbourn, P.E.  
Enclosure

cc: Tom Grace, Caithness Generation Services  
James Miller, Plant Manager, Lake Cogen



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

RECEIVED  
AUG 12 2008

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: <b>Lake Cogeneration Ltd.</b>	
2. Site Name: <b>Lake Cogeneration</b>	
3. Facility Identification Number: <b>0694801</b>	
4. Facility Location... Street Address or Other Locator: <b>39001 Golden Gem Dr.</b> City: <b>Umatilla</b> County: <b>Lake</b> Zip Code: <b>32784</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>Thomas Grace</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Caithness Generation Services</b> Street Address: <b>565 Fifth Ave., 29th Floor</b> City: <b>New York</b> State: <b>NY</b> Zip Code: <b>10017</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(917) 472 - 4593</b> ext. Fax: <b>(732) 817 - 0101</b>	
4. Application Contact E-mail Address: <b>tgrace@caithnessenergy.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application: <b>8/12/08</b>	3. PSD Number (if applicable):
2. Project Number(s): <b>0694801-010-AC</b> <b>0694801-011-AV</b>	4. Siting Number (if applicable):

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AUG 12 2008

## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is being submitted to obtain: (Check one)**

#### **Air Construction Permit**

- ☐ Air construction permit.
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

#### **Air Operation Permit**

- ☐ Initial Title V air operation permit.
- ☐ Title V air operation permit revision.
- ☐ Title V air operation permit renewal.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- ☒ Air construction permit and Title V permit revision, incorporating the proposed project.
- ☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- ☒ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

**The purpose for this permit revision is to request the following:**

- Incorporate the current construction permit SPRINT modification (0694801-008-AC) into the revised TV permit;
- Incorporate the newly installed CAIR program NOx CEMs as the designated method of NOx compliance;
- Request the maximum heat input rate for firing with natural gas to be increased from 435 MMBtu/hr/CT to 450 MMBtu/hr/CT, based on better firing efficiency with the SPRINT upgrade and the reasonable assurance provided by the CEMs installation; and
- Eliminate the need for annual NOx source test and source test requirement resulting from use of temporary lease components during CT repair and/or service periods. The CEMs RATA testing would be conducted in lieu of annual NOx testing.

## APPLICATION INFORMATION

### Scope of Application

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
<b>003 004</b>	<b>Two GE LM-6000 Combustion Turbines (CTs), each with HRSG and Duct Burner (DB)</b>	<b>AF2C</b>	<b>0</b>
<b>002</b>	<b>Facility-wide Fugitive and Vent Emissions</b>		<b>0</b>
	<b>See Attachment LC-A1-AC for specifics</b>		

### Application Processing Fee

**Check one:** ☐ Attached - Amount: \$\_\_\_\_\_ ☒ Not Applicable

## APPLICATION INFORMATION

### Owner/Authorized Representative Statement

Not Applicable

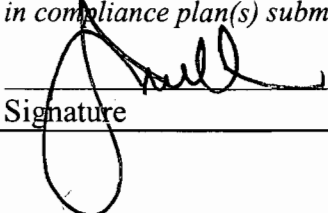
**Complete if applying for an air construction permit or an initial FESOP.**

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Owner/Authorized Representative E-mail Address:
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature _____ Date _____

## APPLICATION INFORMATION

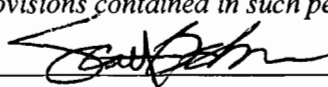
### Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: <b>James Miller, Plant Manager</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>Lake Cogeneration Ltd.</b> Street Address: <b>39001 Golden Gem Dr.</b> City: <b>Umatilla</b> State: <b>Florida</b> Zip Code: <b>32784</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(352) 669-3288</b> ext. Fax: <b>(352) 669-3188</b>
5. Application Responsible Official E-mail Address: <b>jmiller@caithnessenergy.com</b>
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  <div style="display: flex; justify-content: space-between;"><div>Signature </div><div>Date <u>8/7/08</u></div></div>

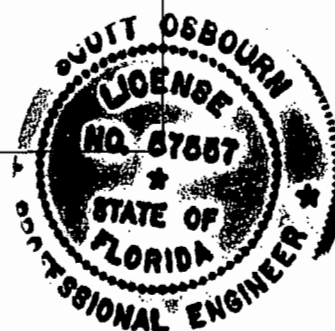
## APPLICATION INFORMATION

### Professional Engineer Certification

1. Professional Engineer Name: <b>Scott H. Osbourn</b> Registration Number: <b>57557</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>5100 Lemon Street, Suite 114</b> City: <b>Tampa</b> State: <b>FL</b> Zip Code: <b>33609</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(813) 287 - 1717</b> ext. Fax: <b>(813) 287 - 1716</b>
4. Professional Engineer E-mail Address: <b>sosbourn@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature  (seal) Date <u>8/8/08</u>

\* Attach any exception to certification statement.

\*\* Board of Professional Engineers Certificate of Authorization #00001670



## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates... Zone <b>17</b> East (km) <b>434.00</b> North (km) <b>3198.80</b>		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) <b>28° 55' 02"</b> Longitude (DD/MM/SS) <b>81° 40' 37"</b>	
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4931</b>
7. Facility Comment :  <b>Lake Cogeneration facility consists of two GE LM-6000 combustion turbine units (CTs), each unit equipped with an inlet chiller and a supplementary fired duct burner (DB) and exhausting through Heat Recovery Steam Generator (HRSG) stacks. The CTs have dual fuel (natural gas and distillate fuel) capability. Both CTs recently underwent SPRINT upgrade for enhanced efficiency per 0694801-008-AC.</b>			

#### Facility Contact

1. Facility Contact Name: <b>Thomas Grace, Mgr. E,H&amp;S</b>			
2. Facility Contact Mailing Address... Organization/Firm: <b>Lake Cogeneration L.P., c/o Caithness</b> Street Address: <b>565 Fifth Ave., 29th Floor</b> City: <b>New York</b> State: <b>NY</b> Zip Code: <b>10017</b>			
3. Facility Contact Telephone Numbers: Telephone: <b>(917) 472 - 4593</b> ext. Fax: <b>(732) 817 - 0101</b>			
4. Facility Contact E-mail Address: <b>tgrace@caithnessenergy.com</b>			

#### Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name: <b>James Miller, Plant Manager</b>			
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: <b>Lake Cogeneration Ltd.</b> Street Address: <b>39001 Golden Gem Dr.</b> City: <b>Umatilla</b> State: <b>FL</b> Zip Code: <b>32784</b>			
3. Facility Primary Responsible Official Telephone Numbers... Telephone: <b>(352) 669 - 3288</b> ext. Fax: <b>(352) 669 - 3188</b>			
4. Facility Primary Responsible Official E-mail Address: <b>jmiller@caithnessenergy.com</b>			



## FACILITY INFORMATION

### Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:  <b>Currently, the NSPS for stationary Combustion Turbines (40 CFR 60 Subpart GG) applies, as well as Subpart Dc for each of the Duct Burners. 40 CFR 60 Subpart Kb applies to the fuel oil storage tank. However, as a result of the requested heat input increase, the CT and DB units will now be subject to NSPS Subpart KKKK.</b>	

## FACILITY INFORMATION

### List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
<b>NOx – Nitrogen Oxides</b>	<b>A</b>	<b>Y</b>
<b>CO – Carbon Monoxide</b>	<b>A</b>	<b>Y</b>
<b>PM – Particulate Matter - Total</b>	<b>B</b>	<b>N</b>
<b>PM<sub>10</sub> – Particulate Matter, 10 micron</b>	<b>B</b>	<b>N</b>
<b>SO<sub>2</sub> – Sulfur Dioxide</b>	<b>B</b>	<b>N</b>
<b>VOC – Volatile Organic Compounds</b>	<b>B</b>	<b>N</b>

## FACILITY INFORMATION

### B. EMISSIONS CAPS

#### Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
<b>NO<sub>x</sub></b>		<b>EU-003 &amp; 004</b>		<b>385</b>	<b>ESCPD</b>
<b>CO</b>		<b>EU-003 &amp; 004</b>		<b>336</b>	<b>ESCPD</b>

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

**EU-003 and EU-004, including the DB units.**

## FACILITY INFORMATION

### C: FACILITY ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>11/27/06</u>
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>11/27/06</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>11/27/06</u>

#### Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input checked="" type="checkbox"/> Attached, Document ID: <u>LC-FI</u>
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <u>LC-FI</u>
4. List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for FESOP Applications

- |  |
|--|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility) |
|--|

#### Additional Requirements for Title V Air Operation Permit Applications

- |   |
|---|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (revision application)  |
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)<br><input checked="" type="checkbox"/> Attached, Document ID: <u>LC-FI-C1</u><br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)  |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input checked="" type="checkbox"/> Attached, Document ID: <u>LC-FI-C2</u><br><br>Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input checked="" type="checkbox"/> Not Applicable   |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable  |
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input checked="" type="checkbox"/> Attached, Document ID: <u>LC-FI-C3</u> <input type="checkbox"/> Not Applicable   |

## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

☐ Attached, Document ID: \_\_\_\_\_ ☐ Previously Submitted, Date: \_\_\_\_\_

☒ Not Applicable (not an Acid Rain source)

Phase II NO<sub>x</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

☐ Attached, Document ID: \_\_\_\_\_ ☐ Previously Submitted, Date: \_\_\_\_\_

☒ Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

☐ Attached, Document ID: \_\_\_\_\_ ☐ Previously Submitted, Date: \_\_\_\_\_

☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

☐ Attached, Document ID: \_\_\_\_\_ ☒ Previously Submitted, Date: 5/16/08

☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):

☐ Attached, Document ID: \_\_\_\_\_ ☐ Previously Submitted, Date: \_\_\_\_\_

☒ Not Applicable (not a Hg Budget unit)

#### Additional Requirements Comment

It should be noted that the CAIR rule was recently vacated by the DC Circuit Court of Appeals. Therefore, all compliance obligations under this rule have been suspended, until further notice. However, as requested in this application for TV revisions, the applicant has chosen to use the NO<sub>x</sub> CEMS, which were required to be installed under the CAIR program, for compliance with the allowable NO<sub>x</sub> limits. The NO<sub>x</sub> CEMS will determine emissions on a 30-day rolling average basis for comparison to the standard. Utilizing this method of compliance, the current TV CAM Plan is no longer required and is requested to be deleted.

## EMISSIONS UNIT INFORMATION

Section [ 1] of [ 2]

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** - Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

2 CTs each with HRSG and DB

**A. GENERAL EMISSIONS UNIT INFORMATION****Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

- ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

**Two SPRINT modified GE LM-6000 Combustion Turbines (CTs), each with HRSG and Duct Burner. SPRINT modifications addressed in Air Construction Permit No. 0694801-008-AC.**

3. Emissions Unit Identification Number: **EU 003 and EU 004**

4. Emissions Unit Status Code:  <b>A</b>	5. Commence Construction Date:	6. Initial Startup Date:  <b>1 July 1993</b>	7. Emissions Unit Major Group SIC Code:  <b>49</b>
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8. Federal Program Applicability: (Check all that apply)

- ☐ Acid Rain Unit
- ☒ CAIR Unit
- ☐ Hg Budget Unit

9. Package Unit: **GE LM-6000 CTs w/ Zurn HRSG**

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **Each CT is 42 MW at 51°F (nameplate), per note below, SPRINT upgrade has increased generation to approximately 52 MW/hr/CT.**



**11. Emissions Unit Comment:**

**Each CT's exhaust goes through a Heat Recovery Steam Generator (HRSG). The two HRSGs service a steam turbine generator rated at 26.5 MW and furnishes steam to an orange processing facility and/or water distillation unit. Supplemental heat to the system is supplied via Duct Burner firing, when needed. The SPRINT upgrade installed in 2007 per 0694801-008-AC increased power production generation output from approximately 42 MW/hr/CT to 52 MW/hr/CT. In addition, as required by the CAIR program, each unit is equipped with a certified CEMs for NOx monitoring and reporting.**

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

2 CTs each with HRSG and DB

**Emissions Unit Control Equipment/Method:** Control 1 of 1

1. Control Equipment/Method Description:

**Water injection to control NOx emissions.**

2. Control Device or Method Code: 028

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

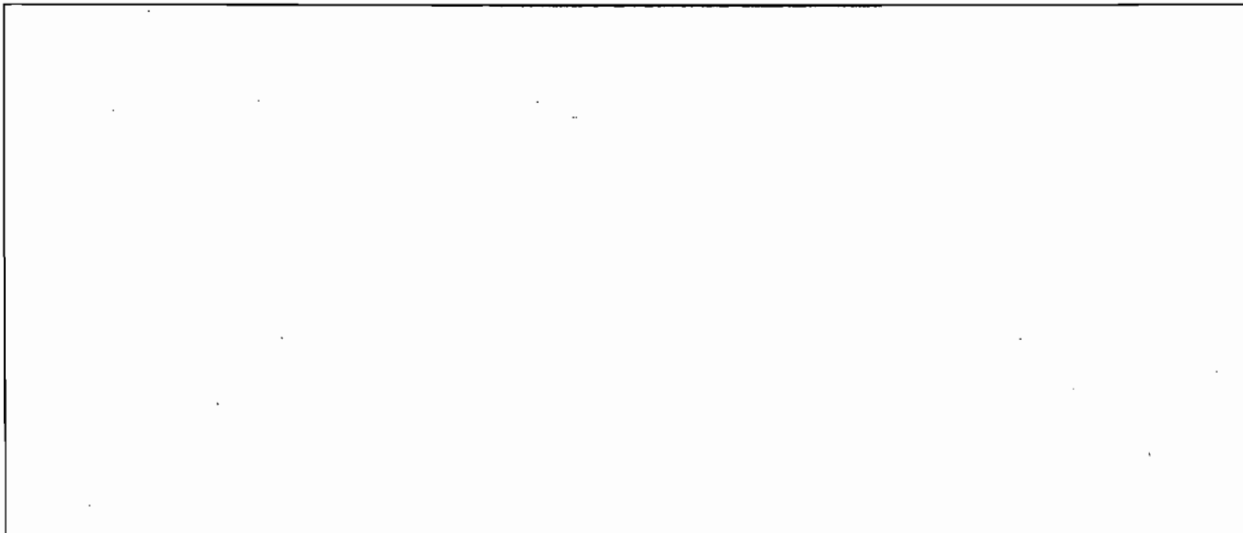
2 CTs each with HRSG and DB

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: million Btu/hr <b>450 (LHV @ 51°F) per CT</b>
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: <div style="display: flex; justify-content: space-between;"><div><b>24 hours/day</b> <b>52 weeks/year</b></div><div><b>7 days/week</b> <b>8,760 hours/year</b></div></div>
6. Operating Capacity/Schedule Comment:  <div style="margin-left: 40px;"><b>1. Incorporation of Construction Permit 0694801-008-AC SPRINT upgrade includes the following:</b>  When firing natural gas, the maximum heat input was increased from 423 MMBtu/hr to 435 MMBtu/hr (LHV @ 51°F) with the SPRINT upgrade. Maximum heat input on fuel oil firing remains 424 MMBTU/hr/CT (LHV @ 51°F). The maximum heat input for the Duct Burners remains 90 MMBTU/hr/DB (HHV). The DBs only fire natural gas.  <b>2. As part of this revision submittal (therefore, the requested concurrent processing of an air construction permit application), it is requested that the maximum heat input, when firing on natural gas in either CT, be increased from 435 MMBtu/hr to 450 MMBtu/hr (LHV @ 51°F). Maximum heat input on fuel oil firing remains 424 MMBTU/hr/CT (LHV @ 51°F). The maximum heat input for the Duct Burners remains 90 MMBTU/hr/DB (HHV). The DBs only fire natural gas.</b></div> The emissions assessment and regulatory applicability analysis for this request is provided in Attachment LC-FI of this application package.



