LAKE COGEN, LTD.
NCP Dade Power, LLC., General Partner

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

December 11, 2006

Mr. Al Linero, PE
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

(850) 921-9536

RE: Lake Cogeneration LP (Lake Cogen); Facility ID No. 0694801; Lake County, Florida; Air Construction Permit Application to Modify Two GE LM-6000 Combustion Turbine Units

Dear Mr. Linero:

Attached are an original and one copy of a completed construction permit application in which the Lake Cogeneration facility requests approval to perform an uprate on its two current GE LM-6000 Combustion Turbine units. GE would perform the proposed uprate that will result in enhanced unit operation. The basic components of the uprate include; replacement of the low pressure turbine with a more efficient design and to modify the CT unit to allow cooling of the combustion process with a water injection process that has been designed by GE.

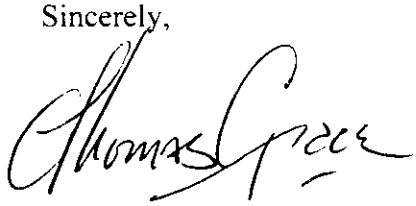
GE has demonstrated this process to be very successful for those facilities it has already modified, including our Pasco Cogen facility located in Dade City, Florida. We believe that the enhancement will allow the two units at Lake Cogen to perform more efficiently while still virtually achieving the same current emission standards. As you will note in our application, what is being proposed is to maintain the current emission concentrations with a slightly higher heat input rate and a slight increase in pounds per hour of NOx and CO. The project is willing to offset the increase in NOx and CO emissions by accepting a lower annual emissions cap. The lowered cap will also ensure the PSD trigger level is not reached.

The project believes that this uprating of the CTs can be performed without the necessity of modifying the emissions monitoring and data recovery programs currently in place at Lake Cogen. The benefits seen by the uprating include more efficient use of the fuel fired by the facility. In terms of actually performing the modification, Lake Cogen is proposing to perform the modification on one unit at a time.

At the Department's convenience, Lake Cogen is prepared to meet with you and discuss this proposal further and go over the permit application. We believe that the performance of this modification will not only enhance the ability for Lake Cogen to perform better, it will also allow the facility to produce electricity with reduced emissions per MMBtu fuel fired.

I will look forward to hearing back from you at your earliest convenience. My telephone number is (775) 850-2248 and my e-mail is tgrace@caithnessenergy.com

For Lake Cogeneration
Sincerely,



Thomas A. Grace, CHMM
Manager, Environmental Services

W/ attachment

Cc: J. Miller, w/a
J. Delgado, w/o
T. DeRocher, w/o
K. Hoffman, w/o
S. Osbourne, w/a, at Golder Associates

File: 274-2010.3

LAKE COGENERATION L.P.

Lake County
Umatilla, Florida

Facility ID No. 0694801

Title V Permit 0694801-005-AV

Submittal of Construction Permit Application
Request to Modify Units 1 and 2 with
GE SPRINT Uprate

November, 2006

TABLE OF CONTENTS

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

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

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Lake Cogeneration L.P.
2. Site Name: Lake Cogeneration
3. Facility Identification Number: 0694801
4. Facility Location...
   Street Address or Other Locator: 39001 Golden Gem Dr.
   City: Umatilla County: Lake Zip Code: 32784
5. Relocatable Facility? ☐ Yes ☒ No
6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: James Miller, Plant Manager
2. Application Contact Mailing Address...
   Organization/Firm: Lake Cogeneration
   Street Address: 39001 Golden Gem Dr.
   City: Umatilla State: FL Zip Code: 32784
3. Application Contact Telephone Numbers...
   Telephone: (352) 669 - 3288 ext. Fax: (352) 669 – 3188
4. Application Contact Email Address: jmiller@caithnessenergy.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 12/12/06
2. Project Number(s): 0694801 - 005 - AC
3. PSD Number (if applicable):
4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

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

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

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

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

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

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

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

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

Application Comment

The purpose of this request is to upgrade 2 existing and permitted LM-6000 Combustion Turbines located at the Lake Cogeneration facility into LM-6000 SPRINT PC series units. The work will parallel that which was licensed and performed at the Pasco Cogeneration (Facility ID no. 1010071) located in Pasco County.

Anticipated date for Commencement of Construction: Summer 2007

See Attachment LC-AI-AC

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Two Combustion Turbines (CTs) with HRSG and DBs The CTs are GE LM-6000 series units	Construction	

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: ( ) - ext. Fax: ( ) -

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

_____ _____

Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   James Miller

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   [X] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   [ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   [ ] The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: Lake Cogeneration L.P.
   Street Address: 39001 Golden Gem Dr.
   City: Umatilla State: FL Zip Code: 32784

4. Application Responsible Official Telephone Numbers...
   Telephone: (352)669-3288 ext. Fax: (352)669 -3188

5. Application Responsible Official Email Address: jmiller@caithnessenergy.com

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

   Signature 11/21/06 Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Scott Osbourn**
   Registration Number: **57557**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **5100 West Lemon St., Suite 114**
   City: **Tampa** State: **FL** Zip Code: **33609**
3. Professional Engineer Telephone Numbers...
   Telephone: **(813) 287-1717** ext. Fax: **(813) 287-1716**
4. Professional Engineer Email Address: **SOsbourn@Golder.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☒, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

12/8/06
Date

SCOTT OSBOURN LICENSE NO. 57557 STATE OF FLORIDA PROFESSIONAL ENGINEER

(seal)

* Attach any exception to certification statement.
** **Board of Professional Engineers Certificate of Authorization #00001670**


SCOTT OSBOURN
JOENSE
NO. 87887
STATE OF
FLORIDA

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 East (km) 434.00 North (km) 3198.80		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 28 55 2 Longitude (DD/MM/SS) 81 40 37	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4931
7. Facility Comment : The Lake Cogeneration facility consists of two GE LM-6000 combustion turbine units (CTs), with each unit equipped with a duct burner (DB) and exhausting through Heat Recovery Steam Generator (HRSG) Stacks. The CTs are natural gas and distillate oil fired			

Facility Contact

1. Facility Contact Name: James Miller, Plant Manager
2. Facility Contact Mailing Address... Organization/Firm: Lake Cogeneration L.P. Street Address: 39001 Golden Gem Dr. City: Umatilla State: FL Zip Code: 32784
3. Facility Contact Telephone Numbers: Telephone: (352)669 - 3288 ext. Fax: (352) 669 – 3188
4. Facility Contact Email Address: jmiller@caithnessenergy.com

