MEMORANDUM

To: Joseph Kahn

From: Trina L. Vielhauer

Subject: DEP File No. **0694801-007-AV**
Lake Cogeneration Facility
Facility ID: **0694801**

No comments were received from the Environmental Protection Agency Region 4 concerning the PROPOSED Title V Air Operation Permit Renewal posted on our website for their review on November 6, 2007. Day 55 is December 31, 2007.

We recommend your signature.

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 TITLE V PERMIT RENEWAL

Electronically Sent – Received Receipt Requested.

In the Matter of an
Application for Permit Renewal

jmiller@caithnessenergy.com
Mr. James Miller, Plant Manager
Lake Cogeneration L.P.
39001 Golden Gem Drive
Umatilla, Florida 32784

DEP File No. 0694801-007-AV
Lake Cogeneration Facility
Facility ID: **0694801**

Enclosed is the FINAL Title V Air Operation Permit Renewal Number 0694801-007-AV for the Lake Cogeneration Facility, located at 39001 Golden Gem Drive, Umatilla, Lake County. This permit renewal is issued pursuant to Chapter 403, Florida Statutes (F.S.). No written comments were received from Region 4, United States Environmental Protection Agency (USEPA); therefore no changes were made to the PROPOSED Permit. The FINAL DETERMINATION is attached.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina L Vielhauer

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT RENEWAL (including the FINAL permit renewal) and all copies were sent electronically (with Received Receipt) before the close of business on 12/28/01 to the persons listed:

James Miller, Plant Manager: jmiller@caithnessenergy.com
Scott Osbourn, P.E., Golder Associates, Inc.: sosbourn@golder.com
James Bradner, P.E., Central District Office: james.bradner@dep.state.fl.us
Thomas A. Grace, Lake Cogeneration L.P.: tgrace@caithnessenergy.com
Katy Forney, EPA Region 4: forney.kathleen@epa.gov
Gracy Danois, EPA Region 4: danois.gracy@epa.gov

Clerk Stamp

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

Barbara J. Friday 12/28/01
(Clerk) (Date)

FINAL PERMIT DETERMINATION

I. Comment(s).

No comments were received from U.S. EPA, Region 4, concerning the PROPOSED Title V Air Operation Permit Renewal that was posted on the Department's web site on November 6, 2007.

II. Conclusion.

The permitting authority hereby issues the FINAL Title V Air Operation Permit Renewal No. **0694801-007-AV** with no changes.

STATEMENT OF BASIS

Lake Cogeneration L.P.
Lake Cogeneration Facility
Facility ID No. **0694801**
Lake County

Title V Air Operation Permit Renewal
Permit No. **0694801-007-AV**

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

This facility consists of three emissions units identified as emissions unit 003 (EU 003), emissions unit 004 (EU 004), and emissions unit 002 (EU 002). Emission units 003 and 004 are 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 26.5 MW steam turbine. Emissions of nitrogen oxides (NO_x) are controlled by using water injection and emissions of sulfur dioxide (SO_2) are controlled by firing natural gas as the primary fuel, and distillate fuel oil with a maximum sulfur content of 0.1 percent, by weight, as an emergency backup fuel. Emissions unit 002 includes a 170,000 gallon fuel oil storage tank.

EU 003 and 004. Each emission unit is subject to: 40 Code of Federal Regulations (CFR) Part 60, Subpart A (General Provisions), Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and Subpart GG (Standards of Performance of Stationary Gas Turbines); visible emissions shall not exceed 10 percent per construction permit AC35-196459, and testing is required annually; Rule 62-212.400 F.A.C., Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT) determination dated 11/20/91; emission limits for NO_x, carbon monoxide (CO), particulate matter (PM), SO_2, volatile organic compounds (VOC), mercury, lead, beryllium, and sulfuric acid mist, per construction permit AC35-196459; compliance testing for VOC, CO_2, O_2, PM, SO_2, NO_x and CO emissions is required annually; excess emissions are regulated per Rule 62-210.700(1), (4), & (6), F.A.C.

EU 002. The emissions unit is subject to: 40 CFR Part 60, Subpart Kb (recordkeeping only).

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

Based on the renewal Title V permit application received November 27, 2006, this facility is not a major source of hazardous air pollutants (HAP).

The only significant change in this Title V Air Operation Permit Renewal is the addition of a Compliance Assurance Monitoring (CAM) plan for the combustion turbines.

Lake Cogeneration L.P.

Lake Cogeneration Facility
Facility ID No. **0694801**

Lake County

Title V Air Operation Permit Renewal

FINAL Permit Project No. 0694801-007-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/921-9533

Compliance Authority:
DEP Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555
Fax: 407/897-5963

Title V Air Operation Permit Renewal

FINAL Permit No. 0694801-007-AV

Table of Contents

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 Cogeneration L.P.
39001 Golden Gem Drive
Umatilla, Florida 32784

FINAL Permit No. 0694801-007-AV
Facility ID No. 0694801
SIC No(s).: 49; 4931
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the facility's Title V Air Operation Permit. This existing Lake Cogeneration Facility is located at 39001 Golden Gem Drive, Umatilla, Lake County. UTM Coordinates: Zone 17, 434.0 km East and 3198.8 km North; and, Latitude: 28° 55' 02" North and Longitude: 81° 40' 37" West.

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

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emission Units and/or Activities
Appendix TV-6, Title V Conditions (version dated 06/23/06).
Appendix SS-1, Stack Sampling Facilities (version dated 3/2/99)
Table 1, A.6 - Allowable Emission Limits
Table 297.310-1, Calibration Schedule (version dated 3/2/99)
Figure 1, Summary Report - Gaseous and Opacity Excess Emission and Monitoring System Performance (version dated 7/96)
Appendix CAM

Effective Date: 12/31/07
Renewal Application Due Date: 7/3/12
Expiration Date: 12/30/12

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/aal/tbc

Section I. Facility Information.

Subsection A. Facility Description.

This facility includes 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_x) emissions are controlled by using water injection. The facility also includes a fuel oil storage tank (170,000 gallon).

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

Based on the Title V permit renewal application received on November 27, 2006, this facility is not a major source of hazardous air pollutants (HAP).

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

E.U. ID No./Brief Description	
003	Combined Cycle Combustion Turbine (CT)/Duct Burner
004	Combined Cycle Combustion Turbine (CT)/Duct Burner
002	Fuel Oil Storage Tank

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes
Statement of Basis

These documents are on file with permitting authority:
Title V Air Operation Permit Renewal Application received November 27, 2006.
DRAFT Title V Air Operation Permit Renewal clerked on September 25, 2007.
PROPOSED Title V Air Operation Permit Renewal posted for EPA review on November 6, 2007.

Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes only and are not permit conditions.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

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

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). Environmental Protection Agency (EPA) Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, MD 20703-1515
Telephone: 301/429-5018

and,
b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 Code of Federal Regulations (CFR) 68]

5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

7. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
a. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; maintenance of paved areas as needed;
b. 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 matter from becoming airborne;
c. Landscaping or planting of vegetation; regular mowing of grass and care of vegetation;
d. Limiting access to plant property by unnecessary vehicles;
e. Use of bagged chemical products in enclosed or semi-enclosed areas;
f. Storage of zero liquid discharge salt cake byproduct in covered enclosed containers; and
e. Other techniques, as necessary.
[Rule 62-296.320(4)(c)2., F.A.C.]
{Permitting note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition No. **57.** of APPENDIX TV-6, TITLE V CONDITIONS)}

8. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

9. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]
{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition **51.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District office.

Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555; Fax: 407/897-5963

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

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on

information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

13. Annual Operating Report. A DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" including the Emissions Report, shall be completed for each calendar year on or before March 1 of the following year and submitted to the Department of Environmental Protection's Central District office:

Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Telephone: 407/894-7555

{Permitting Note: This condition implements the requirements of Rules 62-210.370(3) F.A.C. (see Condition **24.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

14. 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 accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.
{Permitting Note: This condition implements the requirements of Rules 62-213.205 and 62-213.900(1), F.A.C. (see Condition **27.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

15. Annual Emissions Fee. 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.
{Permitting Note: This condition implements the requirements of Rule 62-213.205(1)(j), F.A.C. (see Condition **29.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

16. Annual Emissions Fee. A completed DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by the responsible official with the annual emissions fee.
{Permitting Note: This condition implements the requirements of Rule 62-213.205(1)(k), F.A.C. (see Condition **30.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

17. At least 180 days prior to the expiration date of this operation permit, the permittee shall submit to this office four copies of the air permit application, DEP Form No. 62-210.900(1).
[Rule 62-4.090(1), F.A.C.]
{Permitting Note: This condition implements the requirements of Rules 62-213.420(1)(a)3., 62-213.420(1)(b)1., 2., 3. & 4., 62-213.430(3), F.A.C. and 40 CFR 70.7(f) (see Conditions **35.** and **38.** of APPENDIX TV-6, TITLE V CONDITIONS.)}

Section III. Emissions Unit(s).

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

E.U. ID No.	Brief Description
003	Combined Cycle Combustion Turbine (CT)/Duct Burner
004	Combined Cycle Combustion Turbine (CT)/Duct Burner

{Permitting note: These emission units are regulated under Standards of Performance for New Stationary Sources (NSPS) - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, and Subpart A, General Provisions, adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT) Determination, dated November 20, 1991; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

A1. Capacity

The maximum capacities are as follows:

a) Maximum distillate fuel oil consumption shall not exceed either of the following limitations: 2,921 gallons/hour/CT; 701,050 gallons/year/CT.

b) Maximum annual firing using distillate fuel oil shall not exceed an equivalent of 10 days (240 hours) per year at full load.

c) Maximum sulfur (s) content in the oil shall not exceed 0.1 percent by weight.

d) Maximum heat input based on the lower heating value (LHV) while burning natural gas, shall not exceed 423 million British thermal units (MMBtu)/hour/CT at 51°F or 403 MMBtu/hour/CT when corrected to International Organization for Standardization (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.

e) Duct firing shall be limited to natural gas firing only, with a maximum heat input of 90 MMBtu/hour based on the higher heating value (HHV) of approximately 1054.5 Btu/ft^3.

f) Duct firing shall be limited to 525,000 MMBtu/year/HRSG-duct burner.

[Rule 62-210.200, (PTE), F.A.C. and construction permit AC35-196459]

A2. Methods of Operation - Fuels. Each emission unit is permitted to use natural gas as the primary fuel and distillate oil as the emergency backup fuel.
[Rule 62-210.200, (PTE), F.A.C.; and construction permit AC35-196459]

A3. Hours of Operation. This emission unit is allowed to operate 8760 hours per year.
[Rule 62-210.200, (PTE), F.A.C.; and construction permit AC35-196459]

A4. Emissions Unit Operating Rate Limitation After Testing. See specific condition no. **A26.**
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

A5. Visible emissions shall not exceed 10% opacity.
[Construction permit AC35-196459]

A6. The emission limits are contained in Table 1, Allowable Emission Limits.

Excess Emissions

A7. Excess emissions from this emissions unit resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

A9. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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.]

Monitoring of Operations

A10. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A11.
1. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_X emissions shall install, calibrate, maintain

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_x and oxygen (O_2) monitors.
[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 re-examination 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)1.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_X standard. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(b)(2) and (3)]

A19. Nitrogen Oxides (NO_x) The owner or operator shall determine compliance with the nitrogen oxides standard in 40 CFR 60.332 as follows:

U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 parts per million (ppm) of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(b)(2).
[40 CFR 60.335(b)(3) and construction permit AC35-196459]

A20. If required, the owner or operator shall determine sulfur compliance with the sulfur content standard of 0.1 percent, by weight, as follows:
ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.
[40 CFR 60.335(b)(10)]

A21. When required to meet the requirements of 40 CFR 60.334(h), the owner or operator shall use the methods specified in 40 CFR 60.335 (b) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
[40 CFR 60.335(b)]

A22. Volatile organic compound (VOC). Compliance with the VOC standard shall be EPA Method 25A and shall be assumed provided the carbon monoxide (CO) allowable emission rate is achieved.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC35-196459]

A23. Carbon monoxide (CO). Compliance with the CO standard shall be demonstrated using EPA Method 10.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC35-196459]

A24. Additional Test Requirements

a) NO_x - Method 20 -
Temperature and humidity of the air leaving the chiller will be substituted for ambient temperature and humidity (turbine inlet air) in the ISO correction equation.

b) CO - Method 10 -
Test will be three test runs, with each test run to be a minimum of one hour.

c) Fuel Analysis -
Fuel Analysis both low and high. Btu input for CT calculated using lower heating value. Btu input for DB calculated using higher heating value.

d) CO_2 and O_2 -

Method 20 to be used to measure oxygen for all test conditions.
[Operating permit AO35-248140]

A25. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

A26. Operating Rate During Testing.
Compliance testing of emissions shall be conducted with the combustion turbine operating at capacity. Capacity is defined as 90-100 percent of the manufacturer's rated heat input achievable for the average compressor inlet conditions during the test. If it is impracticable to test at capacity, then the combustion turbines may be tested at less than capacity. In such cases, the entire curve or table shall be adjusted downwards by the increment which reflects the reduced rate of operation at which compliance was demonstrated. This increment is equal to the difference between the manufacturer's heat input or fuel usage value and 110 percent of the value reached during the test. In this case, the data and calculations necessary to demonstrate the heat input or fuel usage rate correction shall be submitted to the Department with the compliance test report. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C.
[Rule 62-297.310(2), F.A.C.]