**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**2 CTs each with HRSG and DB****C. EMISSION POINT (STACK/VENT) INFORMATION****(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: <b>3</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:  <b>Unit 1 stack (EU-003); Unit 2 stack (EU-004)</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:  <b>NA</b>			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>100 feet</b>	7. Exit Diameter: <b>11 feet</b>	
8. Exit Temperature: <b>250 °F</b>	9. Actual Volumetric Flow Rate: <b>320,253 acfm</b>	10. Water Vapor: <b>%</b>	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>Data reflects each individual CT unit. Emission point calculations are based upon baseload conditions at 51°F for natural gas firing.</b>			

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

2 CTs each with HRSG and DB

**D. SEGMENT (PROCESS/FUEL) INFORMATION****Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): <b>Internal Combustion Engines Electric Generation Natural Gas Combustion Turbine</b>		
2. Source Classification Code (SCC): <b>2-01-002-01</b>		3. SCC Units: <b>Million cubic feet burned</b>
4. Maximum Hourly Rate: <b>0.433</b>	5. Maximum Annual Rate: <b>3,793</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>Pipeline quality or less</b>	8. Maximum % Ash: <b>0</b>	9. Million Btu per SCC Unit: <b>1,040</b>
10. Segment Comment:  <b>Max. Annual Rate: 3,793. Maximum rate at 51°F with heat content (MMBtu/SCC) based upon LHV. Maximum percent sulfur: 2 grain/100 scf. DB rates are 90 MMBtu/hr and 525,000 MMBtu/yr each (~5,833 hr/yr/DB of operation).</b>		

**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type):  <b>Internal Combustion Engine, Industrial, Distillate Oil (Diesel) Combustion Turbine; Cogeneration.</b>		
2. Source Classification Code (SCC): <b>2-02-001-03</b>		3. SCC Units: <b>Thousand gallons burned</b>
4. Maximum Hourly Rate: <b>2.921</b>	5. Maximum Annual Rate: <b>701.05</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.05*</b>	8. Maximum % Ash: <b>0</b>	9. Million Btu per SCC Unit: <b>130</b>
10. Segment Comment:  <b>Under NSPS Subpart KKKK, the maximum fuel oil sulfur content is 0.05%. Maximum hourly and annual fuel usage based upon a permit limitation of 2,921 gal/hr/CT and 701,050 gal/yr/CT. The DBs do not fire fuel oil.</b>		

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

2 CTs each with HRSG and DB

**E. EMISSIONS UNIT POLLUTANTS \*****List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>NOx</b>	<b>028</b>		<b>EL</b>
<b>CO</b>			<b>EL</b>
<b>PM</b>			<b>EL</b>
<b>PM<sub>10</sub></b>			<b>EL</b>
<b>VOC</b>			<b>EL</b>
<b>SO<sub>2</sub></b>			<b>EL</b>
<b>SAM</b>			<b>EL</b>

\*Hg, Be and Pb concentration monitoring from the combustion of fuel oil are requested to be deleted due to the restricted amount of oil permitted to be fired by this facility.

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

Page [ 1 ] of [ 19 ].2 CTs w/ HRSG &amp; DB (NOx)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –****POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS****(Optional for unregulated emissions units.)**

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>NOx</b>		2. Total Percent Efficiency of Control: <b>90%</b>	
3. Potential Emissions: <b>148.3 lb/hour      404.7 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>42 ppmvd @ 15%O2</b> Reference: <b>Permit Limit (BACT)</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Potential emissions based on permit Table 1. Hourly potential emission based on CTs at 51°F operating conditions on fuel oil. Annual based on current facility limit. Annual limit for NOx remains limited based upon a limit of firing &lt; 701,050 gallons of fuel oil per unit per year.</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on facility limit. AC35-196459. PSD-FL-176.</b>			



**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>85.5 lb/hr.</b>	4. Equivalent Allowable Emissions: <b>85.5 lb/hour      404.7 tons/year</b>
5. Method of Compliance: <b>Request change from Annual Compliance Test (EPA Method 20) to use of CAIR program CEMs unit and annual RATA.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Total for both units combined with natural gas firing. CTs 1 and 2 are operated with wet injection design to produce 25 ppmvd NOx @ 15% O2. Allowable emissions established as BACT in AC Permit, Table 1a.</b>	

**Allowable Emissions** Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>148.3 lbs/hr/CT</b>	4. Equivalent Allowable Emissions: <b>148.3 lb/hour      404.7 tons/year</b>
5. Method of Compliance: <b>Request change from Annual Compliance Test (EPA Method 20) to use of CAIR program CEMs unit and annual RATA.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Oil firing. The CTs are operated with wet injection designed to produce 42 ppmvd NOx @ 15% O2. Allowable emission established as BACT in AC Permit, Table 1A.</b>	

**Allowable Emissions** Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: <b>Other and PSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>18 lb/hr</b>	4. Equivalent Allowable Emissions: <b>18 lb/hour      404.7 tons/year</b>
5. Method of Compliance: <b>None</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Emission limits for 2 Duct Burners as established as BACT. Annual Emissions for facility. Natural Gas fired only. Basis for limit is 0.1 lb/MMBtu</b>	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

Page [ 3 ] of [ 19 ] 2 CTs w/ HRSG &amp; DB (NOx)

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>103.5 lbs/hr</b>	4. Equivalent Allowable Emissions: <b>103.5 lb/hour      404.7 tons/year</b>
5. Method of Compliance: <b>Request change from Annual Compliance Test (EPA Method 20) to use of CAIR program CEMs unit and annual RATA.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Combined emissions limits for CTs and DBs as established as BACT. Annual emissions for facility. Natural gas firing only. Established by BACT as 25 ppm for CTs and 0.1 lb/MMBtu for DBs.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

Page [ 4 ] of [ 19 ] 2 CTs w/ HRSG &amp; DB (CO)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS****(Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>92 lb/hour                      350.3 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>28 ppmvd for CT and 0.2 lb/MMBtu for DB</b> Reference: <b>Permit Limit (BACT)</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Firing CTs and DBs on natural gas. Hourly potential emission based on CTs at 51°F operating conditions on natural gas.</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Hourly potential emissions based on CTs/ DBs at 51°F operating conditions on natural gas.</b>			

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

Page [ 5 ] of [ 19 ] 2 CTs w/ HRSG &amp; DB (CO)

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>56 lb/hr</b>	4. Equivalent Allowable Emissions: <b>56 lb/hour      350.3 tons/year</b>
5. Method of Compliance: <b>Five Year Renewal Compliance Test; EPA Method 10.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural Gas Firing; CT Units 1 &amp; 2; established as BACT in AC51-196460, Table 1A; Basis of limit is 28 ppmvd.</b>	

**Allowable Emissions** Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>34.5 lb/hr</b>	4. Equivalent Allowable Emissions: <b>34.5 lb/hour      350.3 tons/year</b>
5. Method of Compliance: <b>Five Year Renewal Compliance Test; EPA Method 10, if operated greater than 400 hr/year on fuel oil.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Oil firing; CTs 1 and 2; established as BACT; basis of limit is 18 ppmvd. Annual limit based upon a limit of firing &lt;701,050 gallons of fuel oil per unit per year.</b>	

**Allowable Emissions** Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>36 lb/hr</b>	4. Equivalent Allowable Emissions: <b>36 lb/hour      350.3 tons/year</b>
5. Method of Compliance: <b>None</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing for Duct Burners in Units 1 and 2; established as BACT; basis for limit is 0.2 lb/MMBtu heat input. Each DB is limited to 525,000 MMBtu/yr.</b>	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: <b>Other and ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>92 lb/hr</b>	4. Equivalent Allowable Emissions: <b>92 lb/hour      350.3 tons/year</b>
5. Method of Compliance: <b>Five Year Renewal Compliance Test; EPA Method 10.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural gas firing for CTs and DBs; represents BACT of 28 ppm for gas firing on CTs of 56.0 lb/hr, and 0.2 lb/MMBtu on DBs which reflects 36 lb/hr.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>PM-Total</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>20 lb/hour                      27 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>0.026 lb/MMBtu</b>  Reference: <b>Permit Limit (BACT)</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Potential emissions based on permit limit for CTs and only when firing on fuel oil.</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on permit limit.</b>			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>5 lb/hr</b>	4. Equivalent Allowable Emissions: <b>5 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing; CTs 1 &amp; 2, established as BACT in Permit; Table 1A; basis of limit is 0.0065 lb/MMBtu.</b>	

**Allowable Emissions** Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>20 lb/hr</b>	4. Equivalent Allowable Emissions: <b>20 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less; only required if operated &gt;400 hr/yr operation on fuel oil.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Oil firing; CTs 1 &amp; 2; established as BACT in AC Permit, Table 1A; basis of limit is 0.026 lb/MMBtu.</b>	

**Allowable Emissions** Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>2.6 lb/hr</b>	4. Equivalent Allowable Emissions: <b>2.6 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>None.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing for Duct burners in Units 1 &amp; 2; established as BACT; basis of limit 0.006 lb/ MMBtu.</b>	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>7.6 lb/hr</b>	4. Equivalent Allowable Emissions: <b>7.6 lb/hour      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing for CTs and DBs. Established as BACT.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

Page [10] of [ 19 ] 2 CTs w/ HRSG &amp; DB (PM10)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>PM-10</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>20 lb/hour                      27 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>0.026 lb/MMBtu</b>  Reference: <b>Permit limit (BACT) ; assumed equal to PM Total</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <p><b>Potential emissions based upon permit limit. NOTE, as done in previous permit applications, PM-10 is assumed equal to PM-Total. Testing based upon non-condensable portion fraction of test only. If the FDEP requires both condensable and non-condensable fractions, then the factor for PM-10 should be doubled to 0.052 and the potential emissions doubled to 40 lbs/hr and 54 tons/yr, respectively. For the purpose of this application it has not been and it remains the same as in the original construction permit and Title V application.</b></p>			
11. Potential, Fugitive, and Actual Emissions Comment:  <p><b>Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based upon permit limit.</b></p>			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions Allowable Emissions 1 of 4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>5 lb</b>	4. Equivalent Allowable Emissions: <b>5 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing; CTs 1 &amp; 2, established as BACT in AC Permit; Table1A; basis of limit 0.0065 lb/MMBtu.</b>	

**Allowable Emissions Allowable Emissions 2 of 4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>20 lb/ hr</b>	4. Equivalent Allowable Emissions: <b>20 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less; only if operated on fuel oil &gt;400 hours per year.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Oil firing; CTs 1 &amp; 2; established as BACT; basis of limit is 0.026 lb/ MMBtu.</b>	

**Allowable Emissions Allowable Emissions 3 of 4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>2.6 lb/hr</b>	4. Equivalent Allowable Emissions: <b>2.6 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>None.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural gas firing for DBs 1 &amp; 2; established as BACT; basis of limit is 0.006 lb/ MMBtu.</b>	

**EMISSIONS UNIT INFORMATION**

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**POLLUTANT DETAIL INFORMATION**

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>7.6 lb/hr</b>	4. Equivalent Allowable Emissions: <b>7.6 lb/hour                      27 tons/year</b>
5. Method of Compliance: <b>Annual VE test; 10% or less.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural gas firing for CTs and DBs. Established as BACT.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

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**POLLUTANT DETAIL INFORMATION**

Page[ 13 ] of [ 19 ] 2 CTs w/ HRSG &amp; DB (VOC)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –****POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS****(Optional for unregulated emissions units.)**

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>8.8 lb/hour                      30.8 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor:  Reference: <b>Permit limit</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Potential emissions based upon permit limit for VOC emissions from both CTs and DBs combined.</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Hourly potential emissions based on CTs/ DBs at 51°F operating conditions while operating on natural gas. Annual based upon permit limit.</b>			

**EMISSIONS UNIT INFORMATION**

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**POLLUTANT DETAIL INFORMATION**

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>3.4 lb/ hr</b>	4. Equivalent Allowable Emissions: <b>3.4 lb/hour      30.8 tons/year</b>
5. Method of Compliance: Compliance with CO limit. (See permit condition).	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural gas firing; CTs 1 and 2; established as permit limit in AC permit.</b>	

**Allowable Emissions** Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>8.7 lb/hr</b>	4. Equivalent Allowable Emissions: <b>8.7 lb/hour      30.8 tons/year</b>
5. Method of Compliance: <b>Compliance with CO limit. (See permit condition)</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Oil firing; CTs 1 &amp; 2.</b>	

**Allowable Emissions** Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>5.4 lb/hr</b>	4. Equivalent Allowable Emissions: <b>5.4 lb/hour      30.8 tons/year</b>
5. Method of Compliance: <b>None</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Natural gas firing of DBs 1 &amp; 2. Testing is required only if CO standard is exceeded.</b>	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>8.8 lb/hr</b>	4. Equivalent Allowable Emissions: <b>8.8 lb/hour      30.8 tons/year</b>
5. Method of Compliance: <b>Annual Operating Report.</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Natural gas firing for CTs and DBs.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>SO2</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>43.8 lb/hour                      10.5 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>0.05% sulfur in fuel oil.</b>  Reference: <b>NSPS Subpart KKKK</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Potential emissions based on NSPS Subpart KKKK and the permitted limit on hours of firing (only when firing on fuel oil).</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Hourly potential emissions based upon CTs at 51°F operating conditions on fuel oil. Annual based on permit limit.</b>			

**EMISSIONS UNIT INFORMATION**

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**POLLUTANT DETAIL INFORMATION**

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -****ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>43.8 lb/ hr</b>	4. Equivalent Allowable Emissions: <b>43.8 lb/hour      10.5 tons/year</b>
5. Method of Compliance: <b>Fuel analysis; oil firing.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Potential emissions based on NSPS Subpart KKKK and the permitted limit on hours of firing (only when firing on fuel oil).</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**POLLUTANT DETAIL INFORMATION**

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS****(Optional for unregulated emissions units.)**

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>SAM</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour <b>0.4 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>0.05% sulfur in fuel oil</b> Reference: <b>NSPS Subpart KKKK and permit limit</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:  <b>Potential emissions based upon NSPS Subpart KKKK and permit limit when firing distillate fuel oil. Both CTs combined.</b>			
11. Potential, Fugitive, and Actual Emissions Comment:  <b>Annual based upon permit limit for both units combined.</b>			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.4 tpy</b>	4. Equivalent Allowable Emissions: lb/hour <b>0.4</b> tons/year
5. Method of Compliance: <b>Fuel analysis; oil firing</b>	
6. Allowable Emissions Comment (Description of Operating Method):  <b>Allowable emissions established as limit in AC Permit, Table 1A for distillate oil firing. Annual limit established for facility.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**G. VISIBLE EMISSIONS INFORMATION**

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: <b>VE10</b>	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>10 %</b> Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <b>EPA Method 9</b>	
5. Visible Emissions Comment:  <b>VE limit established in AC Permit.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: <b>VE99</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: <b>100 %</b> Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <b>Best Operating Practice</b>	
5. Visible Emissions Comment:  <b>Excess VE allowed for startup and shutdown of each CT pursuant to FDEP Rule 62-210.700(1); Two hours per 24 period per CT.</b>	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**H. CONTINUOUS MONITOR INFORMATION**