Facility Primary Responsible Official

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

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

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

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☐ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: CT – NSPS for stationary CTs. (40 CFR 60 Subpart GG). 40 CFR 60 Subpart Dc applies to the Duct Burners (DBs). 40 CFR 60 Subpart Kb applies to the fuel oil storage tank.	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	B	N
VOC	B	N
SO2	B	N
CO	A	Y*
NOX	A	Y*
PM10	B	N

*** Per conditions discussed within this construction permit request. NOx will drop from 404 tpy to 385 tpy and CO will drop from 350 tpy to 336 tpy via emission caps in order to escape PSD review for the facility modification. See p. 10.**

FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NOx	Y			385	ESCPSD
CO	Y			336	ESCPSD
PM					
PM10					
SO2					
VOC					

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

See attachment LC-BI-AC.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: LC-FI-E2_ [ ] Previously Submitted, Date:_____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: LC-FI-E3_ [ ] Previously Submitted, Date:_____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: LC-FI-E4 [ ] Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   [X] Attached, Document ID: LC-FI-E1 [ ] Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   [X] Attached, Document ID: LC-FI-E6__
3. Rule Applicability Analysis:
   [X] Attached, Document ID: LC-FI-B
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   [X] Attached, Document ID: LC-FI-E5 [ ] Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    [ ] Attached, Document ID:_____ [X] Not Applicable

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:_____
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☐ Attached, Document ID:
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:_____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

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

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

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

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Two GE LM-6000 series Combustion Turbines (CTs), each with HRSG and DB.

3. Emissions Unit Identification Number: **EU 001**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**1 July 1993**	**49**	☐ Yes ☒ No

9. Package Unit: **GE LM-6000 CTs with Zurn HRSG**
Manufacturer: Model Number:

10. Generator Nameplate Rating: **42 MW each (currently)**

11. Emissions Unit Comment: **Each CT unit exhausts through a Heat Recovery Steam Generator (HRSG). The two HRSG service a steam turbine generator rated at 26.5 MW and also furnishes steam to an orange processing facility and to a water distillation process in order to maintain site QF status. Supplemental heat to the system is supplied by Duct Burner firing, when required. The current total capacity is 110 MW (see Attachment LC-FI-E6 for a description of future proposed operation.**

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Water injection to control NOx emissions

2. Control Device or Method Code(s): **028**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr **435 MMBtu**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day **24** weeks/year **52**	days/week **7** hours/year **8760**
6. Operating Capacity/Schedule Comment: **Maximum heat input on oil firing as low heat value (LHV) @ 51 ° F is 424 mmBtu/hr/ unit; when firing on natural gas, the maximum heat input is currently 423 mmBtu/hr/ (LHV) for the CT and 90 mmBtu/hr (HHV) for the Duct Burner. As part of the SPRINT uprate package it is requested that the maximum heat input, when firing on natural gas in either CT, be raised to 435 MMBtu/hr (LHV)**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **LC-E01-L1**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Unit 1 stack; Unit 2 stack**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **100** feet	7. Exit Diameter: **11** feet
8. Exit Temperature: **232** °F	9. Actual Volumetric Flow Rate: **423,276** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Data reflects each of the individual CT units. Emission Point Calculations are based upon baseload conditions at 51° F for natural gas firing . See attachment LC-EOI-L3, Design Information and Stack Parameters.** **Attachment LC-EOI-L3 provides revised parameters that are current and those which will be seen when the SPRINT Uprate is installed in each of the Lake Cogen CTs.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines, Electric Generation, Natural Gas fired Combustion Turbine, Cogeneration**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **0.435**	5. Maximum Annual Rate: **3,706**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **Pipeline quality or less**	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **1,040**
10. Segment Comment: **Max. Annual Rate: 3,705.5, Max rate at 51°F with heat content (MMBtu/SCC) based upon LHV. Max percent sulfur: 1 grain/100 scf. DB rates are 90 MMBtu/hr. and 525,000 MMBtu/yr, respectively**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engine; Industrial; Distillate Oil (Diesel) Combustion Turbine; Cogeneration**		
2. Source Classification Code (SCC): **2-02-001-03**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **2.921**	5. Maximum Annual Rate: **701**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.1**	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **130**
10. Segment Comment: **Max. Annual Rate: 701.1 Maximum annual fuel usage based upon a permit limitation Of 2,921 gal/hr/CT and a 701,050 gal/yr/CT limit for the CTs**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment __ of __

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

Segment Description and Rate: Segment __ of __

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

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOx	**028**		**EL**
CO			**EL**
PM			**EL**
PM10			**EL**
VOC			**EL**
SO2			**EL**
*			

*SAM, Hg, Be and Pb concentration monitoring from combustion of fuel oil have been requested to be deleted in the recently submitted Title V permit renewal application due to the restricted amount of oil permitted to be fired by this facility.

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **90%**
3. Potential Emissions: **148.3** lb/hour **385** tons/year	4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **42 ppmvd @ 15% O2** Reference: **Permit Limit (BACT)**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

Potential emissions based on revised calculation to synthetically limit triggering PSD. Hourly potential emission based on CTs at 51°F operating conditions on fuel oil. Annual based on current facility limit. Annual limit for NOx remains limited based upon a limit of firing ≤ 701,050 gallons of fuel oil per unit per year. This application requests a synthetic cap for total NOx to 385 tpy (a 19 tpy reduction)

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on facility limit. AC35-196459. PSD-FL-176.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **87.0 lb/hr**	4. Equivalent Allowable Emissions: **87.0** lb/hour **385** tons/year
5. Method of Compliance: **Annual compliance test, EPA Method 20**	
6. Allowable Emissions Comment (Description of Operating Method): **The emission limit for CTs as established by BACT as 25 ppm. The lb/hr rate is expected to increase slightly from 85.5 to 87 lb/hr., while natural gas firing. To support acceptance of this application Lake Cogen requests having a synthetic cap for total NOx to 385 tpy (a 19 tpy reduction)**	

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **148.3 lb/hr**	4. Equivalent Allowable Emissions: **148.3** lb/hour **385** tons/year
5. Method of Compliance: **Annual Compliance test, EPA Method 20, if operated > 400 hrs./yr of fuel oil**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing. The CTs are operated with wet injection designed to produce 42 ppmvd @ 15% O2. Allowable emission established as BACT in AC Permit, Table 1A. This application requests a synthetic cap for total NOx to 385 tpy (a 19 tpy reduction).**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **18 lb/hr**	4. Equivalent Allowable Emissions: **18** lb/hour **385** tons/year
5. Method of Compliance: **None**	
6. Allowable Emissions Comment (Description of Operating Method): **Emission limits for 2 Duct Burners as established as BACT. Annual emissions for Facility. Natural gas fired only. Basis for limit is 0.1 lb NOx /MMBtu.**	