A27. Applicable Test Procedures.

a) Required Sampling Time.
   1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
   2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a FINAL surrogate standard and an existing mass emission limiting standard.
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in TABLE 297.310-1, CALIBRATION SCHEDULE (attached).
e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

A28. The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

A29. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

a) General Compliance Testing.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
a. Did not operate; or
b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

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

c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a baghouse or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

A30. Frequency of Compliance Tests. General Compliance Testing. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
[Rule 62-297.310(7)(a)8., F.A.C.]

A31. Frequency of Compliance Tests. Compliance testing for visible emissions, VOC, carbon dioxide (CO_2), O_2, PM, SO_2, NO_x, and CO emissions from each unit is required at yearly intervals on or within 60 days prior to the date of July 15.
[Rules 62-297.310(7)(a)3., 4., and 5., F.A.C.; operating permit AO35-248140; and construction permit AC35-196459]

A32. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the air compliance section of this office. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.
[Rule 62-297.310(7)(a)9, F.A.C.]

A33. Test Reports.

a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
    1. The type, location, and designation of the emissions unit tested.
    2. The facility at which the emissions unit is located.
    3. The owner or operator of the emissions unit.
    4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
    5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
    6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
    7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
    8. The date, starting time and duration of each sampling run.
    9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
    10. The number of points sampled and configuration and location of the sampling plane.
    11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
    12. The type, manufacturer and configuration of the sampling equipment used.
    13. Data related to the required calibration of the test equipment.
    14. Data on the identification, processing and weights of all filters used.
    15. Data on the types and amounts of any chemical solutions used.
    16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
    17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Record Keeping and Reporting Requirements

A34. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

a) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a). This requirement shall be modified with the upcoming installation of a facility CEMS system.

[Rule 62-296.800, F.A.C.; and, 40 CFR 60.334(j)(1)]

A35. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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

A36. The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

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

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

A37. 1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

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

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the

intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

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

A38. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

A39. A DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" including the Emissions Report, shall be completed for each calendar year on or before March 1 of the following year and submitted to the air compliance section of this office.
[Rule 62-210.370(3), F.A.C.]

A40. In order to demonstrate compliance with conditions no. A1 and A2, the permittee shall maintain a log at the facility. The log at a minimum shall contain the following:

Monthly
a) month
b) consecutive 12 month total of:
- fuel usage and heat input rates
- fuel sulfur content by weight

[Rules 62-4.070(3), and 62-213.440(1)(b)2., F.A.C.]

A41. At least 180 days prior to the expiration date of this operation permit, the permittee shall submit to this office four air permit applications, DEP Form No. 62-210.900(1).
[Rule 62-4.090(1), F.A.C.]

NSPS Subpart A, General Provisions

A42. Definitions. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; and, Rule 62-204.800(8)(a), F.A.C.]

A43. Notification And Record Keeping.

a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:
   4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

b) The owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

c) The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see 40 CFR 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
   1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
   2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
   3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
   4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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

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

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

   (i) For one full year (e.g., four quarterly or twelve 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 reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

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

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

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

[40 CFR 60.7 and Rule 62-213.440(1)(b)2.b., F.A.C.]

A44. Performance Tests.

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart, except as otherwise authorized by an approved alternative method.

(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.

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

[40 CFR 60.8]

A45. Compliance With Standards And Maintenance Requirements.

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

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

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

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

(e)(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11]

A46. Circumvention.

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

standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

A47. Monitoring Requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

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

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of all continuous emission monitoring systems installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

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

of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

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

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

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

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

(g) 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) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13]

Subsection B. This section addresses the emissions unit(s).

E.U. ID No.	Brief Description
002	Fuel Oil Storage Tank (170,000 gallon.)

{Permitting note: The tank is subject to a recordkeeping requirement under NSPS - 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels; adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

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

Recordkeeping Requirements

B.2. The permittee shall maintain records on site for storage vessels to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels.
[40 CFR 60.116b(b)]

Table 1
A.6. Allowable Emission Limits

Pollutant	Source[a]	Fuel[b]	Basis of Limit	Allowable Emission Limits @ 59° F lbs/hr	@ 59° F TPY	lbs/hr[d]	Maximum Allowable @ 51° F[f] TPY[e]
NO_x[c]	CT	NG	BACT: 25 ppmvd at 15% 02	82.7	393.6	85.5	404.7
	CT	DFO	BACT: 42 ppmvd at 15% 02	143.9		148.3	
	DB	NG	BACT: 0.1 lb/MMBtu	18.0		18.0	
	CT&DB	NG		100.7		103.5	
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	
SO2	CT	DFO	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_x 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 NO_x 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.]

Appendix H-1: Permit History

Lake Cogeneration L.P.
Lake Cogeneration Facility

Permit No. **0694801-007-AV**
Facility ID No. **0694801**

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
All	Initial Title V Permit	0694801-002-AV	6/16/1998	5/30/2002	Initial
003 and 004	Minor Changes	0694801-003-AC	7/30/1997	10/01/1997	Construction Modification
003 and 004	Minor Changes	0694801-004 Denied	11/20/1991	6/01/1994	Construction Modification
003 and 004	2 Combustion Turbines/ Duct Burners	AC35-196459	11/20/1991	6/01/1994	Construction
003 and 004		AO35-248140	3/30/1995	11/04/1999	Operation
-002	Fuel Oil Storage Tank	N/A			
All	Administrative Correction	0694801-006-AV			
All	Title V Permit Renewal	0694801-005-AV	9/18/02	5/30/07	Operation
003 and 004	Air Construction Permit	0694801-008-AC		12/31/08	Construction Modification

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

Lake Cogeneration L.P. **Permit No.** 0694801-007-AV

Lake Cogeneration Facility **Facility I.D. No.** 0694801

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

Brief Description of Emissions Units and/or Activities

Area	Emission Unit Description	Number of Units
CT/ST/BUILDING AREA	CT Lube Oil Vents	2
	CT Lube Oil Storage Tank	2
	ST Lube Oil Tank Vent	1
	ST Lube Oil Filter Vent	1
	Electric Generator Mineral Oil Vent	2
	Turbine Cleaning Operation	2
	Water Wash Tanks	3
	Turbine Cooling Air	2
	Various Pumps	Multiple
	Miscellaneous Tank Drains	Multiple
	Hydraulic Equipment	Multiple