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

**Continuous Monitoring System:** Continuous Monitor 1 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... <b>CISCO Systems</b> Manufacturer: Model Number: <b>10008160</b> Serial Number:	
5. Installation Date: <b>01 July 1993 (original); Upgraded system 01 November 2007</b>	6. Performance Specification Test Date: <b>December 18, 2007</b>
7. Continuous Monitor Comment:  <b>In 2007 per CAIR requirements a NOx CEMS was installed, tested and certified. This replaces the water to fuel ratio monitoring system for compliance purposes in the permit.</b>	

**Continuous Monitoring System:** Continuous Monitor 2 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**H. CONTINUOUS MONITOR INFORMATION (CONTINUED)****Continuous Monitoring System:** Continuous Monitor \_\_\_ of \_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_ of \_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [ 1 ] of [ 2 ]

**I. EMISSIONS UNIT ADDITIONAL INFORMATION****Additional Requirements for All Applications, Except as Otherwise Stated**

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u> <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input checked="" type="checkbox"/> Attached, Document ID: <u>LC-EU1-11</u> Test Date(s)/Pollutant(s) Tested: <u>12/18-19/07 for NOx and CO; 2/15/08 for CO</u> <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Section [ 1 ] of [ 2 ]**

### **Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable
- 
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable
- 
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

1. Identification of Applicable Requirements:  
☒ Attached, Document ID: **LC-EU1-I2**

2. Compliance Assurance Monitoring:  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

3. Alternative Methods of Operation:  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

4. Alternative Modes of Operation (Emissions Trading):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

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**EMISSIONS UNIT INFORMATION****Section [ 2] of [ 2]****A. GENERAL EMISSIONS UNIT INFORMATION****Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

- ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:  
Facility wide fugitive and vent emissions

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: <b>A</b>	5. Commence Construction Date:	6. Initial Startup Date: <b>1 July 1993</b>	7. Emissions Unit Major Group SIC Code: <b>49</b>
--	--------------------------------	--	---

8. Federal Program Applicability: (Check all that apply)

- ☐ Acid Rain Unit
- ☐ CAIR Unit
- ☐ Hg Budget Unit

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:

**This emissions unit consists of a fuel storage tank, facility-wide fugitive and vent emissions from various locations throughout the facility. The cumulative emissions from these units are less than the reporting thresholds. List of exemptions: 62-210.300(3)(a)5, 7, 9, 10, 11, 12, 15, 16, 20, 21, 22, 23, 24; 62-296.310(2) and (3). Trivial sources included for completeness.**



**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**Emissions Unit Control Equipment/Method:** Control \_\_\_ of \_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_ of \_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_ of \_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_ of \_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: <b>701,050 gal/ yr/CT</b>
2. Maximum Production Rate:
3. Maximum Heat Input Rate: million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: <div style="display: flex; justify-content: space-between;"><div><b>24</b> hours/day <b>52</b> weeks/year</div><div><b>7</b> days/week <b>8,760</b> hours/year</div></div>
6. Operating Capacity/Schedule Comment:  <b>This is the maximum process rate per CT to reflect fuel oil throughput from the oil storage tank.</b>

**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**C. EMISSION POINT (STACK/VENT) INFORMATION****(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: Facility wide		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: F	6. Stack Height: feet	7. Exit Diameter: feet	
8. Exit Temperature: °F ambient	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: 0 feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>Emission points are fugitive and are located throughout the facility.</b>			

**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**D. SEGMENT (PROCESS/FUEL) INFORMATION****Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type):  <b>Petroleum Liquid Storage: fixed roof tank, distillate no. 2 fuel oil; working loss.</b>		
2. Source Classification Code (SCC): <b>4-03-010-20</b>		3. SCC Units: <b>Thousand gallons stored</b>
4. Maximum Hourly Rate:	5. Maximum Annual Rate: <b>170</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.05</b>	8. Maximum % Ash: <b>0</b>	9. Million Btu per SCC Unit: <b>130</b>
10. Segment Comment:  <b>Maximum Annual Rate: Reflects storage capacity of tank. Fuel sulfur limit is per NSPS Subpart KKKK.</b>		

**Segment Description and Rate:** Segment    of   

1. Segment Description (Process/Fuel Type):          		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:          		

**EMISSIONS UNIT INFORMATION**

Section [ 2] of [ 2]

**E. EMISSIONS UNIT POLLUTANTS****List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>VOCs</b>			<b>NS</b>

**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**G. VISIBLE EMISSIONS INFORMATION**

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_ of \_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %      Exceptional Conditions: Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance: None	
5. Visible Emissions Comment:	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_ of \_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [ 2 ] of [ 2 ]

**H. CONTINUOUS MONITOR INFORMATION** Not Applicable**Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

## EMISSIONS UNIT INFORMATION

Section [2] of [2]

### I. EMISSIONS UNIT ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u>
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>11/27/06</u> <input type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable  Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.



7. Other Information Required by Rule or Statute:

☐ Attached, Document ID: \_\_\_\_\_

☒ Not Applicable

**Section [ 2] of [ 2]**

### **Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable
- 
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable
- 
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

1. Identification of Applicable Requirements:	<input checked="" type="checkbox"/> Attached, Document ID: <b><u>LC-EU1-I2</u></b>
2. Compliance Assurance Monitoring:	<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation:	<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading):	<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

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**ATTACHMENT LC-AI-AC**  
**APPLICATION COMMENT**

## ATTACHMENT LC-AI-AC

### APPLICATION COMMENT

This air permit application is for Lake Cogeneration Facility in Lake County, Umatilla Florida.

The application structure is as follows:

#### Emission Units

General:	2 combustion turbines (CTs)* 2 heat recovery steam generators (HRSGs) 2 duct burners (DBs)
Emission Points (2):	2 stacks for CT/HRSG Units 1 & 2
Fuel Segments:	Natural gas and distillate oil only

#### Pollutants

CT/HRSG	NO <sub>x</sub> , CO, PM/PM <sub>10</sub> , VOC, and SO <sub>2</sub>
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#### VE Emissions

CT/HRSG	VE limits applicable
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#### CEM

CT/HRSG	NO <sub>x</sub> , O <sub>2</sub> , fuel consumption
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#### PSD

CT/HRSG	NO <sub>x</sub> , CO
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\*currently LM-6000 units to be upgraded to LM-6000 Sprint PC units.

**ATTACHMENT LC-FI**  
**EMISSIONS ASSESSMENT FOR HEAT INPUT INCREASE**

## **ATTACHMENT LC-FI**

### **Regulatory Applicability Analysis for Heat Input Increase**

This attachment addresses the following items associated with this project:

- Project Description
- Emission Estimates
- Regulatory Review
- Requested Permit Conditions

#### **PROJECT DESCRIPTION**

The Lake Cogeneration facility consists of two GE LM-6000 combustion turbine units (CTs), each unit equipped with an inlet chiller and a supplementary fired duct burner (DB) and exhausting through Heat Recovery Steam Generator (HRSG) stacks. The CTs have dual fuel (natural gas and distillate fuel) capability. Both CTs recently underwent a SPRay INtercooling (SPRINT) upgrade for enhanced efficiency per Air Permit No. 0694801-008-AC. Compliance testing was conducted which demonstrated compliance with the limits associated with this construction permit.

Subsequently, it was discovered that the SPRINT turbine upgrade could allow additional firing of the unit beyond the level requested. Therefore, this application also serves to request an additional heat input increase of 3.5 percent [i.e., from the current allowable heat input of 435 MMBtu/hr (LHV) to 450 MMBtu/hr (LHV)]. The vendor of the compressor upgrade has provided guarantees to Lake Cogen that the plant will continue to meet the NO<sub>x</sub> and CO permit emission limitations of 25 ppmdv@15% O<sub>2</sub> and 28 ppmdv, respectively.

#### **EMISSION ESTIMATES**

Previous criteria pollutant emissions from the Lake CoGen facility for the years 2003 through 2007 are summarized in Tables 1A through 1E of this Attachment). These data were obtained from the Annual Operating Reports (AORs) submitted to the Florida Department of Environmental Protection (FDEP).

As stated previously, the improved compressor blade design is expected to increase the firing capability of the combustion turbine by up to an additional 3.5 percent. Table 1F presents the highest 2-year average baseline and Table 1G provides the projected annual emissions which are achievable after the completion of the upgrade project (i.e., an additional 3.5 percent increase in the allowable heat input).

#### **REGULATORY REVIEW**

The first aspect of the regulatory review involves the classification of the change from a programmatic perspective. The facility is considered an existing major source for the Prevention of Significant Determination (PSD) regulations as the permitted potential emissions for the site exceed the 100 ton per year threshold for both oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO). Hence, the projected emissions increases (past actual to future projected actual) are compared to the PSD Significant Emission Rates (SERs). The emission increases are presented in Table 1G. The projected criteria pollutant emission increases are considerably less than the corresponding PSD SERs. Hence, PSD review is not required for this construction permit application.

Table 1F summarizes the greatest past actual 2-year average annual emission per pollutant (TPY) for the facility. Recent revisions to the State of Florida's new source review program (62-210.200) now allow

for “actual emissions” to be determined over “consecutive 24-month periods”; however, for purposes of this analysis, the highest 2 calendar year periods in the previous 5 years were considered.

Note that the emission netting information was developed using the simplifying assumption that the compressor upgrade would produce the maximum heat input increase of 3.5 percent compared to baseline operations. This assumption greatly overestimates the likely emission change, as the additional heat input capability would only be exercised during those periods in which the plant is operating the turbine at base load in order to sell power into the grid during conditions of extremely high demand. The impact of the compressor upgrade on fuel firing and emissions during the typical plant dispatch conditions will likely be to reduce fuel firing and emissions as compared to the existing condition. This reduction is because the improved capabilities of the combustion turbine after the compressor upgrade will allow the plant to operate at a more efficient heat rate. Even with the use of conservative simplifying assumptions, Table 1G demonstrates that emissions increases after the compressor upgrade will not exceed the SERs that would trigger PSD review for affected pollutants.

This request will trigger applicability of the recently promulgated New Source Performance Standard (NSPS), Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines*. This applicability is due to the fact that this request constitutes a change in the method of operation accompanied by an increase in the actual hourly emission rate of a regulated pollutant, commencing after February 18, 2005. The facility, as currently permitted, will meet the allowable emissions requirements in this newly promulgated NSPS. This NSPS regulates the pollutants SO<sub>2</sub> and NO<sub>x</sub>. The SO<sub>2</sub> emission limit involves a choice of two limits, one that is expressed based on mass per power output, and one that is based on fuel sulfur content. These two limits are contained in 40 CFR §60.4330, and are summarized following:

1. 0.90 pounds SO<sub>2</sub> per megawatt-hour gross output; or,
2. 0.060 pounds SO<sub>2</sub> per MMBtu heat input.

The facility uses pipeline quality natural gas, which because of its low sulfur content, enables the combustion turbine to meet either of these two limits with a large margin of compliance.

The NO<sub>x</sub> emission limit for this combustion turbine (based on maximum heat input rating being greater than 50 MMBtu/hr and less than 850 MMBtu/hr) is similarly stated as a choice of two limits. One limit is based on concentration in the effluent gas, and the other limit is based on mass per power output. These two limits are contained in Table 1 of the NSPS, and are summarized following:

1. 42 ppm at 15 percent O<sub>2</sub>; or,
2. 2.0 pounds per megawatt-hour gross output.

The NSPS allowable limit is higher than the current BACT permit limit. Hence, no changes to the emission limit are required for the NO<sub>x</sub> limit to incorporate the NSPS. Table 1 of the current TV permit addresses sulfur dioxide, and will need to be changed to include the NSPS limits.

**TABLE 1-A**

**2003 FACILITY EMISSIONS SUMMARY  
Lake Cogeneration Facility - ID No. 0694801**

Air Pollutant	Emission Unit 003 (aka Unit 1)		Emission Unit 004 (aka Unit 2)		Total 2003 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	62.1	0.0	63.5	0.0	125.6
NO <sub>x</sub>	95.0	0.0	97.1	0.0	192.1
PM	6.1	0.0	6.2	0.0	12.3
PM <sub>10</sub>	6.1	0.0	6.2	0.0	12.3
SO <sub>2</sub>	2.8	0.0	2.9	0.0	5.7
VOC	3.8	0.0	3.8	0.0	7.6



**TABLE 1-B**

**2004 FACILITY EMISSIONS SUMMARY**  
**Lake Cogeneration Facility - ID No. 0694801**

<b>Air Pollutant</b>	<b>Emission Unit 003 (aka Unit 1)</b>		<b>Emission Unit 004 (aka Unit 2)</b>		<b>Total 2004 Emissions (TPY)</b>
	<b>Nat. Gas (TPY)</b>	<b>Dist. Oil (TPY)</b>	<b>Nat. Gas (TPY)</b>	<b>Dist. Oil (TPY)</b>	
CO	60.4	0.0	59.4	0.0	119.8
NO <sub>x</sub>	92.5	0.0	91.0	0.0	183.5
PM	6.0	0.0	5.9	0.0	11.9
PM <sub>10</sub>	6.0	0.0	5.9	0.0	11.9
SO <sub>2</sub>	2.7	0.0	2.7	0.0	5.4
VOC	3.7	0.0	3.6	0.0	7.3

**TABLE 1-C**

**2005 FACILITY EMISSIONS SUMMARY**  
**Lake Cogeneration Facility - ID No. 0694801**

Air Pollutant	Emission Unit 003 (aka Unit 1)		Emission Unit 004 (aka Unit 2)		Total 2005 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	61.0	0.0	60.9	0.0	121.9
NO <sub>x</sub>	93.4	0.0	93.2	0.0	186.6
PM	6.0	0.0	6.0	0.0	12.0
PM <sub>10</sub>	6.0	0.0	6.0	0.0	12.0
SO <sub>2</sub>	2.8	0.0	2.8	0.0	5.6
VOC	3.7	0.0	3.7	0.0	7.4

**TABLE 1-D**

**2006 FACILITY EMISSIONS SUMMARY  
Lake Cogeneration Facility - ID No. 0694801**

Air Pollutant	Emission Unit 003 (aka Unit 1)		Emission Unit 004 (aka Unit 2)		Total 2006 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	60.8	0.0	61.6	0.0	122.4
NO <sub>x</sub>	93.0	0.0	94.2	0.0	187.2
PM	6.0	0.0	6.1	0.0	12.1
PM <sub>10</sub>	6.0	0.0	6.1	0.0	12.1
SO <sub>2</sub>	2.8	0.0	2.8	0.0	5.6
VOC	3.7	0.00	3.7	0.0	7.4

**TABLE 1-E**

**2007 FACILITY EMISSIONS SUMMARY  
Lake Cogeneration Facility - ID No. 0694801**

Air Pollutant	Emission Unit 003 (aka Unit 1)		Emission Unit 004 (aka Unit 2)		Total 2007 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	58.7	0.0	60.3	0.0	119.0
NO <sub>x</sub>	89.8	0.0	92.3	0.0	182.1
PM	5.8	0.0	5.9	0.0	11.7
PM <sub>10</sub>	5.8	0.0	5.9	0.0	11.7
SO <sub>2</sub>	2.7	0.0	2.7	0.0	5.4
VOC	3.6	0.0	3.7	0.0	7.3

TABLE 1-F

**EMISSION ANALYSIS**  
**Lake Cogeneration Facility - ID No. 0694801**

<b>Air Pollutant</b>	<b>Total 2003 Emissions (Tons/Year)</b>	<b>Total 2004 Emissions (Tons/Year)</b>	<b>Total 2005 Emissions (Tons/Year)</b>	<b>Total 2006 Emissions (Tons/Year)</b>	<b>Total 2007 Emissions (Tons/Year)</b>	<b>Highest 2-yr Average</b>	<b>CY</b>
CO	125.6	119.8	121.9	122.4	119.0	122.7	2003-2004
NO <sub>x</sub>	192.1	183.5	186.6	187.2	182.1	187.8	2003-2004
PM	12.3	11.9	12.0	12.1	11.7	12.1	2003-2004
PM <sub>10</sub>	12.3	11.9	12.0	12.1	11.7	12.1	2003-2004
SO <sub>2</sub>	5.7	5.4	5.6	5.6	5.4	5.6	2005-2006
VOC	7.6	7.3	7.4	7.4	7.3	7.5	2003-2004

**TABLE 1-G**

**EMISSION ANALYSIS**  
**Lake Cogeneration Facility - ID No. 0694801**

Air Pollutant	Highest 2-yr Average (TPY)	3.5% HI Increase (TPY)*	PSD Netting Analysis		
			Increase (TPY)	PSD SER	PSD ?
CO	122.7	127.0	4.3	100	NO
NO <sub>x</sub>	187.8	194.4	6.6	40	NO
PM	12.1	12.5	0.4	25	NO
PM <sub>10</sub>	12.1	12.5	0.4	15	NO
SO <sub>2</sub>	5.6	5.8	0.2	40	NO
VOC	7.5	7.7	0.3	40	NO

**ATTACHMENT LC-FI-C1**  
**IDENTIFICATION OF APPLICABLE REQUIREMENTS**

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06)

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

{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

### Chapter 62-4, F.A.C.

1. **Not federally enforceable. General Prohibition.** Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. 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.); and, Section 403.087, Florida Statute (F.S.)]