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **105.0 lb/hr**	4. Equivalent Allowable Emissions: **105.0** lb/hour **385** tons/year
5. Method of Compliance: **Annual Compliance test, EPA Method 20**	
6. Allowable Emissions Comment (Description of Operating Method): **The emission limit for CTs and DBs as established by BACT as 25 ppm. The lb/hr rate is expected to increase slightly from 103.5 to 105.0 lb/hr., while natural gas firing. To support acceptance of this application Lake Cogen requests having a synthetic cap for total NOx to 385 tpy (a 19 tpy reduction)**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **93.5** lb/hour **336** tons/year	4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **28 ppmvd** Reference: **Permit Limit (BACT)**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

Firing CTs and DBs natural gas. Potential emissions based on revised calculation to synthetically limit triggering PSD. Hourly potential emission based on CTs at 51°F operating conditions on natural gas. Annual based on current facility limit. This application requests a synthetic cap for total CO to 336 tpy (a 14 tpy reduction)

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs/ DBs at 51°F operating conditions on natural gas. Annual based on permit limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **57.5 lb/hr**	4. Equivalent Allowable Emissions: **57.5** lb/hour **336** tons/year
5. Method of Compliance: **Annual compliance test; EPA Method 10**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing: CT units 1 and 2; established as BACT in AC 35-196459, Table 1A; Basis of limit is 28 ppmvd, which reflects 57.5 lb/hr. Request a synthetic cap having the annual tonnage**	

Allowable Emissions Allowable Emissions 2 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **34.5 lb/hr**	4. Equivalent Allowable Emissions: **34.5** lb/hour **336** tons/year
5. Method of Compliance: **Annual Compliance test, EPA Method 10, if operated > 400 hrs./yr of fuel oil**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing. CTs 1 & 2; Allowable emission established as BACT in AC Permit, Table 1A. Basis of limit is 18 ppmvd. Annual limit for CO remains limited based upon a limit of firing ≤ 701,050 gallons of fuel oil per unit per year.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **36 lb/hr**	4. Equivalent Allowable Emissions: **36** lb/hour **336** tons/year
5. Method of Compliance: **None**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing for Duct Burners in Units 1 and 2; established as BACT; basis for limit is 0.2 lb/MMBtu heat input. Each DB is limited to 525,000 MMBtu/yr.**	

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: **Other and ESCPSD**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **93.5 lb/hr**	4. Equivalent Allowable Emissions: **93.5** lb/hour **336** tons/year
5. Method of Compliance: **Annual Compliance test, EPA Method 10**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing for CTs and DBs; established BACT, 28 ppm for gas firing on CTs which reflects 57.5 lb/hr, and 0.2 lb/MMBtu on DBs which reflects 36 lb/hr. The annual CO cap of 336 tpy reflects a 14 TPY reduction from the current Title V Permit.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **PM-Total**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **20** lb/hour **27** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit Limit (BACT)**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based upon permit limit for CTs and only when firing on fuel oil.

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on facility limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

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

Allowable Emissions Allowable Emissions 2 of 4

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

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2.6 lb/hr/CT**	4. Equivalent Allowable Emissions: **2.6** lb/hour **27** tons/year
5. Method of Compliance: **None**	
6. Allowable Emissions Comment (Description of Operating Method): **Emission limits for Duct Burners in Units 1 and 2; established as BACT. Natural gas fired only. Basis for limit is 0.006 lb/MMBtu.**	

Allowable Emissions Allowable Emissions 4 of 4

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

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **20** lb/hour **27** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit Limit (BACT); assumed equal to PM Total**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based upon permit limit for CTs only, when firing on oil.

NOTE. As done in previous permit applications, PM-10 is assumed to equal PM Total, Testing based upon non-condensable portion fraction of test only. If the FLDEP required both condensable and non-condensable fractions, then the emission factor for PM 10 should be doubled to 0.052 lb/MMBtu and the potential emissions also doubled to 40 tpy, respectively. For the purpose of this application it has not been and remains the same as in the original construction permit and Title V application.

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on permit limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

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

Allowable Emissions Allowable Emissions 2 of 4

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

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

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

Allowable Emissions Allowable Emissions 4 of 4

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

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **8.8** lb/hour **30.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: **Permit Limit (BACT)**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based upon permit limit for VOC emissions from both CTs and DBs combined.

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs/DBs at 51°F operating conditions on natural gas. Annual based on permit limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **3.4 lb/hr**	4. Equivalent Allowable Emissions: **3.4** lb/hour **30.8** tons/year
5. Method of Compliance: **Compliance with CO test (See permit condition).**	
6. Allowable Emissions Comment (Description of Operating Method): **Total for both CTs combined when firing on natural gas: established as permit limit in AC Permit, Table 1A**	

Allowable Emissions Allowable Emissions 2 of 4

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

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **5.4 lb/hr**	4. Equivalent Allowable Emissions: **5.4** lb/hour **30.8** tons/year
5. Method of Compliance: **None**	
6. Allowable Emissions Comment (Description of Operating Method): **Emission limits for Duct Burners 1 & 2; natural gas fired only. Permit condition indicates that testing is only required if CO standard is exceeded.**	

Allowable Emissions Allowable Emissions 4 of 4

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

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **87.6** lb/hour **21** tons/year	4. Synthetically Limited? ☐ Yes [x] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.1% sulfur content in fuel oil** Reference: **Permit Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based upon permit limit and only when firing fuel oil.

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based on CTs at 51°F operating conditions on fuel oil. Annual based on facility limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **87.6 lb/hr**	4. Equivalent Allowable Emissions: **87.6** lb/hour **21** tons/year
5. Method of Compliance: **Fuel Analysis; oil firing**	
6. Allowable Emissions Comment (Description of Operating Method): **Total for both CTs combined when firing on fuel oil: Allowable emissions established in AC Permit, Table 1A. Annual limit established for facility.**	

Allowable Emissions Allowable Emissions ___ of ___

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

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour **0.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.1 % sulfur in fuel oil** Reference: **Permit Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based upon permit limit when firing on fuel oil. For both CTs combined.