Appendix I-1, List of Insignificant Emissions Units and/or Activities.
Permit No. 0694801-007-AV

Area	Emission Unit Description	Number of Units
HRSG	Natural Gas Relief Valves	Multiple
	Various Steam Vents & Pressure	Various
	Relief Valves	
	HPS Breather Vent	Multiple
	Nitrogen Lines	Multiple
HRSG AREA	Blowdown Quench Tank	Multiple
	Blowdown Flash Tank	1
	Various Pumps (feedwater, and	Multiple
	chemical feed)	
	CEM Equipment & Calibration	2 Systems
	Gas Venting	
WATER TREATMENT	Raw Water/Fire Water Storage	1
(BOILER, WASTE WATER)	Tank 376,012 gal capacity	
	Chlorine Cylinders	
	150 lb each	15
	Sulfuric Acid (H2SO4) Tank	1
	6,016 gal capacity	
	Boiler Feedwater Chemical	Multiple
	Treatments Tanks	
	Sodium Hydroxide (NaOH) Tank	1
	6,610 gal capacity	
	Brine Tank	1
	9,306 gal capacity	
	Brine Containment Tank	1
	16,545 gal capacity	

Appendix I-1, List of Insignificant Emissions Units and/or Activities.
Permit No. 0694801-007-AV

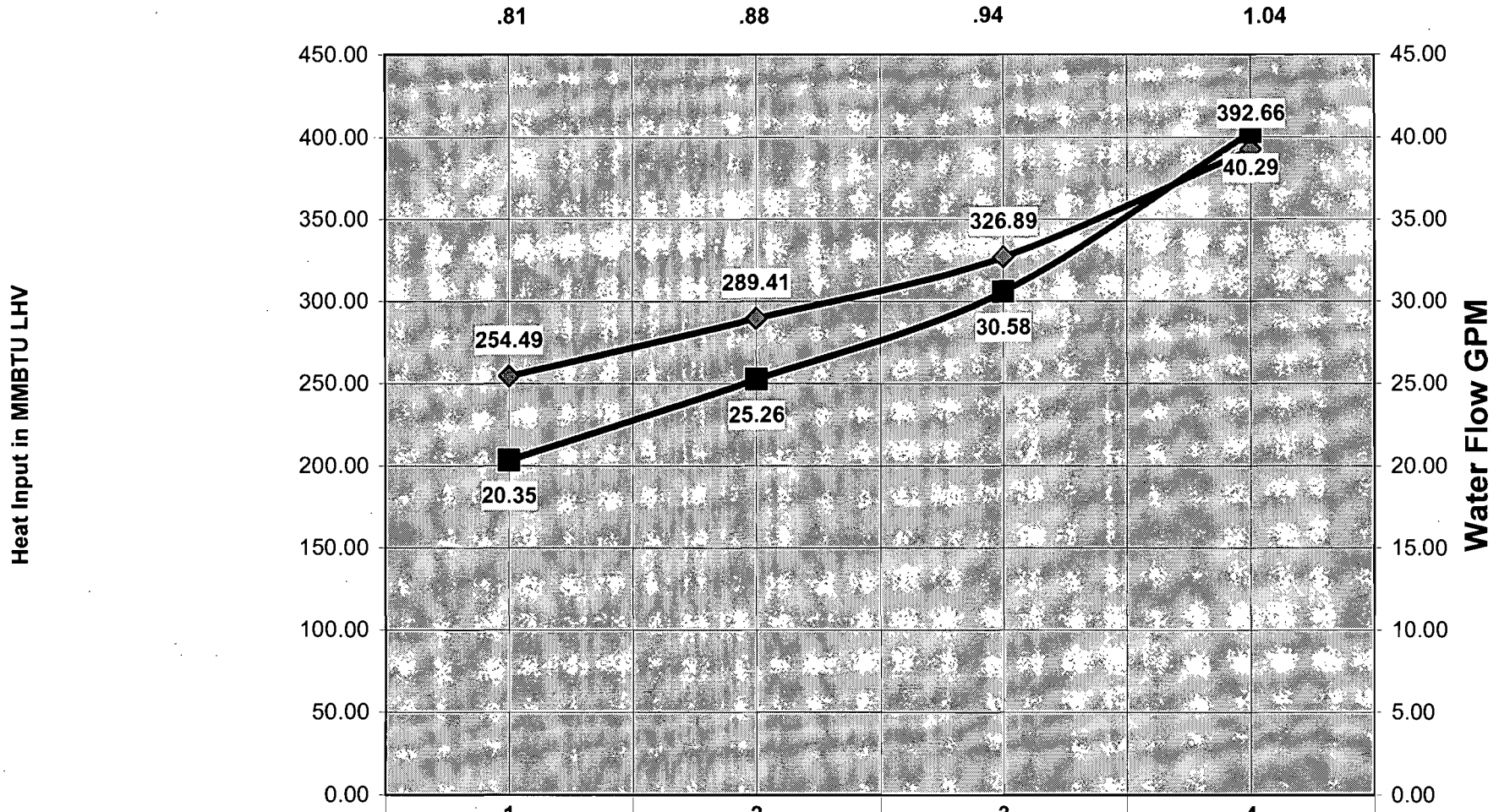
Area	Emission Unit Description	Number of Units
	Chilled Water Storage Tank	1
	25,000 gal capacity	
	RO Surge Tank	1
	10,857 gal capacity	
	Weak Waste Tank	1
	151, 222 gal capacity	
	Condensate Return Tank	1
	25,000 gal capacity	
	Demin Water Storage Tank	1
	102,000 gal capacity	
	Decarbonator/Degasifier	1
	Removes CO2 from raw water	
	Equalization Tank	1
	22,000 gal capacity	
	Neutralization Basin and Pumps	1
	Wastewater Cooling Tower	1
	Filter Press	1
	Various Pumps	Multiple
	Crystallizer	1
	Soda Ash Handling	1
COOLING TOWER	Fresh Water Cooling Tower	1
	Nalco 7342 (NaBr) Tank	1
	492 lb capacity	
	Cooling Water Pumps	Multiple
	Steam Condensing Unit	1
CHILLER AREA	Refrigeration Chillers	3

Appendix I-1, List of Insignificant Emissions Units and/or Activities.
Permit No. 0694801-007-AV