### 2. **Not federally enforceable. Procedures to Obtain Permits and Other Authorizations: Applications.**

- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) 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. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except, when the application is for renewal of an air pollution operation permit at a non-Title V source as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
  - (b) When an application is received without the required fee, the Department shall acknowledge receipt of the application and shall immediately notify the applicant by certified mail that the required fee was not received and advise the applicant of the correct fee. The Department shall take no further action until the correct fee is received. If a fee was received by the Department which is less than the amount required, the Department shall return the fee along with the written notification.
  - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
  - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
  - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application for the same time duration except for modification under Chapter 62-45, F.A.C.

[Rule 62-4.050, F.A.C.]



## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, 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.]

4. Modification of Permit Conditions.

(1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following: (also, see Condition No. 38.)

- (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
- (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
- (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
- (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.

(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(v), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090, F.A.C.]

6. Suspension and Revocation.

(1) 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.

(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.

(3) 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:

- (a) Submitted false or inaccurate information in his application or operational reports.
- (b) Has violated law, Department orders, rules or permit conditions.
- (c) Has failed to submit operational reports or other information required by Department rules.
- (d) Has refused lawful inspection under Section 403.091, F.S.

(4) 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.]

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

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7. **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.]

8. **Transfer of Permits.**

(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.

(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.

(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.

(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.

(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. 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.

[Rule 62-4.120, F.A.C.]

9. **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. (also, see Condition No. 10.)

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

10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "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 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". [also, see Conditions Nos. 9. and 12.(8).]

[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable. Review.** Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

[Rule 62-4.150, F.A.C.]

12. **Permit Conditions.** All permits issued by the Department shall include the following general conditions:

(1) 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.

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

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- (2) 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.
- (3) 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.
- (4) 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.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) 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.
- (7) 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:
- (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) 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.
- (8) 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: **(also, see Condition No. 10.)**
- (a) A description of and cause of noncompliance; and
  - (b) 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.
- (9) 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.
- (10) 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.
- (11) 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.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
- (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;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

5. The analytical techniques or methods used;
6. The results of such analyses.

(15) 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.

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

### 13. Construction Permits.

(1) No person shall construct any installation or facility which will reasonably be expected to be a source of air pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:

- (a) A completed application on forms furnished by the Department.
- (b) An engineering report covering:
  1. Plant description and operations,
  2. Types and quantities of all waste material to be generated whether liquid, gaseous or solid,
  3. Proposed waste control facilities,
  4. The treatment objectives,
  5. The design criteria on which the control facilities are based, and
  6. Other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S., and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.

(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources the applicant shall submit the appropriate fee and certification that construction was completed, noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

### Chapters 28-106 and 62-110, F.A.C.

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C.

[Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.

[Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.]

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

### Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

### Chapter 62-210, F.A.C.

18. Permits Required. Unless exempted from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., or unless specifically authorized by provision of Rule 62-210.300(4), F.A.C., or Rule 62-213.300, F.A.C., the owner or operator of any facility or emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, reconstruction pursuant to 40 CFR 60.15 or 63.2, modification, or the addition of pollution control equipment; or to authorize initial or continued operation of the emissions unit; or to establish a PAL or Air Emissions Bubble. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. 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.

#### (1) Air Construction Permits.

(a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new, reconstructed, or modified facility or emissions unit, or any new pollution control equipment prior to the beginning of construction, reconstruction pursuant to 40 CFR 60.15 or 63.2, or modification of the facility or emissions unit or addition of the pollution control equipment; or to establish a PAL; in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of Chapter 62-210, F.A.C., Chapters 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction, reconstruction or modification of the facility or emissions unit or addition of the air pollution control equipment; and operation while the owner or operator of the new, reconstructed or modified facility or emissions unit or the new pollution control equipment is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.

(b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.

1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:

- a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;
- b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
- c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(1)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(1)(d)2., Rule 62-212.400 or Rule 62-212.500, F.A.C., as appropriate.

2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.

3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.

(2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in Chapter 62-210, F.A.C., or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or air general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-213, F.A.C., and Chapter 62-4, F.A.C.

(a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.

3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.

a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.

b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

- (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and
- (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and
- (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.

4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(8), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

19. **Not federally enforceable.** 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.

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

(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.]

### 20. 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.]

### 21. Transfer of Air Permits.

(a) An air permit is transferable only after submission of an Application for Transfer of Air Permit (DEP Form 62-210.900(7)) and Department approval in accordance with Rule 62-4.120, F.A.C. For Title V permit transfers only, a complete application for transfer of air permit shall include the requirements of 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C. Within 30 days after approval of the transfer of permit, the Department shall update the permit by an administrative permit correction pursuant to Rule 62-210.360, F.A.C.

(b) For an air general permit, the provision of Rules 62-210.300(7)(a) and 62-4.120, F.A.C., do not apply. Thirty (30) days before using an air general permit, the new owner must submit an air general permit notification to the Department in accordance with Rule 62-210.300(4), F.A.C., or Rule 62-213.300(2)(b), F.A.C.

[Rule 62-210.300(7), F.A.C.]

### 22. Public Notice and Comment.

#### (1) Public Notice of Proposed Agency Action.

(a) A notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:

1. An air construction permit;
2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

(b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-110.106, F.A.C. A public notice under Rule 62-210.350(1)(a)1., F.A.C., for an air construction permit may be combined with any required public notice under Rule 62-210.350(1)(a)2. or 3., F.A.C., for air operation permits. If such notices are combined, the public notice must comply with the requirements for both notices.

(c) Except as otherwise provided at Rules 62-210.350(2), (5), and (6), F.A.C., each notice of intent to issue an air construction permit shall provide a 14-day period for submittal of public comments.

#### (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment - Area Preconstruction Review.

(a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
2. A 30-day period for submittal of public comments; and

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.
  - (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
  - (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
  - (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
  - (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.
  - (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
  - (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
  - (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C.:
    1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
    2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
- (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
    1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and
    2. A 30-day period for submittal of public comments.
  - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a), F.A.C.
  - (c) The notice shall identify:
    1. The facility;
    2. The name and address of the office at which processing of the permit occurs;
    3. The activity or activities involved in the permit action;
    4. The emissions change involved in any permit revision;
    5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;



**APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)**

6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;
7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and
8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rules 62-210.350(1) thru (3), F.A.C.]

**23. Administrative Permit Corrections.**

(1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

- (a) Typographical errors noted in the permit;
- (b) Name, address or phone number change from that in the permit;
- (c) A change requiring more frequent monitoring or reporting by the permittee;
- (d) A change in ownership or operational control of a facility, subject to the following provisions:
  1. The Department determines that no other change in the permit is necessary;
  2. 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
  3. The new permittee has notified the Department of the effective date of sale or legal transfer.
- (e) 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. 7651-7651o;
- (f) 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. 7651-7651o, 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
- (g) Any other similar minor administrative change at the source.

(2) Upon receipt of any such notification, the Department shall within 60 days correct the permit and provide a corrected copy to the owner.

(3) 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.

(4) 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.]

**24. Emissions Computation and Reporting.**

(1) **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.

(2) **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.

(a) **Basic Approach.** The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

1. If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

2. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

3. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(b) **Continuous Emissions Monitoring System (CEMS).**

1. An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

- a. The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

- b. The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
    2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
      - a. A calibrated flowmeter that records data on a continuous basis, if available; or
      - b. The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
    3. The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
  - (c) Mass Balance Calculations.
    1. An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
      - a. Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
      - b. Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
    2. Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
    3. In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
  - (d) Emission Factors.
    1. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
      - a. If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
      - b. Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
      - c. The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
    2. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
  - (e) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
  - (f) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
  - (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.
- (3) Annual Operating Report for Air Pollutant Emitting Facility.
  - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
  - (c) 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 March 1 of the following year.
  - (d) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for purposes of the annual operating report.

[Rules 62-210.370(1), (2) and (3)(a), (c) & (d), F.A.C.]

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

25. Circumvention. 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.]

26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, 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, or by accessing the Division's website at [www.dep.state.fl.us/air](http://www.dep.state.fl.us/air). The requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate is waived if an air permit application is submitted using the Department's electronic application form.

(1) Application for Air Permit - Long Form, Form and Instructions (Effective 02-02-2006).

(a) Acid Rain Part, Form and Instructions (Effective 06-16-2003).

1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995).

2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).

3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001).

4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).

5. Phase II NOx Averaging Plan, Form (Effective 01/06/1998).

(b) Reserved.

(5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).

(7) Application for Transfer of Air Permit - Title V Source, (Effective 04/16/2001).

[Rule 62-210.900, F.A.C.]

### Chapter 62-213, F.A.C.

27. Responsible Official.

(1) Each Title V source must identify a responsible official on each application for Title V permit, permit revision, and permit renewal. For sources with only one responsible official, this is how the Title V source designates the responsible official.

(2) Each Title V source may designate more than one responsible official, provided a primary responsible official is designated as responsible for the certifications of all other designated responsible officials. Any action taken by the primary responsible official shall take precedence over any action taken by any other designated responsible official.

(3) Any facility initially designating more than one responsible official or changing the list of responsible officials must submit a Responsible Official Notification Form (DEP Form No. 62-213.900(8)) designating all responsible officials for a Title V source, stating which responsible official is the primary responsible official, and providing an effective date for any changes to the list of responsible officials. Each individual listed on the Responsible Official Notification Form must meet the definition of responsible official given at Rule 62-210.200, F.A.C.

(4) A Title V source with only one responsible official shall submit DEP Form No. 62-213.900(8) for a change in responsible official.

(5) No person shall take any action as a responsible official at a Title V source unless designated a responsible official as required by this rule, except that the existing responsible official of any Title V source which has a change in responsible official during the term of the permit and before the effective date of this rule may continue to act as a responsible official until the first submittal of DEP Form No. 62-213.900(8) or the next application for Title V permit, permit revision or permit renewal, whichever comes first.

[Rules 62-213.202(1) thru (5), F.A.C.]

28. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

(1)(g) 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

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

(1)(i) 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.

(1)(j) 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)(g), (1)(i) & (1)(j), F.A.C.]

29. Reserved.

30. Reserved.

31. Air Operation Permit Fees. No permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

[Rule 62-213.205(4), F.A.C.]

32. Permits and Permit Revisions Required. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C., except those Title V sources permissible pursuant to Rule 62-213.300, F.A.C., Title V Air General Permits.

(1) No Title V source may operate except in compliance with Chapter 62-213, F.A.C.

(2) Except as provided in Rule 62-213.410, F.A.C., no source with a permit issued under the provisions of Chapter 62-213, F.A.C., shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the following:

- (a) Constitutes a modification;
- (b) Violates any applicable requirement;
- (c) Exceeds the allowable emissions of any air pollutant from any unit within the source;
- (d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;
- (e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
- (f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;
- (g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.;
- (h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(e), (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;
- (i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1), (2), or (3), (b)(1) or (b)(3), hereby incorporated by reference;
- (j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source;

[Rules 62-213.400(1) & (2), F.A.C.]

33. 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:

(1) Permitted sources may change among those alternative methods of operation;

(2) 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;

(a) 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;

(b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;

(3) 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.]

34. Immediate Implementation Pending Revision Process.

(1) Those permitted Title V sources making any change that constitutes a modification pursuant to the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to 42 USC 7412(a) or to 40 CFR 52.01, 60.2, or 61.15, adopted and incorporated by reference at Rule 62-204.800, F.A.C., may implement such change prior to final issuance of a permit revision, provided the change:

- (a) Does not violate any applicable requirement;
- (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
- (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
- (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.

(2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.

(3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action on the operation permit revision application until all the requirements of Rules 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.

(4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit. If any terms and conditions of the new or revised construction permit have not been complied with prior to the issuance of the draft operation permit revision, the operation permit shall include a compliance plan in accordance with the provisions of Rule 62-213.440(2), F.A.C.

(5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.

(6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

(1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, F.A.C., and Rules 62-4.050(1) through (3), F.A.C.

(a) Timely Application.

3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.

(b) Complete Application.

1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change(s) from the currently effective Title V permit and any other requirements that become applicable at the time of application. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.

2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed

to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., 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, 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 Rules 62-213.420(1)(b)3. and 4., F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.

3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.

4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

36. 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. (also, see Condition No. 50.) [Rule 62-213.420(2), F.A.C.]

37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.

[Rule 62-213.420(3), F.A.C.]

38. a. Permit Renewal and Expiration. 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) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.

b. Permit Revision Procedures. Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause. (also, see **Condition No. 4.**)

(1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:

- (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
  - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

### 39. Insignificant Emissions Units or Pollutant-Emitting Activities.

(a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.

(b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:

1. Such unit or activity would be subject to no unit-specific applicable requirement;
2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s);
3. Such unit or activity would not emit or have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

40. Permit Duration. Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years, provided that the initial Acid Rain Part may be issued for a term less than five years where necessary to coordinate the term of such part with the term of a Title V permit to be issued to the source. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five years.

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

41. Monitoring Information. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses.

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

42. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

43. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

[Rule 62-213.440(1)(b)3.a., F.A.C.]

44. Deviation from Permit Requirements Reports. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., 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 62-213.440(1)(b)3.b., F.A.C.]

45. Reports. 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.]

46. 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.]

47. 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.]

48. 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.]

49. 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.]

50. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. (also, see Condition No. 36.)

[Rule 62-213.440(1)(d)6., F.A.C.]

51. Statement of Compliance. (a)2. 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:

a. 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

b. 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.

3. 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.



## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

(b) 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.]

52. 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 Rule 62-213.460, F.A.C., 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.