11. Potential, Fugitive, and Actual Emissions Comment:

Annual based on permit limit. For both units combined.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.8 tpy**	4. Equivalent Allowable Emissions: lb/hour **0.8** tons/year
5. Method of Compliance: **Fuel Analysis; oil firing**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions established as limit in AC Permit, Table 1A for firing on fuel oil. Annual limit established for facility.**	

Allowable Emissions Allowable Emissions ___ of ___

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

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **VE limit established in Construction Permit.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **V99**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operation Practice**	
5. Visible Emissions Comment: **Excess VE allowed for startup and shutdown of each CT pursuant to FDEP Rule 62-210.700(1); 2 hours per 24 hour period per CT**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: **Chessel** Model Number:	Serial Number:
5. Installation Date: **01 July 1993**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Parameter Code: FUEL. CMS required by NSPS (40 CFR 60 Subpart GG). System installed per Site Construction Permit. Chessel recorder unit. The Chessel monitors data from the respective unit DCS**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: **WTF**	2. Pollutant(s): **NOx**
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: **Chessel** Model Number:	Serial Number:
5. Installation Date: **01 July 1993**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **CMS required by NSPS (40 CFR 60 Subpart GG). System required in accordance with Construction Permit. Pollutant emitted = NOx. Chessel recorder unit. The unit monitors data from the unit DCS system.**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **LC-EOI-L1** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **LC-EOI-L2** [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **LC-FI-E6** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **LC-EOI-L6** [ ] Previously Submitted, Date _____
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **LC-EOI-L5** [ ] Previously Submitted, Date _____
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [X] Attached, Document ID: **LC-EOI-L7**
   Test Date(s)/Pollutant(s) Tested: Unit 1 & 2 Annual Source Test for NOx, CO & VE, Performed by ACE, July 11 & 12, 2006 (summary only)
   [ ] Previously Submitted, Date:
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] To be Submitted, Date (if known): ASAP
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

EMISSIONS UNIT INFORMATION
Section [1] of [1]

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☒ Attached, Document ID: **LC-E01-L4** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID:
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

Additional Requirements Comment

ATTACHMENT LC-AI-AC

APPLICATION COMMENT

ATTACHMENT LC-AI-AC

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

The application structure is as follows:

Emission Units

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

Pollutants

CT/HRSG	NO_x, CO, PM/PM10, VOC, SO_2

VE Emissions

CT/HRSG	VE limits applicable

CEM

CT/HRSG	NO_x, O_2, fuel consumption

PSD

CT/HRSG	NO_x, CO

*currently LM-6000 units to be upgraded to LM-6000 Sprint PC units

ATTACHMENT LC-BI-AC

Five Year Site Emissions Data and Proposed Emissions Cap

ATTACHMENT LC-BI-AC

Lake Cogen Five Year Site Emission Data (2001 – 2005), Future Potential Calculation and Proposed Emission Cap for SPRINT Modification Request

Pollutant	2001			2002			2003			2004			2005		
	U-1	U-2	Total	U-1	U-2	Total	U-1	U-2	Total	U-1	U-2	Total	U-1	U-2	Total
NOx	137.5	138.4	275.9	135.8	131.8	267.6	95.8	98.3	194.1	93.4	93.2	186.6	95.6	94.3	189.8
CO	90.7	91.2	181.9	89.9	87.4	177.3	63.8	65.8	129.6	62.3	63.8	126.2	65.4	63.0	128.4
PM/PM10	8.8	8.9	17.7	8.8	8.5	17.2	6.1	6.3	12.5	6.0	6.0	12.0	6.1	6.1	12.2
SO2	4.1	4.1	8.2	4.0	3.9	8.0	2.8	2.9	5.8	2.8	2.8	5.5	2.8	2.8	5.6
VOC	5.6	5.6	11.2	5.6	5.5	11.1	4.0	4.2	8.2	3.9	4.3	8.2	4.4	4.0	8.4

Future Potential to Emit

Assumption for future potential to emit NOx and CO is based upon reviewing the facility operating history during the period of 1996 through 2000. The above data for the period of 2001 through 2006 represented a low period of operation for this facility. The following represents the future potential that this facility can operate under (per recent PSD regulatory changes) based upon reasonable historical information.

Year	NOx (tons)	CO (tons)
2000	296.5	211.4
1999	326.3	222.4
1998	339.1*	232.8*
1997	338.6	232.5
1996	351.8*	239.3*
2 year high aver.	345	236
PSD trigger	40	100
Proposed Cap (tons)	385	336
Site emission cap reduction from current permit limit (tons)	19	14

ATTACHMENT LC-BI-AC

Lake Cogen Five Year Site Emission Data (2001 – 2005), Future Potential Calculation and Proposed Emission Cap for SPRINT Modification Request

Pollutant	Current Permit [1] [2]	2 yr. high (2001-2002) Mean Ave.	(1996-2000) 2 High Yr. Ave. [4]	Proposed PSD Trigger	Proposed Emission Cap	Current Limit vs. Proposed Difference
NOx	404.7	271.8	345	40	385	- 19 [3]
CO	350.3	179.6	236	100	336	- 14
PM/PM10	27.0	17.5		15	27.0	0
SO2	21.0	8.1		40	21.0	0
VOC	30.8	11.2		40	30.8	0

(1) tonnage from current permit
(2) all calcs are in tons per year (tpy)
(3) total annual loss from current Title V permit to secure an artificial cap and not trigger PSD review on request for SPRINT modification and slightly higher heat input.
(4) Tonnage considered for future potential calculations of site emissions – NOx and CO only

ATTACHMENT LC-FI-B

FACILITY REGULATIONS

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

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

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

Chapter 62-4, F.A.C.

1. **Not federally enforceable.** General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.
[Rule 62-4.030, Florida Administrative Code (F.A.C.); and, Section 403.087, Florida Statute (F.S.)]

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

3. Standards for Issuing or Denying Permits. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules.
[Rule 62-4.070(7), F.A.C.]

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

(a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

(b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.

(c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.

(e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.

(2) A permittee may request a modification of a permit by applying to the Department.
(3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(v), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.
[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.
[Rule 62-4.090, F.A.C.]

6. Suspension and Revocation
(1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
(2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
(3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:

(a) Submitted false or inaccurate information in his application or operational reports.

(b) Has violated law, Department orders, rules or permit conditions.

(c) Has failed to submit operational reports or other information required by Department rules.

(d) Has refused lawful inspection under Section 403.091, F.S.

(4) No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.
[Rule 62-4.100, F.A.C.]

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

8. Transfer of Permits
(1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.
(2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
(3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
(4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
(5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.
[Rule 62-4.120, F.A.C.]

9. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. **(also, see Condition No. 10.)**
[Rule 62-4.130, F.A.C.]

10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays, and, for purposes of 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". **[also, see Conditions Nos. 9. and 12.(8).]**
[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.
[Rule 62-4.150, F.A.C.]

12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
(1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

(2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

(3) As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

(4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

(5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

(6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules

(7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to.

(a) Have access to and copy any records that must be kept under conditions of the permit;

(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

(8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: **(also, see Condition No. 10.)**

(a) A description of and cause of noncompliance; and

(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

(9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

(10) The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

(12) This permit or a copy thereof shall be kept at the work site of the permitted activity.

(14) The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The dates analyses were performed;
4. The person responsible for performing the analyses;

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

(15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
[Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

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

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

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

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

(2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
(3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.
[Rule 62-4.210, F.A.C.]