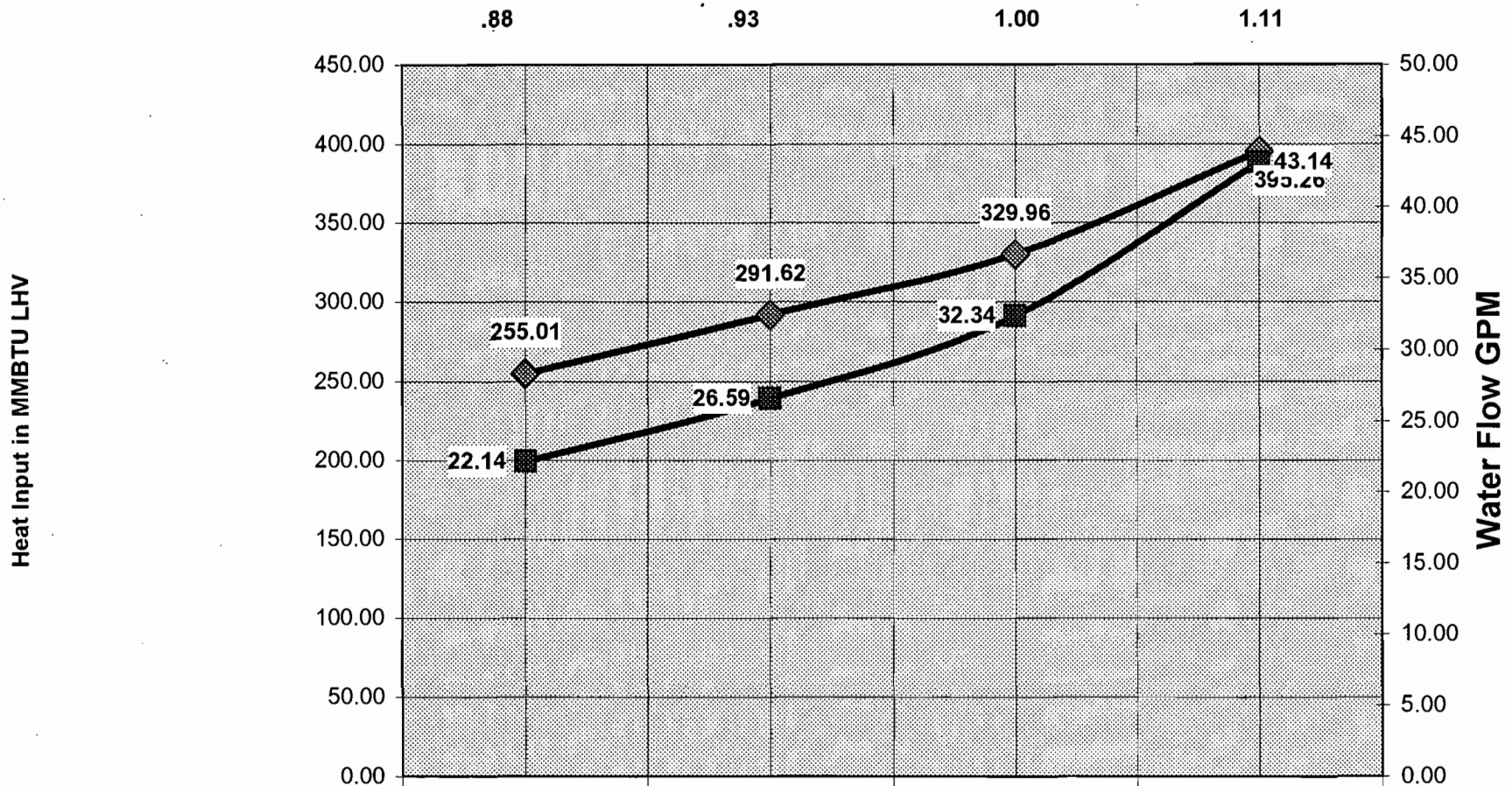
Area	Emission Unit Description	Number of Units
	Chiller Condensate Tank	1
	Various pumps	Multiple
GENERAL SITE	Surface Coating <6.0 gal/day	NA
	Sewer Vents	Multiple
	Emergency Generators	1
	250 kW Diesel	
	Diesel Fuel Storage Tank	2
	Natural Gas Meter Station	1
	Diesel Fire Pump - 216 hp	1
	Diesel Fire Pump Storage Tank	1
	Diesel Portable Welder/Air Compressor	1
OFFICE SHOP AREA	Degreaser Non-Halogenated	1
	Solvent	
	Laboratory	1
	Propane Forklift	1
	Air Compressor	1
	Battery Room	1
	CO_2 Fire System (Control Room)	1 System
	Bead Blaster	1
SWITCHYARD/	Transformers and Associated	Multiple
SUBSTATION AREA	Equipment	
	Breakers-SF6	2
PARKING LOT	Vehicles	Multiple
GENERAL	Unit 1 250 gallon waste oil reclaim tank	1
	Unit 2 250 gallon waste oil reclaim tank	1

	Nalco Tower Brom Tank	1
	300 gallon waste oil storage tank	1
	Unit 1 CO_2 fire system	10 cylinders
	Unit 2 CO_2 fire system	10 cylinders
	Electric Room CO_2 Fire System	2 cylinders
	Water Distillation Units Air Ejectors (vents)	3
	100,000 gallon distilled water tank (vent)	1