[Rule 62-213.460, F.A.C.]

53. 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 form is 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, or by contacting the appropriate permitting authority.

(1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)

(7) Statement of Compliance Form. (Effective 06/02/2002)

(8) Responsible Official Notification Form. (Effective 06/02/2002)

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

### Chapter 62-256, F.A.C.

54. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.

[Chapter 62-256, F.A.C.]

### Chapter 62-281, F.A.C.

55. 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 Rule 62-281.100, F.A.C. Those requirements include the following restrictions:

(1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;

(2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

(3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;

(4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;

(5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;

(6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (**Chapter 62-281, F.A.C., is not federally enforceable**)]

## APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06) (continued)

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### Chapter 62-296, F.A.C.

56. Industrial, Commercial, and Municipal Open Burning Prohibited. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:

- (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
- (b) An emergency exists which requires immediate action to protect human health and safety; or
- (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

### 57. Unconfined Emissions of Particulate Matter.

(4)(c)1. 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.

3. Reasonable precautions include the following:

- a. Paving and maintenance of roads, parking areas and yards.
- b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- e. Landscaping or planting of vegetation.
- f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. Confining abrasive blasting where possible.
- h. Enclosure or covering of conveyor systems.

4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

[electronic file name: tv-6.doc]

**ATTACHMENT LC-FI-C2**  
**COMPLIANCE REPORT AND PLAN**

**LAKE COGEN, LTD.**

**NCP LAKE POWER LLC, GENERAL PARTNER**

39001 Golden Gem Dr. • Umatilla, FL 32784  
Tel (352) 669-3288 • Fax (352) 669-3188

January 28, 2008

Mr. Garry Kuberski  
Florida Department of Environmental Protection  
Central District  
3319 Maguire Blvd., Suite 232  
Orlando, FL 32803

RE: Lake Cogen Ltd., Facility ID No. 0694801,  
Year 2007 Annual Title V Permit Certification Submittal

Dear Mr. Kuberski

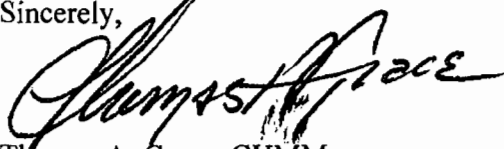
Attached for your review and use is the Year 2007 Title V annual Compliance Statement for the Lake Cogen facility. A copy of this report is also being submitted to USEPA Region IV as previously requested by the Department.

All known reporting issues and operational discrepancies were brought to the Department's attention in the four quarterly facility summary and excess emission reports submitted for calendar year 2007.

The four quarterly summary and excess emission reports were submitted to the Department in April 2007, July 2007, October 2007 and January, 2008. There were a number of minor emission limit exceedances. All of the minor exceedances described in these reports were attributed to either startup/ shutdown situations or equipment malfunction, and were allowable and acceptable under operating conditions stipulated in the Operating Permit. All exceedances were within the recovery time allowed under the site permit.

Based upon reasonable inquiry and review of the Lake Cogen facility's performance, we believe we have provided you with a reasonable report that reflects the facility's compliance status during the year 2007. If you have any questions or require additional information with regard to this submittal please feel free to contact me. My new telephone number is (775) 850-2248.

For Lake Cogeneration LP  
Sincerely,



Thomas A. Grace, CHMM  
Manager, Environmental Resources

W/attachment

Cc: USEPA Region IV  
Atlanta Federal Center  
Attn: Air and EPCRA Enforcement Branch  
61 Forsyth Street SW  
Atlanta, GA 30303-3104  
(404) 562-9099

Cc: J. Delgado  
J. Miller @ Lake



# Department of Environmental Protection

## Division of Air Resource Management

### STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☒ Annual Requirement      ☐ Transfer of Permit      ☐ Permanent Facility Shutdown

REPORTING PERIOD*	REPORT DEADLINE**
01/01 through 12/31 of 2007 (year)	03/01/08

\*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

\*\*See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Lake Cogen Ltd.

Site Name: Lake Cogen Facility ID No. 0694801 County: Lake

#### COMPLIANCE STATEMENT (Check only one of the following three options)

- ☐ A. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.
- ☒ B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:
1. Date of report previously submitted identifying the incident of deviation.
  2. Description of the incident.
- ☐ C. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:
1. Emissions unit identification number.
  2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
  3. Description of the requirement of the permit condition.
  4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
  5. Beginning and ending dates of periods of noncompliance.
  6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
  7. Dates of any reports previously submitted identifying this incident of noncompliance.

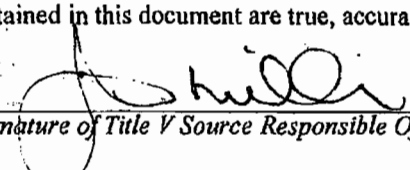
For each incident of deviation, as described in paragraph B. above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

## STATEMENT OF COMPLIANCE - TITLE V SOURCE

## RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

  
(Signature of Title V Source Responsible Official)

1/25/08  
(Date)

Name: James Miller

Title: Plant Manager

## DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

NA

(Signature of Acid Rain Source Designated Representative)

(Date)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

*{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency (EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}*

**ATTACHMENT LC-FI-C3**

**REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT**



Table 1  
A.6. Allowable Emission Limits

Pollutant	Source <sup>a</sup>	Fuel <sup>b</sup>	Basis of Limit	Allowable Emission Limits			
				at 59°F	Maximum Allowable at 51°F <sup>f</sup>		
				lbs/hr	TPY	lbs/hr <sup>d</sup>	TPY <sup>e</sup>
NOx <sup>c</sup>	CT	NG	BACT: 25 ppmvd at 15% O <sub>2</sub>	82.7	393.6	85.5	404.7
	CT	DFO	BACT: 42 ppmvd at 15% O <sub>2</sub>	143.9			
	DB	NG	BACT: 0.1 lb/MMBtu	18.0			
	CT&DB	NG		100.7			
CO	CT	NG	BACT: 28 ppmvd	54.6	350.3	56.0	350.3
	CT	DFO	BACT: 18 ppmvd	33.0		34.5	
	DB	NG	BACT: 0.2 lb/MMBtu	36.0		36.0	
	CT&DB	NG		90.6		92.0	
PM/PM10	CT	NG	BACT: 0.0065 lb/ MMBtu	5.0	27.0	5.0	27.0
	CT	DFO	BACT: 0.026 lb/MMBtu	20.0		20.0	
	DB	NG	BACT: 0.006 lb/MMBtu	2.6		2.6	
	CT&DB	NG		7.6		7.6	
SO <sub>2</sub>	CT	NG	Estab. By Applicant 0.1% S	80.0	21.0	87.6	21.0
VOC	CT	NG	Established by Applicant	3.3	30.8	3.4	30.8
	CT	DFO	Established by Applicant	8.3		8.7	
	DB	NG	Established by Applicant	5.4		5.4	
	CT&DB	NG		8.7		8.8	
Mercury (Hg)	CT	DFO	Established by Applicant	--	0.0003	--	0.0003
Lead (Pb)	CT	DFO	Established by Applicant	--	0.0008	--	0.0008
Beryllium (Be)	CT	DFO	Established by Applicant	--	0.0002	--	0.0002
Sulfuric Acid Mist	CT	DFO	Established by Applicant	--	0.80	--	0.80

a CT = 2 combustion turbines. DB = 2 duct burners

b NG = natural gas. DFO = distillate fuel oil

c No, limits for 59°F are at 60% relative humidity (ISO conditions)

d Compliance with the Maximum Allowable Emission Limits shall be demonstrated for CT limits and CT&DB limits.

e The Maximum Allowable TPY of emissions, based on a worst case scenario, are the sum of the CT emissions while firing NG for 355 days, the CT emissions while firing DFO for 10 days, and DB emissions at the maximum heat input for the previous combinations of CT firing. The DB will only fire NG and only while the CT is firing NG.

f These are the Maximum Allowable Emission Limits shall never be exceeded at any temperature and/or operating configuration.

Note: All temperatures cited in this table refer to turbine inlet temperatures.

{Note: The NOx limit is more stringent than the NSPS nitrogen oxides limitation and thus ensure compliance with 40 CFR 60.332 and 60.334.}

[BACT dated November 20, 1991 and construction permit AC35-196459.]

and operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine.

2. As an alternative to operating the CMS program described in 1 above, the owner or operator may install, certify, maintain, operate and quality assure a continuous emissions monitoring system (CEMS) consisting of NO<sub>x</sub> and oxygen (O<sub>2</sub>) monitors. Using this method of compliance, NO<sub>x</sub> emissions will be determined on a 30 day rolling average basis for comparison to required standards. Required NO<sub>x</sub> RATA tests will be conducted in lieu of required annual NO<sub>x</sub> testing.

[40 CFR 60.334(a) and (b)]

**A12.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- 1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- 2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(h).
- 3) 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 has been demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring.

[40 CFR 60.334(h)(1), (2) and (3)]

**A13.** The permittee shall monitor sulfur content and nitrogen content of natural gas fired in the turbine as follows:

Custom Fuel Monitoring Schedule for Natural Gas

1.
  - a) Monitoring of fuel nitrogen content shall not be required when firing natural gas.
  - b) Sulfur Monitoring:
    - i. Provided there is no change in fuel supply, the facility has demonstrated to the satisfaction of the Department that it does fire natural gas which meets the definition set forth in 40 CFR 60.331(u) and is therefore not required to continue with the previously approved customized fuel monitoring schedule.
  - c) If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change requires reexamination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

- d) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[40 CFR 60.334(h)(2) and (3), and AC35-196459]

**A14. 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.]

**Compliance Assurance Monitoring (CAM) Requirements**

~~A.14.1. These emissions unit(s) are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.~~

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

**Test Methods and Procedures**

**A15. Visible Emissions (VE).** The test method for VE shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC35-196459]

**A16. Particulate matter (PM).** The test methods for PM emissions shall be EPA Method 5 or 17, incorporated by reference in Chapter 62-297, F.A.C. A visible emission test using EPA Method 9 will be acceptable and stack testing for PM is waived if the opacity is less than 10%.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC35-196459]

**A17.** To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department.

[40 CFR 60.335(b)]

~~**A18.** For purposes of demonstrating compliance with NSPS -- 40 CFR 60, Subpart GG, the monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>x</sub> standard. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.~~

~~See Specific Condition A.11(2).~~

**ATTACHMENT LC-EU1-II**

**COMPLIANCE DEMONSTRATION REPORTS/RECORDS**

## EXECUTIVE SUMMARY

The annual compliance test results for Units 1 and 2 Combustion Turbine meet all mass emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 0694801-008-AC. All tests were conducted on natural gas firing only. The units are limited to 50.2 MW generation with the SPRINT system in operation by General Electric.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions*
<b>UNIT 1</b>			
NO <sub>x</sub>	CT	41.97 lbs/hr, 24.4 ppm <sub>v</sub> d @ 15% O <sub>2</sub>	85.5 lbs/hr, 25ppm <sub>v</sub> d @ 15% O <sub>2</sub>
	DB	1.36 lbs/hr, 0.031 lbs/MMBTU	18.0 lbs/hr, 0.1 lbs/MMBTU
	CT & DB	43.35 lbs/hr	103.5 lbs/hr
CO	CT	26.5 lbs/hr, 27.6 ppm <sub>v</sub> d	56.0 lbs/hr, 28 ppm <sub>v</sub> d
	DB	2.90 lbs/hr, 0.066 lbs/MMBTU	36.0 lbs/hr, 0.2 lbs/MMBTU
	CT & DB	29.3 lbs/hr	92.0 lbs/hr
<b>UNIT 2</b>			
NO <sub>x</sub>	CT	40.52 lbs/hr, 23.3 ppm <sub>v</sub> d @ 15% O <sub>2</sub>	85.5 lbs/hr, 25ppm <sub>v</sub> d @ 15% O <sub>2</sub>
	DB	NA	18.0 lbs/hr, 0.1 lbs/MMBTU
	CT & DB	NA	103.5 lbs/hr
CO	CT	26.21 lbs/hr, 27.3 ppm <sub>v</sub> d	56.0 lbs/hr, 28 ppm <sub>v</sub> d
	DB	NA	36.0 lbs/hr, 0.2 lbs/MMBTU
	CT & DB	NA	92.0 lbs/hr

\* at 51°F

Emission results are provided in Tables 1 and 2.

SO<sub>2</sub> emissions based on fuel analysis was 0.00376 lb/hr at 49 MW for CT-1 and 0.00378 lb/hr for CT-2.

## **1.0 INTRODUCTION**

On December 18 and 19, 2007 Air Consulting and Engineering, Inc. performed testing according to conditions stated in Construction Permit #0694801-008 AC for Carbon Monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>) and Oxygen content (O<sub>2</sub>) on the two Combustion Turbines, (CT-1 and CT-2) at Lake Cogen Limited in Umatilla, Florida. The spray intercooling (SPRINT) system was also in operation during these test series.

The United States Environmental Protection Agency (EPA) Methods 7E (NO<sub>x</sub>), 3A (O<sub>2</sub>) and 10 (CO) were used to conduct the tests.

CT-1 was tested with and without Duct Burners (DB) operating at base load, while CT-2 was tested with the turbine only in operation.

Mr. Jim Miller of Lake Cogen coordinated the tests. Mr. Garry Kuberski of the FDEP Orlando and Mr. Russell A. Wilder of the FDEP Tallahassee were present for a portion of the testing.

## 2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the emission tests are summarized in Tables 1 (CT-1) and 2 (CT-2), showing base load conditions with and without duct burners. The Units were fired on natural gas.

The contribution of NO<sub>x</sub> and CO emissions of the gas fired duct burners was determined by performing a test series with and without duct burner firing. The difference in emission rates was attributed to the duct burners.

Duct burner NO<sub>x</sub> contributions averaged 0.031 pounds per Million BTUs (lbs/MMBTU) for Unit 1. CO duct burner contributions averaged 0.066 lbs/MMBTU for Unit 1. Unit 2 could not be tested with the duct burner in operation.

Duct burner emissions were calculated using the following formula:

$$\text{lbs/MMBTU DB} = \frac{(\text{lbs/hr CT+DB}) - (\text{lbs/hr CT})}{\text{DB Heat input MMBTUH (HHV)}}$$

Units 1 and 2 without duct burners averaged 24.4 and 23.3 parts per million (ppm) NO<sub>x</sub> at 15% O<sub>2</sub>, respectively, which is within the permitted standard of 25 ppm at 15% O<sub>2</sub>. CO emissions were at 27.6 and 27.3 ppm for CT-1 and CT-2, respectively.

The maximum power output of the both combustion turbines was 49 megawatts (MW) during the test series.

Mass emissions of NO<sub>x</sub> and CO were determined by multiplying the fuel factor (8710) derived lbs/MMBTU value by the heat input in terms of higher heating value.

Gaseous emission data with data logger results and strip chart copies are provided in Appendices B and C, respectively.