14. **Not federally enforceable.** Operation Permit for New Sources. To properly apply for an operation permit for new sources the applicant shall submit the appropriate fee and certification that construction was completed, noting any deviations from the conditions in the construction permit and test results where appropriate.
[Rule 62-4.220, F.A.C.]

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

15. Public Notice, Public Participation, and Proposed Agency Action. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C.
[Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]

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

Chapter 62-204, F.A.C.

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

Chapter 62-210, F.A.C.

18. Permits Required. Unless exempted from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., or unless specifically authorized by provision of Rule 62-210.300(4), F.A.C., or Rule 62-213.300, F.A.C., the owner or operator of any facility or emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, reconstruction pursuant to 40 CFR 60.15 or 63.2, modification, or the addition of pollution control equipment; or to authorize initial or continued operation of the emissions unit; or to establish a PAL or Air Emissions Bubble. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

(1) Air Construction Permits.

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

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

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

a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;

b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and

c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(11)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(11)(d)2., Rule 62-212.400 or Rule 62-212.500, F.A.C., as appropriate.

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

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

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

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

1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;

2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.

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

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

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

(i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

(ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

(iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

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

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

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

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

19. **Not federally enforceable.** Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

(a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification

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

(b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

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

21. Transfer of Air Permits.

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

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

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

22. Public Notice and Comment

(1) Public Notice of Proposed Agency Action

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

1. An air construction permit;

2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or

3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.

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

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

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

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

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

2. A 30-day period for submittal of public comments; and

3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.

(b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.

(c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.

(d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.

(e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.

(f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.

(g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.

(h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C.:

1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.

2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.

(3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.

(a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:

1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and

2. A 30-day period for submittal of public comments.

(b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a), F.A.C.

(c) The notice shall identify:

1. The facility;

2. The name and address of the office at which processing of the permit occurs;

3. The activity or activities involved in the permit action;

4. The emissions change involved in any permit revision;

5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;

6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;

7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled), and

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

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

23 Administrative Permit Corrections.

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

(a) Typographical errors noted in the permit;

(b) Name, address or phone number change from that in the permit;

(c) A change requiring more frequent monitoring or reporting by the permittee,

(d) A change in ownership or operational control of a facility, subject to the following provisions:

1. The Department determines that no other change in the permit is necessary,

2. The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C., and

3. The new permittee has notified the Department of the effective date of sale or legal transfer

(e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

(f) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C., and

(g) Any other similar minor administrative change at the source.

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

(3) After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.

(4) For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

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

24. Emissions Computation and Reporting

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

(2) Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

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

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

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

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

(b) Continuous Emissions Monitoring System (CEMS).

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

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

b. The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

a. A calibrated flowmeter that records data on a continuous basis, if available; or

b. The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

3. The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

(c) Mass Balance Calculations

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

a. Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

b. Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

2. Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

3. In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(d) Emission Factors.

1. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

a. If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

b. Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

c. The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

2. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(e) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(f) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

(g) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

(h) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

(3) Annual Operating Report for Air Pollutant Emitting Facility

(a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.

(c) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by March 1 of the following year.

(d) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for purposes of the annual operating report.

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

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

26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by accessing the Division's website at www.dep.state.fl.us/air. The requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate is waived if an air permit application is submitted using the Department's electronic application form.
(1) Application for Air Permit - Long Form, Form and Instructions (Effective 02-02-2006).
(a) Acid Rain Part, Form and Instructions (Effective 06-16-2003).
1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995)
2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).
3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001).
4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).
5. Phase II NOx Averaging Plan, Form (Effective 01/06/1998).
(b) Reserved.
(5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).
(7) Application for Transfer of Air Permit – Title V Source, (Effective 04/16/2001).
[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

27. Responsible Official.
(1) Each Title V source must identify a responsible official on each application for Title V permit, permit revision, and permit renewal. For sources with only one responsible official, this is how the Title V source designates the responsible official.
(2) Each Title V source may designate more than one responsible official, provided a primary responsible official is designated as responsible for the certifications of all other designated responsible officials. Any action taken by the primary responsible official shall take precedence over any action taken by any other designated responsible official.
(3) Any facility initially designating more than one responsible official or changing the list of responsible officials must submit a Responsible Official Notification Form (DEP Form No. 62-213.900(8)) designating all responsible officials for a Title V source, stating which responsible official is the primary responsible official, and providing an effective date for any changes to the list of responsible officials. Each individual listed on the Responsible Official Notification Form must meet the definition of responsible official given at Rule 62-210.200, F.A.C.
(4) A Title V source with only one responsible official shall submit DEP Form No. 62-213.900(8) for a change in responsible official.
(5) No person shall take any action as a responsible official at a Title V source unless designated a responsible official as required by this rule, except that the existing responsible official of any Title V source which has a change in responsible official during the term of the permit and before the effective date of this rule may continue to act as a responsible official until the first submittal of DEP Form No. 62-213.900(8) or the next application for Title V permit, permit revision or permit renewal, whichever comes first.
[Rules 62-213.202(1) thru (5), F.A.C.]

28. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.
(1)(g) If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to $50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to

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

(1)(i) Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.

(1)(j) A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.

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

29. Reserved.

30. Reserved.

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

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

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

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

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

(a) Constitutes a modification;

(b) Violates any applicable requirement;

(c) Exceeds the allowable emissions of any air pollutant from any unit within the source;

(d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;

(e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;

(f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;

(g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.;

(h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(e), (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;

(i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1), (2), or (3), (b)(1) or (b)(3), hereby incorporated by reference;

(j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source.

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

33. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:

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

(2) A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;

(a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change,

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

(3) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.

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

34. Immediate Implementation Pending Revision Process.

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

(a) Does not violate any applicable requirement;

(b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;

(c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;

(d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.

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

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

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

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

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

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

35. Permit Applications.

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

(a) Timely Application.

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

(b) Complete Application.

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

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

to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4., F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.

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

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

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

36. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. **(also, see Condition No. 50.)**
[Rule 62-213.420(2), F.A.C.]

37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
[Rule 62-213.420(3), F.A.C.]

38. a. Permit Renewal and Expiration. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.

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

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

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

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

(i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).

(ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

(iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable

(3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

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

39. Insignificant Emissions Units or Pollutant-Emitting Activities.

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

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

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

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

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

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

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

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

42. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
[Rule 62-213.440(1)(b)2.b., F.A.C.]

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

44. Deviation from Permit Requirements Reports. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken
[Rule 62-213.440(1)(b)3.b., F.A.C.]

45. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C.
[Rule 62-213.440(1)(b)3.c, F.A.C.]

46 If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect.
[Rule 62-213.440(1)(d)1., F.A.C.]

47 It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.
[Rule 62-213.440(1)(d)3., F.A.C.]

48. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C.
[Rule 62-213.440(1)(d)4., F.A.C.]