GT1 Water to Fuel Curve on Gas

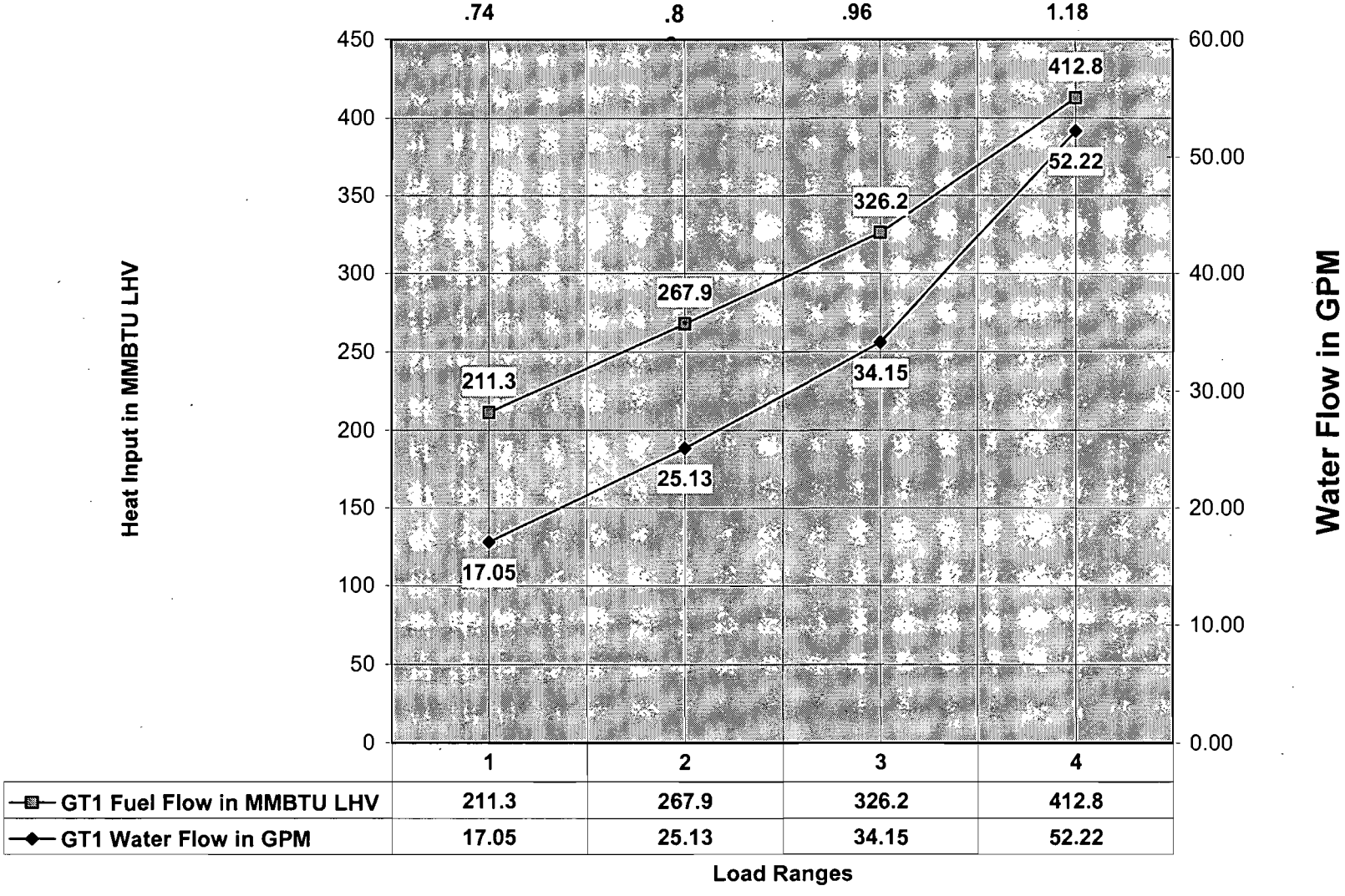


GT2 Water to Fuel Curve on Gas

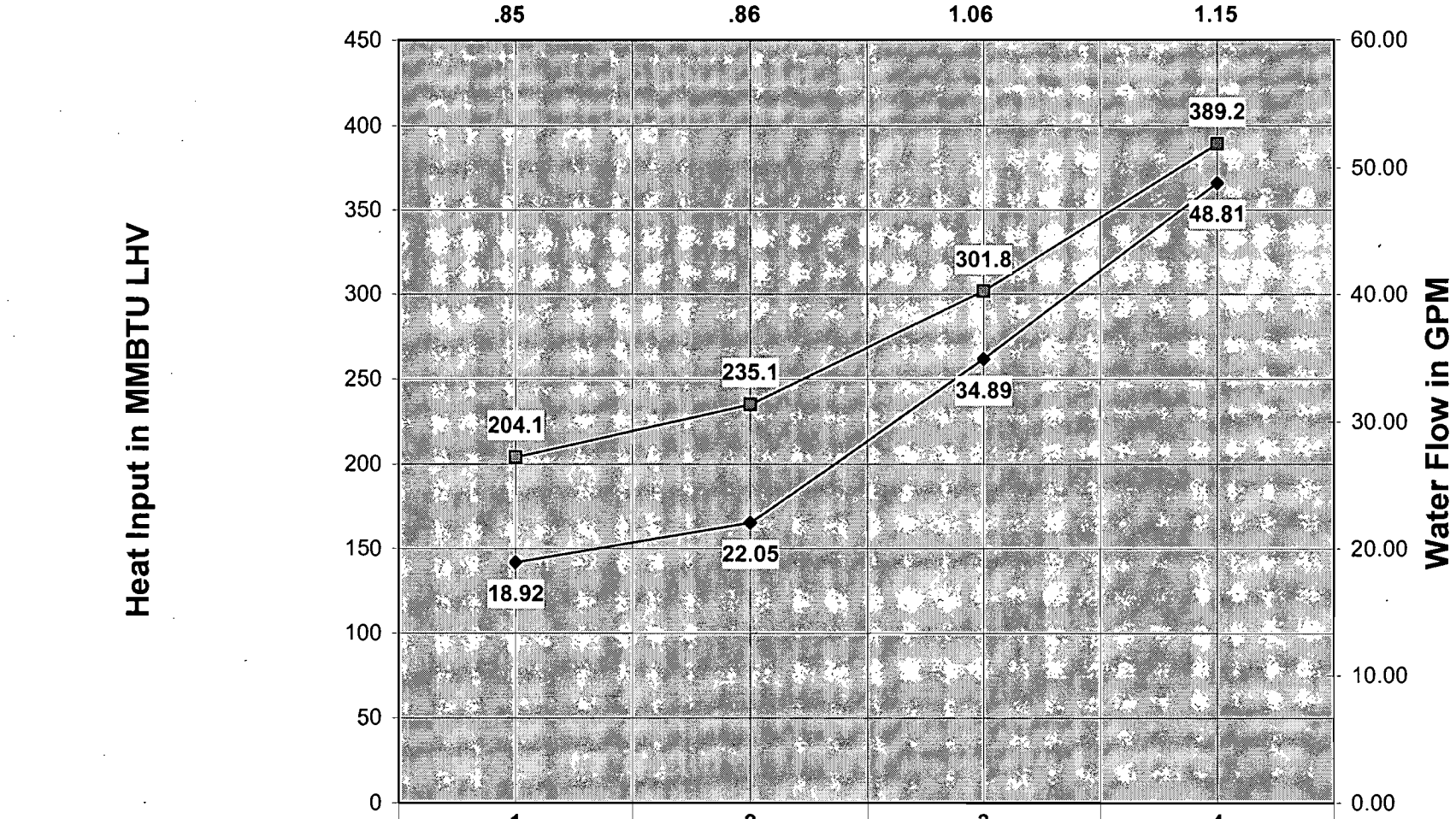


	1	2	3	4
Fuel Flow in MMBTU LHV	255.01	291.62	329.96	395.26
Water Flow in GPM	22.14	26.59	32.34	43.14