Table 1. Emission Summary  
Unit 1 Combustion Turbine - Gas Fired  
Lake Cogeneration, Ltd.  
Umatilla, Florida  
December 19, 2007

Run Number	Time	Oxygen %	NOx Emissions				CO Emissions			CT Gas Flow	CT Heat Input		DB		CT + DB	DB	DB
			ppm	ppm	lbs/hr	lbs/MMBTU	ppm	lbs/hr	lbs/MMBTU	hscf/hr	MMBTUH HHV	MMBTUH LHV	Gas Flow hscf/hr	Heat Input MMBTUH HHV	Heat Input MMBTUH HHV	NOx Contr. lbs MMBTU	CO Contr. lbs MMBTU
Full Load CT only																	
1	0746-0904	14.46	26.51	24.26	41.68	0.0894	28.19	26.98	0.0579	4542	466.5	421.8	NA	NA	NA	NA	NA
2	0916-1030	14.46	26.54	24.28	41.79	0.0895	27.59	26.44	0.0566	4549	467.2	422.5	NA	NA	NA	NA	NA
3	1042-1155	14.45	26.94	24.63	42.44	0.0908	27.06	25.92	0.0555	4551	467.4	422.7	NA	NA	NA	NA	NA
Average	--	14.46	26.66	24.39	41.97	0.0899	27.61	26.45	0.0566	4547	467.0	422.3	NA	NA	NA	NA	NA
Full Load CT with Duct Burner																	
1	1352-1505	13.79	27.70	22.96	43.29	0.0846	30.96	29.45	0.0576	4558	468.1	423.3	425.0	43.6	511.8	0.037	0.057
2	1518-1629	13.80	27.62	22.94	43.29	0.0845	31.16	29.71	0.0580	4556	467.9	423.1	432.0	44.4	512.3	0.034	0.074
3	1642-1755	13.82	27.77	23.13	43.46	0.0852	30.30	28.86	0.0566	4546	466.9	422.2	424.0	43.5	510.4	0.024	0.068
Average	--	13.80	27.70	23.01	43.35	0.0848	30.80	29.34	0.0574	4553	467.6	422.9	427.0	43.9	511.5	0.031	0.066

Natural Gas Fd-Factor = 8710 MMBTU/dscf MW NOx = 46 lbs/lb-mole MW CO = 28 lbs/lb-mole

Heat Input HHV = (gas flow)(1027 dry Btu/cf)(60 min/hr)/10E6

lbs/hr = ppm(2.595 x 10<sup>-9</sup>)MW (20.9/20.9-%O<sub>2</sub>)(Fd)(Heat Input HHV)

**Allowable Emissions**

NOx = 25 ppmvd @ 15%O<sub>2</sub>

CO = 28 ppmvd

DB NOx = 0.1 lbs/MMBTU

DB CO = 0.2 lbs/MMBTU

SO<sub>2</sub> Emissions (Subpart GG NSPS) = 3.76E-03 lbs/hr CT

Duct Burner Contribution =  $\frac{(\text{lbs/hr CT+DB}) - \text{lbs/hr CT}}{\text{DB Heat Input (HHV)}}$



**Table 2. Emission Summary**  
**Unit 2 Combustion Turbine - Gas Fired**  
**Lake Cogeneration, Ltd.**  
**Umatilla, Florida**  
**December 18, 2007**

Run Number	Time	Oxygen %	NOx Emissions				CO Emissions			CT	CT Heat Input	
			ppm	ppm 15% O2	lbs/hr	lbs/MMBTU	ppm	lbs/hr	lbs/MMBTU	Gas Flow	MMBTUH HHV	MMBTUH LHV
										hscf/hr		
Full Load CT only												
1	0745-0907	14.42	26.17	23.83	41.52	0.0878	26.97	26.06	0.0551	4600	472.9	427.7
2	0922-1036	14.41	25.68	23.35	40.48	0.0860	27.24	26.13	0.0555	4579	470.7	425.7
3	1051-1208	14.40	25.17	22.82	39.55	0.0841	27.68	26.45	0.0563	4575	470.3	425.4
Average	---	14.41	25.67	23.33	40.52	0.0860	27.30	26.21	0.0556	4585	284.4	426.3

**Natural Gas Fd-Factor = 8710 MMBTU/dscf    MW NOx = 46 lbs/lb-mole    MW CO = 28 lbs/lb-mole**  
**Heat Input HHV = (gas flow)(1028 dry Btu/cf)(60 min/hr)/10E6**  
**lbs/hr = ppm(2.595 x 10<sup>-9</sup>)MW (20.9/20.9-%O2)(Fd)(Heat Input HHV)**

**Allowable Emissions**

**NOx = 25 ppmvd @ 15%O2**  
**CO = 28 ppmvd**  
**DB NOx = 0.1 lbs/MMBTU**  
**DB CO = 0.2 lbs/MMBTU**

**SO2 Emissions (Subpart GG NSPS) = 3.78E-03 lbs/hr CT**

### **3.0 PROCESS DESCRIPTION AND OPERATION**

The Lake Cogeneration Limited facility consists of two GE LM6000 PC combustion gas turbine generating sets with a nominal generating capacity of 47 MW each. The maximum heat input based on the Lower Heating Value (LHV) without the SPRINT system shall not exceed 423 MMBTU/hr CT at 51°F, which produces about 47 MW. With the SPRINT system in operation, the heat input based on the LHV is 435 MMBTUH with a power output of about 50.0 MW. Each turbine is exhausted through a Heat Recovery Steam Generator (HRSG) with supplemental duct burner firing. The steam produced by the HRSG is exhausted through a common steam turbine generator originally rated for 26.5 MW. The duct burners are permitted for up to 90 MMBTU heat input each but actually operate at less than half that value. The gas turbines can be fired on either natural gas or oil. The duct burners are fired only with natural gas. The gas turbines have a chiller system, which maintains inlet combustion air at about 51°F to 58°F and 100% relative humidity year round. Water is also injected at the turbine combustor to reduce NO<sub>x</sub> emissions.

During the compliance tests, both turbines were operated at a nominal rate of 49 MW (see Appendix E for plant production data).

## EXECUTIVE SUMMARY

The compliance test results for Unit 2 Combustion Turbine with the Duct Burner in operation meets all mass emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 0694801-008-AC. All tests were conducted on natural gas firing only. The units produced approximately 50 MW with the SPRINT system in operation.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions*
<b>UNIT 2</b>			
NO <sub>x</sub>	CT	40.5 lbs/hr, 23.3 ppm <sub>v</sub> d @ 15% O <sub>2</sub>	85.5 lbs/hr, 25ppm <sub>v</sub> d @ 15% O <sub>2</sub>
	DB	3.04 lbs/hr, 0.075 lbs/MMBTU	18.0 lbs/hr, 0.1 lbs/MMBTU
	CT & DB	43.56 lbs/hr	103.5 lbs/hr
CO	CT	26.2 lbs/hr, 27.3 ppm <sub>v</sub> d	56.0 lbs/hr, 28 ppm <sub>v</sub> d
	DB	5.95 lbs/hr, 0.146 lbs/MMBTU	36.0 lbs/hr, 0.2 lbs/MMBTU
	CT & DB	32.2 lbs/hr	92.0 lbs/hr

\* at 51°F

Emission results are provided in Table 1. Emission data for the turbine only were used from the December 18, 2007 test for both NO<sub>x</sub> and CO. NO<sub>x</sub> data with the turbine and duct burner operating on February 15 was taken from the plant CEM data. Only Carbon Monoxide emissions were measured.

The SO<sub>2</sub> emission based on fuel analysis was 0.00108 lb/hr at 49.6 MW.

## **1.0 INTRODUCTION**

On February 15, 2008 Air Consulting and Engineering, Inc. performed testing according to conditions stated in Construction Permit Number 0694801-008-AC for Carbon Monoxide (CO) and Oxygen content (O<sub>2</sub>) on the Combustion Turbine CT-2 at Lake Cogen Limited in Umatilla, Florida. The spray intercooling (SPRINT) system was also in operation during these test series. CT-2 was tested with and without Duct Burners (DB) operating at base load.

The United States Environmental Protection Agency (EPA) Methods 3A (O<sub>2</sub>) and 10 (CO) were used to conduct the tests.

Mr. Jim Miller of Lake Cogen coordinated the tests. Mr. Garry Kuberski of the FDEP Orlando was present for a portion of the testing.

## 2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the emission test are summarized in Table 1, showing base load conditions with and without duct burners. The Unit was fired on natural gas.

The contribution CO emissions of the gas fired duct burners was determined by performing a test series with duct burner firing. The turbine without duct burner data was used from the emissions test on December 18, 2007. The difference in emission rates was attributed to the duct burners. NO<sub>x</sub> duct burner contribution was determined using the plant's CEMS data, as well as the December 18, 2007 baseline test results.

Duct burner NO<sub>x</sub> contributions averaged 0.075 pounds per Million BTUs (lbs/MMBTU). CO duct burner contributions averaged 0.146 lbs/MMBTU.

Duct burner emissions were calculated using the following formula:

$$\text{lbs/MMBTU DB} = \frac{(\text{lbs/hr CT+DB}) - (\text{lbs/hr CT})}{\text{DB Heat input MMBTUH (HHV)}}$$

The maximum power output of the combustion turbine was 49.6 megawatts (MW) during the test series.

Mass emissions of NO<sub>x</sub> and CO were determined by multiplying the fuel factor (8710) derived lbs/MMBTU value by the heat input in terms of higher heating value.

Gaseous emission data and data logger results copies are provided in Appendices B and C, respectively.

**Table 1. Emission Summary**  
**Unit 2 Combustion Turbine - Gas Fired**  
**Lake Cogeneration, Ltd.**  
**Umatilla, Florida**  
**February 15, 2008**

Run Number	Time	Oxygen %	NOx Emissions				CO Emissions			CT Gas Flow	CT Heat Input		DB		CT + DB	DB	DB
			ppm	ppm	lbs/hr	lbs/MMBTU	ppm	lbs/hr	lbs/MMBTU	scfm	MMBTUH HHV	MMBTUH LHV	Gas Flow	Heat Input	Heat Input	NOx Contr.	CO Contr.
													scfm	MMBTUH HHV			
Full Load CT only tested December 18, 2007																	
1	0745-0907	14.42	26.17	23.83	41.52	0.0878	26.97	26.06	0.0551	7667	472.9	427.7	NA	NA	NA	NA	NA
2	0922-1036	14.41	25.68	23.35	40.48	0.0860	27.24	26.13	0.0555	7632	470.7	425.7	NA	NA	NA	NA	NA
3	1051-1208	14.40	25.17	22.82	39.55	0.0841	27.68	26.45	0.0563	7625	470.3	425.4	NA	NA	NA	NA	NA
Average	—	14.41	25.67	23.33	40.52	0.0860	27.30	26.21	0.0556	7641	474.1	426.3	NA	NA	NA	NA	NA
Full Load CT with Duct Burner																	
1	1050-1154	13.54	from Plant CEM Data				33.32	30.87	0.0599	7725	475.6	430.1	653.0	40.2	515.7	0.076	0.120
2	1250-1353	13.52	28.70	22.79	43.23	0.0838	35.44	32.75	0.0635	7716	475.0	429.6	660.2	40.6	515.6	0.068	0.163
3	1409-1512	13.50	28.67	22.66	42.86	0.0831	35.65	32.85	0.0637	7709	474.6	429.2	664.7	40.9	515.5	0.081	0.156
Average	—	13.52	28.92	22.98	43.56	0.0844	34.80	32.16	0.0624	7717	475.0	429.6	659.3	40.6	515.6	0.075	0.146

**Natural Gas Fd-Factor = 8710 MMBTU/dscf MW NOx = 46 lbs/lb-mole MW CO = 28 lbs/lb-mole**  
**Heat Input HHV = (gas flow)(1026 dry Btu/cf)(60 min/hr)/10E6**  
**lbs/hr = ppm(2.595 x 10<sup>-9</sup> MW (20.9/20.9-%O<sub>2</sub>)(Fd)(Heat Input HHV)**

**Allowable Emissions**

**NOx = 25 ppmvd @ 15%O<sub>2</sub>**  
**CO = 28 ppmvd**  
**DB NOx = 0.1 lbs/MMBTU**  
**DB CO = 0.2 lbs/MMBTU**

**Duct Burner Contribution =  $\frac{(\text{lbs/hr CT} - \text{lbs/hr CT+DB})}{\text{DB Heat Input (HHV)}}$**

**SO<sub>2</sub> Emissions (Subpart GG NSPS) = 1.08E-02 lbs/hr**

**Note:** **NOx ductburner contribution** was calculated using the plant's CEMS NOx values during this test (CT and duct burner) and CT values only from the December 18, 2007 test.  
**CO ductburner contribution** was calculated using the measured CO values during this test (CT and duct burner) and the CT values only from the December 18, 2007 test.

### **3.0 PROCESS DESCRIPTION AND OPERATION**

The Lake Cogeneration Limited facility consists of two GE LM6000 PC combustion gas turbine generating sets with a nominal generating capacity of 47 MW each. The maximum heat input based on the Lower Heating Value (LHV) without the SPRINT system shall not exceed 423 MMBTU/hr CT at 51°F, which produces about 47 MW. With the SPRINT system in operation, the heat input based on the LHV is 435 MMBTUH with a power output of about 50.0 MW. Each turbine is exhausted through a Heat Recovery Steam Generator (HRSG) with supplemental duct burner firing. The steam produced by the HRSG is exhausted through a common steam turbine generator originally rated for 26.5 MW. The duct burners are permitted for up to 90 MMBTU heat input each but actually operate at less than half that value. The gas turbines can be fired on either natural gas or oil. The duct burners are fired only with natural gas. The gas turbines have a chiller system, which maintains inlet combustion air at about 51°F to 58°F and 100% relative humidity year round. Water is also injected at the turbine combustor to reduce NO<sub>x</sub> emissions.

During the compliance tests, CT-2 was operated at a nominal rate of 49.6 MW (see Appendix E for plant production data).

**ATTACHMENT LC-EU1-I2**  
**EMISSION UNIT APPLICABLE REQUIREMENTS**





# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kotikamp  
Lt. Governor

Michael W. Sole  
Secretary

## PERMITTEE

Lake Cogeneration L.P.  
39001 Golden Gem Drive  
Umatilla, Florida 32784  
*Authorized Representative:*  
Mr. James Miller, Plant Manager

Air Permit No. 0694801-008-AC  
Facility ID No. 0694801  
SIC No. 4931  
SPRINT Project

Permit Expires: December 31, 2008

## PROJECT AND LOCATION

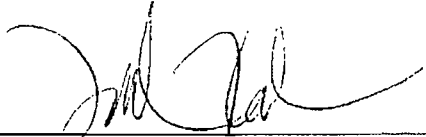
This permit authorizes installation of spray intercooling (SPRINT) systems on the compressors of two gas turbines designated by the applicant as Units 1 and Unit 2 and by the Department of Environmental Protection (Department) Air Resource Management System as emissions units EU-003 and EU-004 located at the Lake Cogeneration L.P. Facility (the facility). The facility is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida 32784.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Parts 60 and 63 of the Code of Federal Regulations (CFR). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

## CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

  
\_\_\_\_\_  
Joseph Kahn, Director  
Division of Air Resource Management

6/11/07  
\_\_\_\_\_  
(Date)

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

*Electronically sent – Received Receipt requested.*

In the Matter of an  
Application for Permit by:

Lake Cogeneration L.P.  
39001 Golden Gem Drive  
Umatilla, Florida 32784

Authorized Representative:

Mr. James Miller, Plant Manager


DEP File No. 0694801-008-AC  
Lake Cogeneration Facility  
SPRINT Project  
Lake County, Florida  
Expires: December 31, 2008

Enclosed is Final Air Construction Permit No. 0694801-008-AC that authorizes installation of spray intercooling (SPRINT) systems on the compressors of two gas turbines designated by the applicant as Units 1 and Unit 2 and by the Department of Environmental Protection (Department) Air Resource Management System as emissions units EU-003 and EU-004 located at the Lake Cogeneration L.P. Facility (the facility). The facility is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida 32784.