49 A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.
[Rule 62-213.440(1)(d)5., F.A.C.]

50. Confidentiality Claims. Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. **(also, see Condition No. 36.)**
[Rule 62-213.440(1)(d)6., F.A.C.]

51. Statement of Compliance. (a)2. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:

a. Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and

b. Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.

3. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.

(b) The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited
[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

52. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.
[Rule 62-213.460, F.A.C.]

53. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
(1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)
(7) Statement of Compliance Form (Effective 06/02/2002)
(8) Responsible Official Notification Form. (Effective 06/02/2002)
[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

Chapter 62-256, F.A.C.

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

Chapter 62-281, F.A.C.

55. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions
(1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
(2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42.
(3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
(4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
(6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F
[40 CFR 82; and, Chapter 62-281, F.A.C. **(Chapter 62-281, F.A.C., is not federally enforceable)**]

Chapter 62-296, F.A.C.

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

(a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or

(b) An emergency exists which requires immediate action to protect human health and safety; or

(c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

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

57. Unconfined Emissions of Particulate Matter

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emissions.

3. Reasonable precautions include the following:

a. Paving and maintenance of roads, parking areas and yards.

b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.

d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.

e. Landscaping or planting of vegetation.

f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

g. Confining abrasive blasting where possible.

h. Enclosure or covering of conveyor systems.

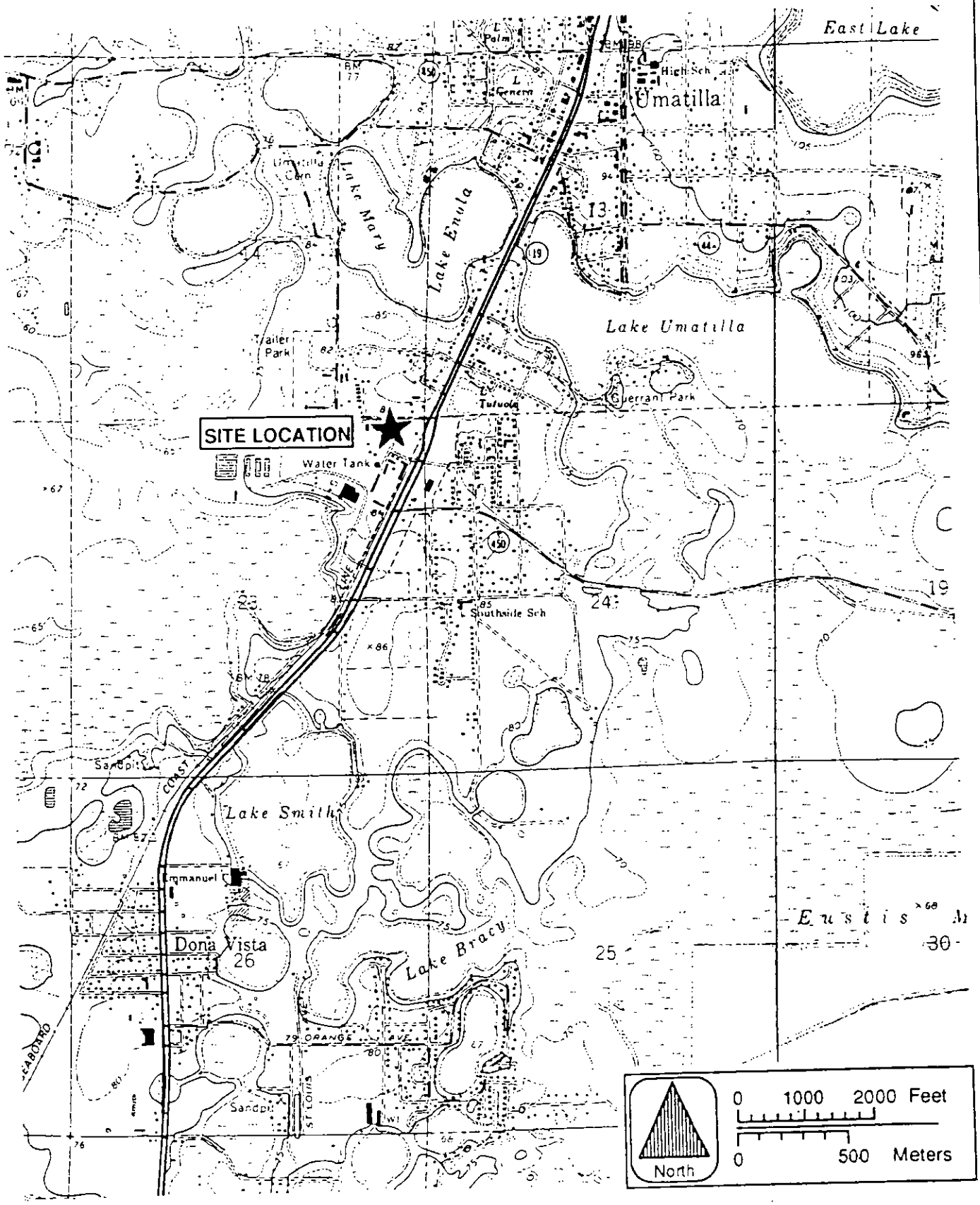
4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique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

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

[electronic file name: tv-6.doc]