GT 1 Water to Fuel Curve on Fuel Oil

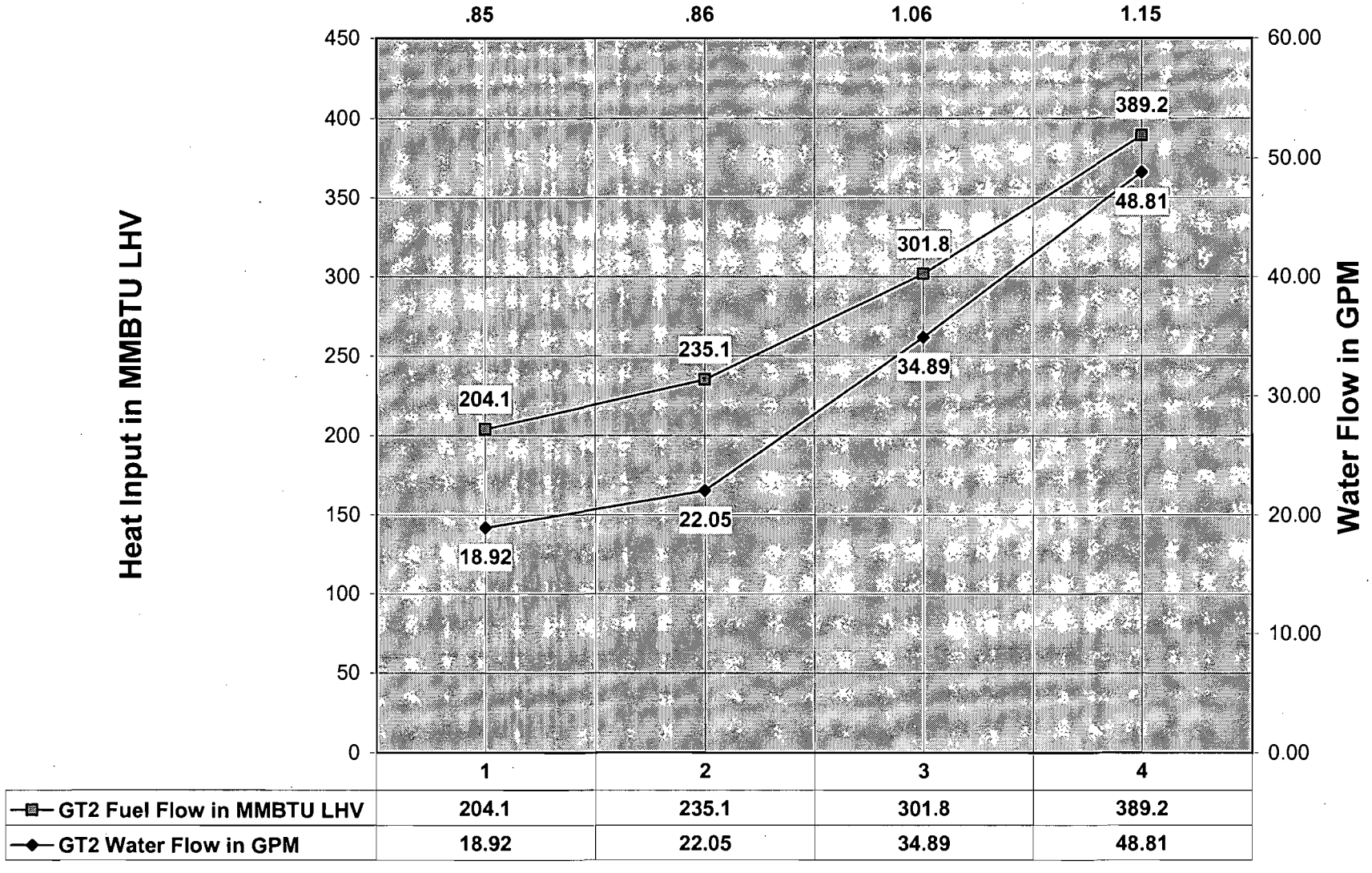


GT 2 Water to Fuel Curve on Fuel Oil



GT2 Fuel Flow in MMBTU LHV	204.1	235.1	301.8	389.2
GT2 Water Flow in GPM	18.92	22.05	34.89	48.81

GT 2 Water to Fuel Curve on Fuel Oil



	1	2	3	4
GT2 Fuel Flow in MMBTU LHV	204.1	235.1	301.8	389.2
GT2 Water Flow in GPM	18.92	22.05	34.89	48.81

Natural Gas Water to Fuel Curves

GT1	Fuel Flow in MMBTU LHV	254.49	289.41	326.89	392.66
	Water Flow in GPM	20.35	25.26	30.58	40.29
	W/F Ratio	0.81	0.88	0.94	1.04
GT2	Fuel Flow in MMBTU LHV	255.01	291.62	329.96	395.26
	Water Flow in GPM	22.14	26.59	32.34	43.14
	W/F Ratio	0.88	0.93	1.00	1.11

Fuel Oil Water to Fuel Curves

GT1	Fuel Flow in MMBTU LHV	211.3	267.9	326.2	412.8
	Water Flow in GPM	17.05	25.13	34.15	52.22
	W/F Ratio	0.74	0.86	0.96	1.16
	PPH of fuel oil	11514.99	14599.46	17776.57	22495.91
	PPH of Water	8521.09	12555.53	17065.5	26095.26
	GPM to PPH Conversion	499.68	499.68	499.68	499.68
MMBTU to btu/lb conversion	18350				
GT2	Fuel Flow in MMBTU LHV	204.1	235.1	301.8	389.2
	Water Flow in GPM	18.92	22.05	34.89	48.81
	W/F Ratio	0.85	0.86	1.06	1.15
	PPH of fuel oil	11122.62	12811.99	16446.87	21209.81
	PPH of Water	9454.223	11018.31	17433.68	24391.28
	GPM to PPH Conversion	499.68	499.68	499.68	499.68

Lake Cogeneration L.P.

Facility ID No. 0694801

Emission Units –003 and –004

Natural Gas and Oil-Fired Combustion Turbines
Nitrogen Oxides (NO_x) Emissions Controlled by Water Injection

Compliance Assurance Monitoring Plan

Table 1. Monitoring Approach

		Compliance Indicator
I.	Indicator	Water-to-Fuel ratio.
II.	Measurement Approach	Continuous Monitoring System (CMS) measuring water injection rate, fuel consumption and water to fuel ratio.
III.	Indicator Range	An excursion is defined as any one hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance. The calculations incorporate the water injection curves shown in figures 1 – 4. If there is a problem with fuel or water flow that causes the actual ratio to fall below the target, a Distributed Control System (DCS) alarm notifies the Control Room Staff of the problem. The alarms allow the staff to investigate the cause and take corrective action prior to having a non-compliant situation.
IV.	Performance Criteria	
	A. Data Representativeness	The Woodward Netcon 5000 Combustion Turbine control system continuously monitors the fuel flow rate and sends a signal to the water flow control valve to adjust the flow to meet the target ratio. The target ratio is calculated by the Woodward Netcon 5000 based upon algorithms programmed into the system to account for varying conditions relevant to the proper control.
	B. Verification of Operational Status	Annual compliance testing and reestablishment of the water-to-fuel ratio.
	C. Monitoring Frequency	Continuous.