As noted in the attached Final Determination, no changes were made to the Draft Permit. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief  
Bureau of Air Regulation

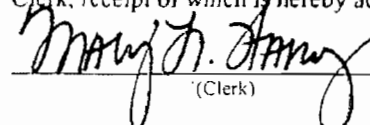
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction Permit, Final Determination, and all copies were sent electronically (with Received Receipt) before the close of business on 6/13/07 to the person(s) listed below.

James Miller, Plant Manager: [jmiller@caithnessenergy.com](mailto:jmiller@caithnessenergy.com)  
Scott Osbourn, P.E., Golder Associates, Inc.: [sosbourn@golder.com](mailto:sosbourn@golder.com)  
James Bradner, P.E., Central District Office: [james.bradner@dep.state.fl.us](mailto:james.bradner@dep.state.fl.us)  
Thomas A. Grace, Lake Cogeneration L.P.: [tgrace@caithnessenergy.com](mailto:tgrace@caithnessenergy.com)  
Katy Forney, EPA Region 4: [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)  
James Little, EPA Region 4: [little.james@epa.gov](mailto:little.james@epa.gov)


Clerk Stamp

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

  
(Clerk)

6/13/07  
(Date)

## MEMORANDUM

To: Joseph Kahn  
From: Trina L. Vielhauer   
Subject: Lake Cogeneration Facility  
Air Construction Permit No. 0694801-008-AC  
Date: June 7, 2007

Attached is the final air construction permit for the subject facility. This permit authorizes installation of spray intercooling (SPRINT) systems on the compressors of two gas turbines designated by the applicant as Units 1 and Unit 2. It also establishes these changes as applicable Title V Air Operation Permit conditions.

The Department distributed an "Intent to Issue Permit" package on May 4, 2007. The applicant published the "Public Notice of Intent to Issue" in the Orlando Sentinel on May 9, 2007. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. Minor comments were received from the Applicant on the Intent to Issue the Air Construction Permit package.

I recommend your signature.

## **FINAL DETERMINATION**

### **PERMITTEE**

Lake Cogeneration L.P.  
39001 Golden Gem Drive  
Umatilla, Florida 32784

### **PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation, Permitting South Section  
2600 Blair Stone Road, MS 5505  
Tallahassee, Florida 32399-2400

### **PROJECT**

Air Permit No. 0694801-008-AC

Lake Cogeneration Facility

This permit authorizes installation of spray intercooling (SPRINT) systems on the compressors of two gas turbines designated by the applicant as Units 1 and Unit 2 and by the Department of Environmental Protection (Department) Air Resource Management System as emissions units EU-003 and EU-004 located at the Lake Cogeneration L.P. Facility (the facility). The facility is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida 32784.

### **NOTICE AND PUBLICATION**

The Department distributed an "Intent to Issue Permit" package on May 4, 2007. The applicant published the "Public Notice of Intent to Issue" in the Orlando Sentinel on May 9, 2007. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. The following comments were received from the Applicant on the Draft Permit Intent Package in an e-mail memorandum dated May 22, 2007.

Comment 1:

*On the TE&PD, page 3 of 8, it looks like part of the text was deleted at the bottom of the page.*

Department Response:

The Applicant is referring to a sentence fragment that has been deleted.

Comment 2:

*On the TE&PD, page 8 of 8, under "Other Applicable Requirements"-- it's acknowledged that the Applicant will be installing NO<sub>x</sub> CEMS for CAIR, which will make it easier to track one of the two critical pollutants (NO<sub>x</sub> and CO).*

Department Response:

No response necessary – the Department acknowledges the comment.

## **FINAL DETERMINATION**

### **Comment 3:**

*The CEMS timing may end up affecting the compliance testing obligations under the draft permit, Condition 8 (page 4). Depending on when it's proposed to install the NO<sub>x</sub> CEMS for CAIR (need by 2009), it may be possible to delete the annual NO<sub>x</sub> testing obligation. This may be significant, as the language seems to state that you test annually for all NO<sub>x</sub> and CO limits (i.e., CO from CTs and from CT+DB, same with NO<sub>x</sub>). There may also be an issue with getting to >90% capacity on the DBs for the annual testing.*

### **Department Response:**

No response necessary – the Department acknowledges the comment.

### **Comment 4:**

*For Condition 14.a, can we propose that the NO<sub>x</sub> emissions be tracked and reported by CEMS?*

### **Department Response:**

The Department concurs with the suggestion. Further, pursuant to Department Rule 62-210.370, F.A.C., the owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches described in the Rule to compute the emissions of a pollutant from an emissions unit. And, if the emissions unit is equipped with a continuous emissions monitoring system (CEMS) meeting the applicable certification and quality assurance requirements of 40 CFR Part 60, the owner or operator shall use such CEMS to compute the emissions of the pollutant. Specific Condition 14.a. has been modified to reflect this requirement.

## **CONCLUSION**

The final action of the Department is to issue the permit with the minor edits noted above.

## SECTION 1. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

Lake Cogeneration L.P. consists primarily of two 42 megawatt (MW) combined-cycle units (Units 1 and 2). The two units are designated as Emissions Units EU-003 and 004 in the Department's Air Resource Management System (ARMS).

Each unit consists of a General Electric LM6000PA combustion turbine-electrical generator (CTG) equipped with an air chiller system and a supplementary-fired heat recovery steam generator (HRSG). The steam from the two CTG/HRSGs is available for use by local industries, to make distilled water or in a single nominal 26.5 steam turbine-electrical generator (STG) to produce additional electricity.

The two combined cycle units operate primarily on natural gas. There is a 170,000 gallon storage tank designated as ARMS EU-002.

The project is to add spray intercooling (SPRINT) systems to each CTG to increase power output. Equipment will be installed to inject atomized water into the compressor between the high-pressure and low-pressure compressors. The maximum heat input rate when firing natural gas is expected to increase from 423 to 435 million British thermal units (MMBtu) per hour per CTG.

ID	Emission Unit Description
003	Combined Cycle Combustion Turbine with Duct Burner
004	Combined Cycle Combustion Turbine with Duct Burner

### REGULATORY CLASSIFICATION

NESHAP: The facility IS NOT a potential major source of hazardous air pollutants. The facility DOES NOT OPERATE units subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63.

Title IV: The facility DOES NOT OPERATE existing units subject to the Acid Rain provisions of the Clean Air Act (CAA).

Title V: The facility IS a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The facility IS a PSD-major stationary source in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility OPERATES units subject to New Source Performance Standards (NSPS) in 40 CFR 60 including:

- 40 CFR 60, Subpart A - General Provisions.
- 40 CFR 60, Subpart GG - Standards of Performance for Stationary Gas Turbines.

CAIR: The facility IS subject to the Clean Air Interstate Rule (CAIR).

CAMR: Unit IS NOT subject to the Clean Air Mercury Rule (CAMR).

Siting: The facility is a steam electrical generating plant and IS NOT subject to the power plant siting provisions of Chapter 62-17, F.A.C.

### RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the draft permit package including the Department's Technical Evaluation and Preliminary Determination; publication and comments; and the Department's Final Determination.

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Central District Office. The mailing address and phone number of the Central District Office is: 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803; Telephone: 407/894-7555; Fax: 407/897-5963.
3. Appendices: The following Appendices are attached as part of this permit: Appendix GC (General Conditions); and Appendix C (Common State Regulatory Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Bureau of Air Regulation with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

### SECTION 3. EMISSIONS UNITS SPECIFIC CONDITIONS

This section of the permit addresses the following emissions units.

#### **AIR RESOURCE MANAGEMENT SYSTEM (ARMS) Emissions Units 003 and 004**

**Description:** Each emissions unit consists of a General Electric Model LM6000 gas turbine, heat recovery steam generator (HRSG) with duct firing, chiller system, and SPRINT spray inter-cooling. Steam generated in the HRSGs is directed to a common steam turbine-electrical generator, which is rated at 26.5 megawatts (MW). Energy is sold to Progress Energy pursuant to a 20-year agreement that commenced on July 1, 1993. Steam has been furnished to an orange processing facility. In 2002 the facility installed three water distillation units. The distilled water is sold on the open market. Operations and maintenance services are provided by the Caithness Operating Co., L.L.C.

**Fuel:** Each unit fires pipeline natural gas as the primary fuel and distillate oil as a restricted alternate fuel.

**Capacity:** At a turbine inlet temperature of 51° F, the maximum heat input rate from gas firing using lower heating value (LHV) without SPRINT is 423 million British thermal units (MMBtu) per hour, which produces approximately 39.5 MW. At a turbine inlet temperature of 51° F, the maximum heat input rate from gas firing (LHV) with SPRINT is 435 MMBtu per hour, which produces approximately 50.2 MW.

**Nitrogen Oxides (NO<sub>x</sub>) Controls:** A water injection system is used to reduce NO<sub>x</sub> emissions. The water-to-fuel ratio is monitored continuously and adjusted by the automatic control system based on load conditions.

**Stack Parameters:** The stack is 11.0 feet in diameter and 100 feet tall. After the HRSGs and steam turbine-electrical generator, the exhaust exits at 232° F with a volumetric flow rate of 325,221 actual cubic feet per minute (acfm).

*{Permitting Note: The units remain subject to the applicable requirements of previous Air Construction Permit No. PSD-FL-176 (Project No. AC35-196459) and current Title V Air Operation Permit No. 0694801-005-AV.}*

#### **PREVIOUS APPLICABLE REQUIREMENTS**

1. **Other Permits:** The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

#### **EQUIPMENT AND PERFORMANCE RESTRICTIONS**

2. **SPRINT Upgrade:** This permit authorizes the construction activities necessary to add the General Electric Company's spray inter-cooling (SPRINT) technology to Unit 1 and Unit 2. In general, the equipment consists of a system that will automatically meter approximately 9 to 12 gallons per minute (gpm) of de-mineralized water to a series of 24 spray nozzles. [Applicant request.]
3. **Permitted Capacity:** At a turbine inlet temperature of 51° F, the maximum heat input rate from firing natural gas (LHV) when utilizing the SPRINT system is 435 MMBtu per hour per combustion turbine. [Rule 62-210.200(PTE), F.A.C.]

*{Permitting Note: This permit does not alter any previous requirements for other methods of operation or modify any specifications related to authorized fuels, fuel consumption, or allowable hours of operation.}*



### SECTION 3. EMISSIONS UNITS SPECIFIC CONDITIONS

#### EMISSIONS STANDARDS

##### 4. Carbon Monoxide (CO)

- a. Combustion Turbines (CTs): When firing natural gas and utilizing SPRINT, CO emissions from each unit shall not exceed 28 parts per million by volume dry (ppmvd). In addition, the maximum CO mass emission rate from both units combined shall not exceed 56.0 pounds per hour based on a turbine inlet temperature of 51° F.

*{Permitting Note: The concentration-based standard (ppmvd) remains consistent with the BACT determination made in Permit No. PSD-FL-176.}*

- b. Combustion Turbines and Duct Burners (CTs+DBs): When firing natural gas, operating the duct burner system, and utilizing SPRINT, the maximum CO mass emission rate from both units combined shall not exceed 92.0 pounds per hour based on a turbine inlet temperature of 51° F.

[AC35-196459; 0694801-005-AV; and Applicant request.]

##### 5. Nitrogen Oxides (NO<sub>x</sub>)

- a. Combustion Turbines (CTs): When firing natural gas and utilizing SPRINT, NO<sub>x</sub> emissions from each unit shall not exceed 25 ppmvd corrected to 15% oxygen. In addition, the maximum NO<sub>x</sub> mass emission rate from both units combined shall not exceed 85.5 pounds per hour based on a turbine inlet temperature of 51° F.

*{Permitting Note: The concentration-based standard (ppmvd corrected to 15% oxygen) remains consistent with the initial BACT determination made in Permit No. PSD-FL-176.}*

- b. Combustion Turbines and Duct Burners (CTs+DBs): When firing natural gas, operating the duct burner system, and utilizing SPRINT, the maximum NO<sub>x</sub> mass emission rate from both units combined shall not exceed 103.5 pounds per hour based on a turbine inlet temperature of 51° F.

[AC35-196459; 0694801-005-AV; and Applicant request.]

6. Other Emissions Standards: Unless otherwise specified above, the emissions standards specified in current Title V Air Operation Permit No. 0694801-005-AV also apply when utilizing the SPRINT spray inter-cooling system with each corresponding operational configuration.

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

#### EMISSIONS PERFORMANCE TESTING

7. Initial Compliance Tests: Each unit shall be tested to demonstrate initial compliance with the CO and NO<sub>x</sub> emissions standards specified in this permit. CO and NO<sub>x</sub> emissions tests shall be conducted concurrently. The initial tests shall be conducted within 60 days after completing construction of the SPRINT project and achieving maximum production capacity, but not later than 180 days after initial operation of the unit with SPRINT. [Rule 62-297.310(7)(a)1., F.A.C.]

8. Annual Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), each unit shall be tested to demonstrate compliance with the CO and NO<sub>x</sub> emissions standards specified in this permit. CO and NO<sub>x</sub> emissions tests shall be conducted concurrently.

[Rule and 62-297.310(7)(a)4, F.A.C., and to avoid Rule 62-212.400, F.A.C.]

9. Test Notifications: At least 15 days prior to the date on which each required test is to begin, the permittee shall notify the Compliance Authority of the date, time, and place of each test. The notification shall also include the name and phone number of the contact person who will be responsible for coordinating and having the tests conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

### SECTION 3. EMISSIONS UNITS SPECIFIC CONDITIONS

10. 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.
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources.
10	Determination of Carbon Monoxide Emissions from Stationary Sources. {Permitting Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates. {Permitting Note: The F-factor method may also be used to determine flow rates and gas analysis to calculate mass emission rates in lieu of Methods 1-4.}

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 without prior written approval from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

#### NOTIFICATIONS, RECORDS AND REPORTS

11. Construction Notifications: Within 15 days of beginning construction, the permittee shall notify the Compliance Authority that construction has commenced. Within 15 days of completing construction, the permittee shall notify the Compliance Authority that construction has concluded. Each notification shall include an updated proposed schedule of activities through the initial shakedown period and initial testing. [Rule 62-4.070(3), F.A.C.]
12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in the facility's current Title V Air Operation Permit. For each test run, the report shall also indicate the operating load (MW), maximum heat input rate (MMBtu per hour), ambient temperature (° F), turbine inlet temperature (° F), and water-to-fuel ratio. [Rule 62-297.310(8), F.A.C.]
13. Operational Data: The permittee shall monitor and record the hours of operation utilizing SPRINT. [Rule 62-4.070(3), F.A.C.]
14. PSD Applicability Report: Before March 1<sup>st</sup> of each year, the permittee shall submit a report to the Bureau of Air Regulation and the Compliance Authority summarizing actual annual emissions for the previous calendar year. The reports shall be submitted for five separate years that are representative of normal post-change operations after completing construction of the SPRINT project. The reports shall begin during the first full year that the SPRINT technology is in use and continue for five years. Reports are subject to the following conditions.
- Actual emissions for a given year in the future shall be determined by the tested emission rates for that year and the actual hours of operation during the calendar year. Pursuant to Department Rule 62-210.370, F.A.C., the owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches described in the Rule to compute the emissions of a pollutant from an emissions unit. If the emissions unit is equipped with a continuous emissions monitoring system (CEMS) meeting the applicable certification and quality assurance requirements of 40 CFR Part 60, the owner or operator shall use such CEMS to compute the emissions of the pollutant.