ATTACHMENT LC-FI-E1

AREA MAP



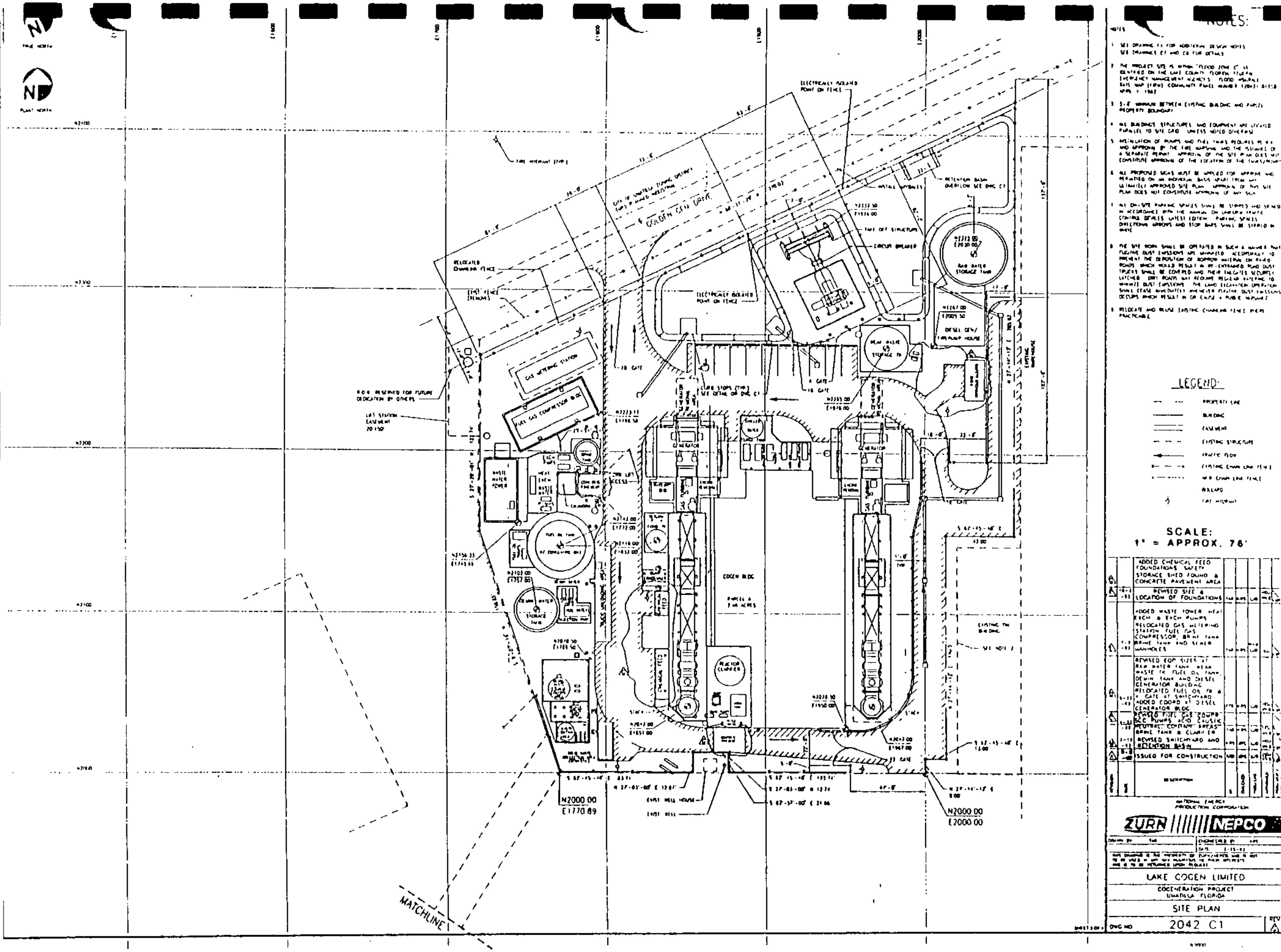
Attachment LC-FI-E1
Area Map

Sources: USGS, 1950; KBN, 1996.

KBN
A GOLDER ASSOCIATES COMPANY

ATTACHMENT LC-FI-E2

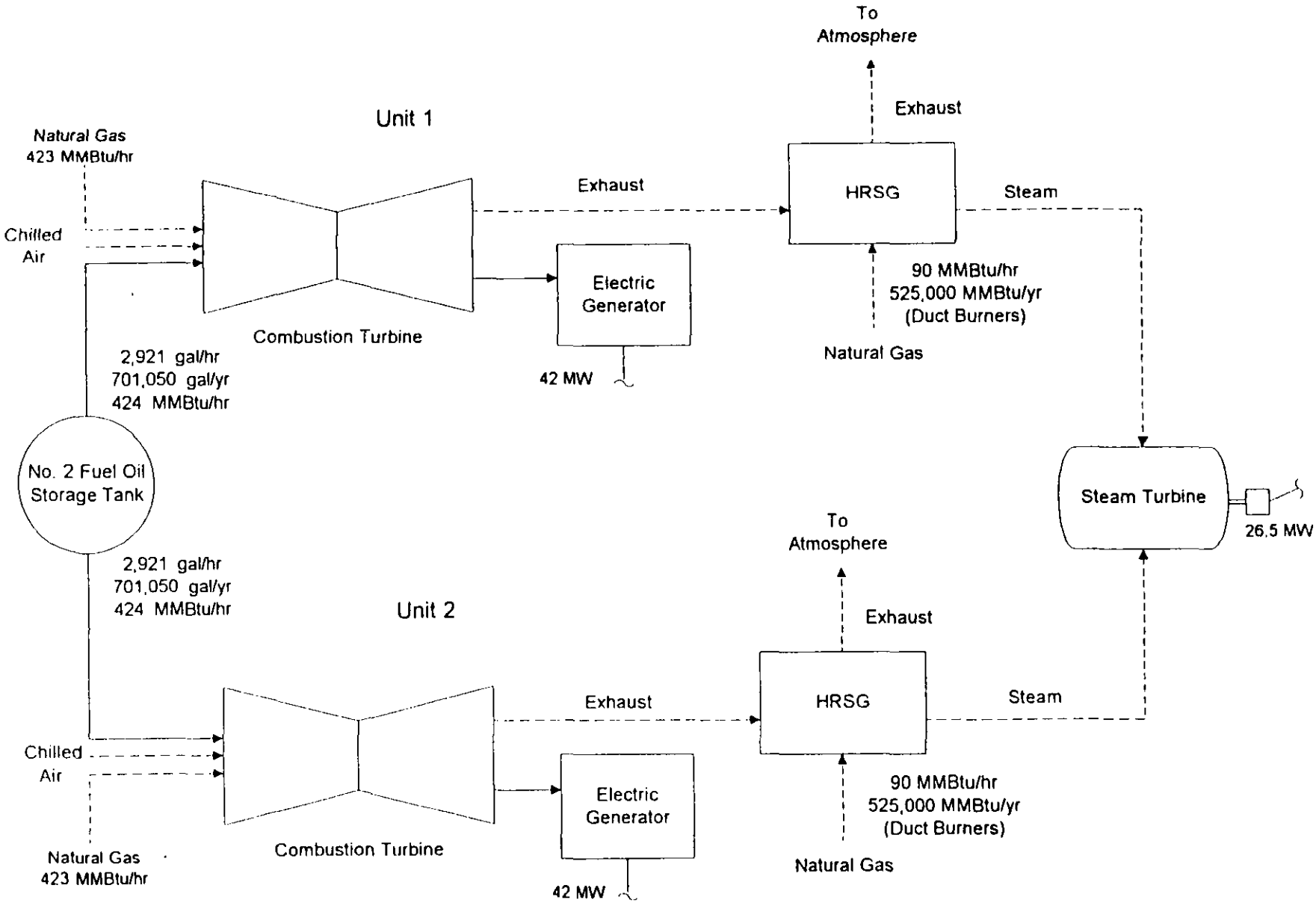
FACILITY PLOT PLAN



MATCHLINE
GOLDEN GEM DRIVE
COGEN BLDG
N2000.00
E1770.89
N2000.00
E2000.00
NOTES:
LEGEND
SCALE:
1" = APPROX. 76'
ADDED CHEMICAL FEED FOUNDATIONS, SAFETY STORAGE SHED FOUND & CONCRETE PAVEMENT AREA
REVISED SIZE & LOCATION OF FOUNDATIONS
ISSUED FOR CONSTRUCTION
ZURN
NEPCO
LAKE COGEN LIMITED
COGENERATION PROJECT
UMATILLA, FLORIDA
SITE PLAN
DWG NO
2042 C1
REV