Table 1. Monitoring Approach (con't)

D. QA/QC Practices and Criteria	Operate and maintain the Woodward Netcon 5000 combustion turbine control system according to manufacturer's specifications. All metering equipment, including the transmitters meet or exceed the minimum regulatory requirement of 5% accuracy.
E. Data Collection Procedures	The Woodward Netcon 5000 combustion turbine control system continuously monitors fuel flow rate and sends a signal to the water flow control valve to adjust the flow to meet the target ratio. The target ratio is calculated based upon algorithms programmed into the system to account for varying conditions relevant to proper control. In addition, the DCS monitors the water to fuel ratio and provides additional monitoring/trim control for the Netcon
F. Averaging Period	One Hour.

Lake Cogeneration Facility

APPENDIX CAM

Compliance Assurance Monitoring Requirements

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:
   (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
   (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
   (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.
[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.)** and reporting exceedances or excursions (see **CAM Conditions 10. – 14.**).
[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).
[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times

that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR 64.7(c)]

8. Response to excursions or exceedances.

a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8.a.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a

pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
[40 CFR 64.8(a)]

11. Elements of a QIP:
   a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
   b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
      (i) Improved preventive maintenance practices.
      (ii) Process operation changes.
      (iii) Appropriate improvements to control methods.
      (iv) Other steps appropriate to correct control performance.
      (v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).
[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
   a. Failed to address the cause of the control device performance problems; or
   b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

15. General reporting requirements.
   a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
   b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
(iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.

a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

Friday, Barbara

From: Thomas Grace [tgrace@caithnessenergy.com]
To: undisclosed-recipients
Sent: Wednesday, January 02, 2008 11:05 AM
Subject: Read: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To: tgrace@caithnessenergy.com
Subject:

was read on 1/2/2008 11:05 AM.

Friday, Barbara

To: jmiller@caithnessenergy.com; 'sosbourn@golder.com'; Bradner, James; Thomas Grace

Cc: Cascio, Tom

Subject: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Attachments: NoticeofFinalPermit.pdf; CAM Plan 2007.pdf; CAM Prelude 2007.pdf; Final Determination.pdf; Final Statement of Basis 2007.pdf; Final Title V Permit 1 2007.pdf; Final Title V Permit 2 2007.pdf; Final Title V Permit 3 2007.pdf; FinalPermitSignaturePage.pdf; History 2007.pdf; Insignificant 2007.pdf; Lake Water to Fuel Curves (1).pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Friday, Barbara

From: System Administrator
To: Bradner, James
Sent: Friday, December 28, 2007 11:30 AM
Subject: Delivered:FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To:	'jmiller@caithnessenergy.com'; 'sosbourn@golder.com'; Bradner, James; 'Thomas Grace'
Cc:	Cascio, Tom
Subject:	FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility
Sent:	12/28/2007 11:30 AM

was delivered to the following recipient(s):

Bradner, James on 12/28/2007 11:30 AM

Friday, Barbara

From: System Administrator
To: Cascio, Tom
Sent: Friday, December 28, 2007 11:30 AM
Subject: Delivered:FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To:	'jmiller@caithnessenergy.com'; 'sosbourn@golder.com'; Bradner, James; 'Thomas Grace'
Cc:	Cascio, Tom
Subject:	FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility
Sent:	12/28/2007 11:30 AM

was delivered to the following recipient(s):

Cascio, Tom on 12/28/2007 11:30 AM

Friday, Barbara

From: Exchange Administrator
Sent: Friday, December 28, 2007 11:31 AM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)

Attachments: ATT141522.txt; FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility


ATT141522.txt
(380 B)


FINAL Title V Permit Renewal N...

This is an automatically generated Delivery Status Notification.

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

jmiller@caithnessenergy.com
tgrace@caithnessenergy.com

Friday, Barbara

From: Thomas Grace [tgrace@caithnessenergy.com]
Sent: Friday, December 28, 2007 11:31 AM
To: Friday, Barbara
Subject: Out of Office AutoReply: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

I will be out of the office from late 12/19/07 through 01/05/08. Please leave a message and I'll get back with you as soon as I can.

Tom

Friday, Barbara

From: Mail Delivery System [MAILER-DAEMON@sophos.golder.com]
Sent: Friday, December 28, 2007 11:30 AM
To: Friday, Barbara
Subject: Successful Mail Delivery Report

Attachments: Delivery report; Message Headers


Delivery report.txt (461 B)


Message Headers.txt (2 KB)

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

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

The mail system

<sosbourn@golder.com>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 47752495_24156_161_1

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]
To: Friday, Barbara
Sent: Friday, December 28, 2007 11:37 AM
Subject: Read: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To: Scott_Osbourn@golder.com
Subject:

was read on 12/28/2007 11:37 AM.

Friday, Barbara

From: Cascio, Tom
To: Friday, Barbara
Sent: Friday, December 28, 2007 12:11 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To:	'jmiller@caithnessenergy.com'; 'sosbourn@golder.com'; Bradner, James; 'Thomas Grace'
Cc:	Cascio, Tom
Subject:	FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility
Sent:	12/28/2007 11:30 AM

was read on 12/28/2007 12:11 PM.

Friday, Barbara

From: Bradner, James
To: Friday, Barbara
Sent: Friday, December 28, 2007 12:40 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Your message

To:	'jmiller@caithnessenergy.com'; 'sosbourn@golder.com'; Bradner, James; 'Thomas Grace'
Cc:	Cascio, Tom
Subject:	FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility
Sent:	12/28/2007 11:30 AM

was read on 12/28/2007 12:39 PM.

Friday, Barbara

From: Bradner, James

Sent: Friday, December 28, 2007 12:40 PM

To: Friday, Barbara

Subject: RE: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

Thanks, and Happy New Year!

From: Friday, Barbara
Sent: Friday, December 28, 2007 11:30 AM
To: 'jmiller@caithnessenergy.com'; 'sosbourn@golder.com'; Bradner, James; 'Thomas Grace'
Cc: Cascio, Tom
Subject: FINAL Title V Permit Renewal No.: 0694801-007-AV - Lake Cogeneration, L.P. - Lake Cogeneration Facility

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Thank you,

DEP, Bureau of Air Regulation