### SECTION 3. EMISSIONS UNITS SPECIFIC CONDITIONS

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- b. The total "baseline actual emissions" for Unit 1 and Unit 2 (2-year average) are 180 tons per year of carbon monoxide and 272 tons per year of nitrogen oxides.
- c. In accordance with Rule 62-210.200(247), F.A.C., the permittee may "exclude that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth".
- d. The permittee shall quantify any excluded emissions and provide a rationale.
- e. The annual report shall compare actual emissions calculated for a given year with the baseline actual emissions identified above. If the comparison shows an increase in actual emissions greater than the PSD significant emission rates defined in Rule 62-210.200, F.A.C., then Unit 1 and Unit 2 shall be subject to PSD preconstruction review at that time. The review shall include a determination of the Best Available Control Technology (BACT) for each PSD-significant pollutant.

[Rules 62-204.800, 62-210.200, 62-212.300(1)(e)1., 62-212.400, and 62-210.370, F.A.C.; and 40 CFR 52.21(b)(41)(ii)(c)]

**SECTION 4. APPENDIX C**  
**COMMON STATE REGULATORY REQUIREMENTS**

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*(Permitting Note: Unless otherwise specified by 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. **Circumvention:** 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 two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [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 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.]
6. **VOC or OS Emissions:** No person shall 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. [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(217), F.A.C.]
8. **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 percent opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. **Unconfined Particulate Emissions:** 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.]

**TESTING REQUIREMENTS**

10. **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.]

**SECTION 4. APPENDIX C**  
**COMMON STATE REGULATORY REQUIREMENTS**

11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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. [Rule 62-297.310(2), F.A.C.]
12. 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.]
13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
- a. *Required Sampling Time*. 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
  - 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. *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.
- [Rule 62-297.310(4), F.A.C.]
14. 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.]
15. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
16. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]
17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it 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. [Rule 62-297.310(7)(b), F.A.C.]
18. Test Reports: 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. 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. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to

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**SECTION 4. APPENDIX C**  
**COMMON STATE REGULATORY REQUIREMENTS**

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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.]

**RECORDS AND REPORTS**

19. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. 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 March 1st of each year. [Rule 62-210.370(2), F.A.C.]

## SECTION 4. APPENDIX GC

### General Permit Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. 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.
2. 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.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, 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 or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. 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.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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.
7. 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 a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. 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.

8. 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:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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.

9. 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

## SECTION 4. APPENDIX GC

### General Permit Conditions

arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. 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.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, 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.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (not applicable to project);
  - b. Determination of Prevention of Significant Deterioration (not applicable to project); and
  - c. Compliance with New Source Performance Standards (previously applicable to gas turbines).
14. The permittee shall comply with the following:
  - 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 or this permit. These materials shall be retained at least three 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;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.
15. 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 that 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.





# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

June 4, 2008

*Electronic Mail – Received Receipt Requested.*

Mr. Thomas A. Grace, Manager – Environmental, Health & Safety  
Lake Cogen, Ltd.  
39001 Golden Gem Drive  
Umatilla, Florida 32784

Re: Draft/Proposed Permit No. 0694801-009-AV  
Lake Cogen, Ltd., Lake Cogeneration Facility  
Title V Air Operation Permit Revision  
Clean Air Interstate Rule Part


Dear Mr. Grace:

On May 16, 2008, you submitted a Clean Air Interstate Rule (CAIR) Part Form (DEP Form No. 62-210.900(1)(b)) for incorporation into the Title V air operation permit for the Lake Cogeneration Facility. This facility is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida. Enclosed are the following documents:

- The proposed Draft/Proposed Title V Air Operation Permit Revision includes the CAIR Part which specifies that the owner/operator will operate the facility and each CAIR unit at the facility in accordance with 40 Code of Federal Regulations (CFR) 96 and Rule 62-296.470, Florida Administrative Code (F.A.C.).
- The Statement of Basis, which summarizes the facility, the equipment, the primary rule applicability, and any changes since the last Title V air operation permit revision.
- The Written Notice of Intent to Issue Title V Air Operation Permit Revision 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 revised Draft/Proposed Permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Title V Air Operation Permit Revision 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 Revision 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.

If you have any questions, please contact the Project Engineer, Tom Cascio, by telephone at 850-921-9526 or by email at [tom.cascio@dep.state.fl.us](mailto:tom.cascio@dep.state.fl.us).

Sincerely,,

  
Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TLV/raw/tbc

Enclosures

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

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*In the Matter of an  
Application for Air Permit by:*

Lake Cogen, Ltd.  
39001 Golden Gem Drive  
Umatilla, Florida 32784

Draft/Proposed Permit No. 0694801-009-AV  
Facility ID No. 0694801  
Lake Cogeneration Facility  
Title V Permit Revision  
Lake County, Florida

*Responsible Official:*

Mr. Thomas A. Grace, Manager – Environmental, Health  
& Safety

**Facility Location:** Lake Cogen, Ltd. operates the Lake Cogeneration Facility, which is located at 39001 Golden Gem Drive, Umatilla in Lake County, Florida.

**Project:** The applicant has submitted a complete and certified Clean Air Interstate Rule (CAIR) Part Form and has requested its incorporation into the existing Title V air operation permit. Details of the project are provided in the application and the enclosed Statement of Basis.

The existing facility consists of the following emissions units:

Currently at the plant site are two nominal 42.0 megawatt (MW) combined cycle combustion turbines with duct burners that exhaust through heat recovery steam generators (HRSG) which are used to power a nominal 26.5 MW steam turbine. Nitrogen oxides (NO<sub>x</sub>) emissions are controlled by using water injection. The facility also includes a fuel oil storage tank (170,000 gallon).

**Permitting Authority:** Applications for Title V air operation permits 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 62-296.470 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 CAIR Part Form, 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/eproducts/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 an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed 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 proposed Draft/Proposed Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Sections 403.815 and 403.087, F.S. and Rules 62-110.106 and 62-210.350(3),

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Lake Cogen, Ltd.  
Lake Cogeneration Facility

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Draft/Proposed Permit No. 0694801-009-AV  
CAIR Part

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

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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 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 on the official web site for notices at Florida Administrative Weekly (FAW) at <http://faw.dos.state.fl.us/> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If 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 Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**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 state; (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

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

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.

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

**EPA Review:** EPA has agreed to treat the Draft/Proposed 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.

  
for Trina L. Vielhauer, Chief  
Bureau of Air Regulation

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

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Statement of Basis, and the Draft/Proposed Permit) was sent by electronic mail with received receipt requested before the close of business on 6/10/08 to the persons listed below.

Thomas A. Grace, Lake Cogen, Ltd.: [tgrace@caithnessenergy.com](mailto:tgrace@caithnessenergy.com)

Gracy Danois, U.S. EPA Region 4: [danois.gracy@epa.gov](mailto:danois.gracy@epa.gov)

Jim Bradner, P.E., Central District Office: [James.Bradner@dep.state.fl.us](mailto:James.Bradner@dep.state.fl.us)

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

Clerk Stamp

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

Barbara J. Friday 6/10/08  
(Clerk) (Date)

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

there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the official web site for notices at Florida Administrative Weekly (FAW) at <http://faw.dos.state.fl.us/> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If 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 Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**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 this 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 petition must so state; (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 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/Proposed 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

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

Florida Department of Environmental Protection  
Division of Air Resource Management, Bureau of Air Regulation  
Draft/Proposed Air Permit No. 0694801-009-AV  
Lake Cogen, Ltd., Lake Cogeneration Facility  
Lake County, Florida

**Applicant:** The applicant for this project is Lake Cogen, Ltd. The applicant's authorized representative and mailing address is: Mr. Thomas A. Grace, Manager – Environmental, Health & Safety, Lake Cogen, Ltd., Lake Cogeneration Facility, 39001 Golden Gem Drive, Umatilla, Florida 32784.

**Facility Location:** Lake Cogen, Ltd. operates the existing Lake Cogeneration Facility, which is located in Lake County at 39001 Golden Gem Drive, Umatilla, Florida.

**Project:** The applicant has submitted a complete and certified Clean Air Interstate Rule (CAIR) Part Form and has requested its incorporation into the existing Title V air operation permit.

The existing facility consists of the following emissions units: Currently at the plant site are two nominal 42.0 megawatt (MW) combined cycle combustion turbines with duct burners that exhaust through heat recovery steam generators (HRSG) which are used to power a nominal 26.5 MW steam turbine. Nitrogen oxides (NO<sub>x</sub>) emissions are controlled by using water injection. The facility also includes a fuel oil storage tank (170,000 gallon).

**Permitting Authority:** Applications for Title V air operation permits 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 62-296.470 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/eproducts/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 Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed 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 proposed Draft/Proposed Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice 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 this 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

**(Public Notice to be Published in the Newspaper)**

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

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>.



## STATEMENT OF BASIS

### PROJECT DESCRIPTION

On May 16, 2008, the applicant submitted a CAIR Part Form in order to incorporate the Clean Air Interstate Rule provisions into Title V permit 0694801-007-AV.

### FACILITY DESCRIPTION

The existing facility consists of the following emissions units: Currently at the plant site are two nominal 42.0 megawatt (MW) combined cycle combustion turbines with duct burners that exhaust through heat recovery steam generators (HRSG) which are used to power a nominal 26.5 MW steam turbine. Nitrogen oxides (NO<sub>x</sub>) emissions are controlled by using water injection. The facility also includes a fuel oil storage tank (170,000 gallon).

### PRIMARY REGULATORY REQUIREMENTS

The existing facility is regulated under:

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

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

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

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

CAIR: The facility is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

### APPLICABLE REGULATIONS

In addition to federal rules above, this facility is subject to the following state rules:

APPLICABLE REGULATIONS	EU ID
Rule 62-4, F.A.C. (Permitting Requirements)	003, 004
Rule 62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	
Rule 62-212, F.A.C. (Preconstruction Review, PSD Review and BACT)	
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)	
Rule 62-296, F.A.C. (Emission Limiting Standards)	
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	
NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800	
NSPS - 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800	
AC35-196459, 0694801-008-AC	

### PROJECT REVIEW

The CAIR Part Form is now a part of this permit and has been incorporated as Section IV, CAIR Part Form. This section identifies the units that must comply with the standard requirements and special provisions set forth in the CAIR Part Form.

## STATEMENT OF BASIS

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### CONCLUSION

This project revises Title V air operation permit No. 0694801-007-AV, which was issued on December 31, 2007. This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, 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.

DRAFT/PROPOSED

**SECTION IV. CAIR PART FORM**  
**CLEAN AIR INTERSTATE RULE PROVISIONS**

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**Clean Air Interstate Rule (CAIR).**

**Operated by:** Lake Cogen, Ltd.  
**Plant:** Lake Cogeneration Facility  
**ORIS Code:** 54423

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

EU No.	EPA Unit ID#	Brief Description
003	3	Combined Cycle Combustion Turbine (CT)/Duct Burner
004	4	Combined Cycle Combustion Turbine (CT)/Duct Burner

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.]



**SECTION IV. CAIR PART FORM**  
**CLEAN AIR INTERSTATE RULE PROVISIONS**

**Lake Cogen, Ltd. (54423)**  
Plant Name (from STEP 1)

**STEP 3**

**Read the  
standard  
requirements.**

**CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM**

**CAIR Part Requirements.**

- (1) 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 98.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  - (ii) [Reserved];
- (2) 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 Part.

**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 recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, 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> allowances available for compliance deductions for the control period under 40 CFR 96.154(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 determined in accordance with 40 CFR Part 96, 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 96.170(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 accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A 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 96, Subpart EE, FF, or GG, every allocation, 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 NO<sub>x</sub> unit.

**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 deduction under 40 CFR 96.154(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 96, 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 96.113 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 96.113 changing the CAIR designated representative.
  - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, 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.
  - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program or to demonstrate compliance with the requirements 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> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

**SECTION IV. CAIR PART FORM**  
**CLEAN AIR INTERSTATE RULE PROVISIONS**

**STEP 3,  
Continued**

**Lake Cogen, Ltd. (54423)**

Plant Name (from STEP 1)

**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 62-298.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  - (ii) [Reserved];
- (2) 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 96, 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 98, Subpart HHH, and Rule 62-298.470, 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 Requirements.**

- (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 tonnage 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 sulfur 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 98, 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 thereafter.
- (3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO<sub>2</sub> Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur 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 96, 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.

**SECTION IV. CAIR PART FORM**  
**CLEAN AIR INTERSTATE RULE PROVISIONS**

**STEP 3,  
Continued**

**Lake Cogen, Ltd. (54423)**  
Plant Name (from STEP 1)

**Recordkeeping and Reporting Requirements.**

- (1) Unless otherwise provided, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</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 Department or the Administrator.
  - (i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO<sub>2</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 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 Program.
  - (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> unit at the source shall submit the reports required under the CAIR SO<sub>2</sub> Trading Program, including those under 40 CFR Part 96, Subpart HHH.

**Liability.**

- (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<sub>x</sub> OZONE SEASON TRADING PROGRAM**

**CAIR Part Requirements.**

- (1) 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:
  - (i) 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
  - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO<sub>x</sub> Ozone Season source required to have a Title V operating permit or air 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 unit shall be subject to the requirements under paragraph (1) of the NO<sub>x</sub> Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(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 Allowance Tracking System accounts in accordance with 40 CFR Part 96, 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 Part, or an exemption under 40 CFR 96.305 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> Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from 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 NO<sub>x</sub> Ozone Season unit.

**SECTION IV. CAIR PART FORM**  
**CLEAN AIR INTERSTATE RULE PROVISIONS**

Plant Name (from STEP 1) **Lake Cogen, Ltd. (54423)**

**STEP 3,**  
**Continued**

**Excess Emissions Requirements.**

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 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 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 96.113 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 HHHH, 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> Ozone Season Trading Program.

(iv) Copies 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 96, 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 Trading Program.

(2) Any 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 representative of a 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 CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

**Effect on Other Authorities.**

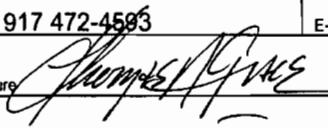
No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Ozone Season source or CAIR NO<sub>x</sub> Ozone 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 true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name <b>Thomas Grace</b>	Title <b>Mgr., E, H &amp; S</b>
Company Owner Name <b>Lake Cogen, Ltd.</b>	
Phone <b>917 472-4583</b>	E-mail Address <b>tgrace@caithnessenergy.com</b>
Signature 	Date <b>05/22/08</b>



## Zahm, Alan

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**From:** Koerner, Jeff  
**Sent:** Tuesday, January 13, 2009 8:37 AM  
**To:** Walker, Elizabeth (AIR)  
**Cc:** Zahm, Alan; Linero, Alvaro; Holtom, Jonathan  
**Subject:** Lake Cogen

Elizabeth,

AI received a phone call from CD office regarding the status for the following projects for Lake Cogen.

0694801-010-AC - Request to revise PSD permit for heat input rate  
0694801-010-AV - Concurrent Title V revision

Although the District and Local programs typically handle the Title V permits for these types of facilities, we will handle this pair.

Please transfer these to me.

Thanks!

Jeff Koerner, BAR - New Source Review Section  
Florida Department of Environmental Protection  
850/921-9536

P.S. Alan, please send me the hard copy of the application.