ATTACHMENT LC-FI-E3

PROCESS FLOW DIAGRAM



Attachment LC-FD-3.VSD
Lake Cogeneration, Ltd.
Process Flow Diagram
Umatilla, Florida

Process Flow Legend
Solid / Liquid
Gas

Emission Unit: Facility
Process Area: Facility
Filename: PC-FD-3.VSD
Latest Revision Date: 5/20/96

KBN Engineering and Applied Sciences, Inc.

ATTACHMENT LC-FI-E4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT LC-FI-E4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of particulate matter include:

- Fugitive dust from paved and unpaved roads,
- Fugitive particulates from the use of bagged chemical products, and
- Storage and handling of zero-liquid-discharge (ZLD) salt cake.

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296.310(3), F.A.C.:

- Maintenance of paved areas as needed,
- Regular mowing of grass and care of vegetation,
- Limiting access to plant property by unnecessary vehicles,
- Use of bagged chemical products in enclosed or semi-enclosed areas, and
- Storage of ZLD byproduct in covered enclosed containers.

ATTACHMENT LC-FI-E5
FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT LC-FI-E5
FUGITIVE EMISSIONS IDENTIFICATION

It should be noted that many fugitive emissions at the plant site have been classified as "exempt" or "trivial" activities and as such are not addressed here. The discussion below provides information on fugitive emissions that may occur at the facility.

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PC-FI-E4. Lake Cogeneration, LT. is not aware of fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation. VOCs are also emitted by the fuel oil storage tanks on the plant property, and by the combined-cycle units. VOC emissions for each of these emission units are covered in the respective Facility Pollutant or Emission Unit sections of this permit application.

Fugitive HAPs Emissions

The following hazardous air pollutants are present on the facility property and are potential sources of fugitive HAPs emissions:

- Chlorine
- Naphthalene
- Methyl ethyl ketone
- Toluene
- Xylene

Chlorine – Present in 150-lb cylinders. Used for water treatment at the facility. Presumptively exempt under category #27 of the FDEP Title V Insignificant Source Summary dated May 20, 1994. Administrative restriction limits on-site total at any one time to 1,500 lbs, or less, of chlorine gas.

Methyl Ethyl Ketone, Toluene, Xylene – The facility routinely maintains 5 gallons of paint thinner and solvents (which may contain MEK, toluene, or xylene) for use inplant maintenance activities. These containers are kept closed and are stored in weather-tight buildings. These emissions as a whole are addressed in the VOC section (preceding page).

Regulated Toxic or Flammable Substances
The following regulated toxic or flammable substances are present at the Lake Cogeneration facility:

- Chlorine
- Sulfuric acid
- Acetylene
- Methane (natural gas)
- Cyclohexylamine

Sulfuric Acid – The facility maintains a 6,000-gallon Sulfuric Acid storage tank for water treatment use.

Acetylene – Present on the facility property in two 125-lb cylinders which are used for plant maintenance (welding and cutting). These operations are identified by EPA as trivial activities, and are exempt by Rule 62-210.3000.

Methane – Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating units. This fuel delivery system is normally airtight, but does have safety valves which occasionally relieve (open) when an overpressure condition develops in the gas line.

Cyclohexylamine – The facility maintains several covered tote bins of a pH-adjustant chemical (Nalco Tri-Act 1820 Inhibitor) with up to 40% by weight of cyclohexylamine.

LC-FI-E6
DESCRIPTION OF PROPOSED PROJECT

PC-FI-E6: Description of Proposed Project

Lake Cogen plans to uprate its 2 GE LM6000 PA series Combustion Turbines (CTs) into more efficient GE LM6000 Sprint PC units. Given the nature of the facility's PPA and steam export requirements, the only way to improve plant performance is to decrease fuel consumption while maintaining current power loads and export steam levels. Modification of the current LM-6000 CTs with the proposed PC Sprint uprate can help Lake Cogen achieve this goal. Lake proposes to physically uprate one unit on-site, while replacing the second, with a newly reconditioned and uprated unit.

The primary advantage of the newer LM6000 SPRINT technology for Lake Cogen will be the fact that the modified CTs will experience significantly better fuel economy than the current PA series CTs. The key reason for this improved fuel efficiency is the use of GE's "**spray int**ercooling" or Sprint modification technology. Spray intercooling involves the injection of a fine mist of demineralized water into the inlet of the CT compressor section. The small water droplets (< 20 micron), rapidly evaporate as the compressed air heats up within the compressor unit. The evaporation process extracts heat from the air and lowers the discharge temperature of the compressor. The lower discharge temperature allows the firing temperature of the engine to be increased because the compressor discharge air is used to cool the most critical parts of the hot sections of the engine. By providing this cooling, the modification allows the engine to operate more efficiently. The hotter firing temperature, or increased delta in temperature, produces more power with improved fuel efficiency.

The results seen from this modification are especially noticeable in warm /hot weather. Based upon ASHRAE weather data for the past 50 years in the vicinity of Lake Cogen, the average ambient temperature observed during on-peak hours of operation is approximately 80°F. At that temperature, the facility can produce 109 MW of power using the PC Sprint engines with no inlet chilling or supplemental firing.

Based upon emission levels seen from similar uprates in other units, the NOx and CO emission concentration resulting from the CT uprate modification are expected to remain within compliance of the current permit concentration (ppm) requirements. The total plant mass emission rates for NOx and CO are expected to be elevated slightly. NOx is anticipated to rise from its current 85.5 lb/hr to 87.0 lb/hr., wile CO is expected to increase slightly from 56.0 lb/hr to 57.5 lb/hr., both while firing on natural gas. Currently, the site's LM6000 PA engines use water injection into the combustion chamber to meet permit limits. The water moderates the flame temperature, which suppresses NOx formation. It is anticipated that this same technique will continue to be used to control NOx emissions at 25 ppmvd and CO emissions to 28 ppmvd with the modified units also. As shown in the synthetic cap table (LC-BI-AC), Lake Cogen is willing to accept less hours of operation, or additional hours of lower load operation, to meet the lower annual tonnage caps in order to have the ability to of this additional coverage.

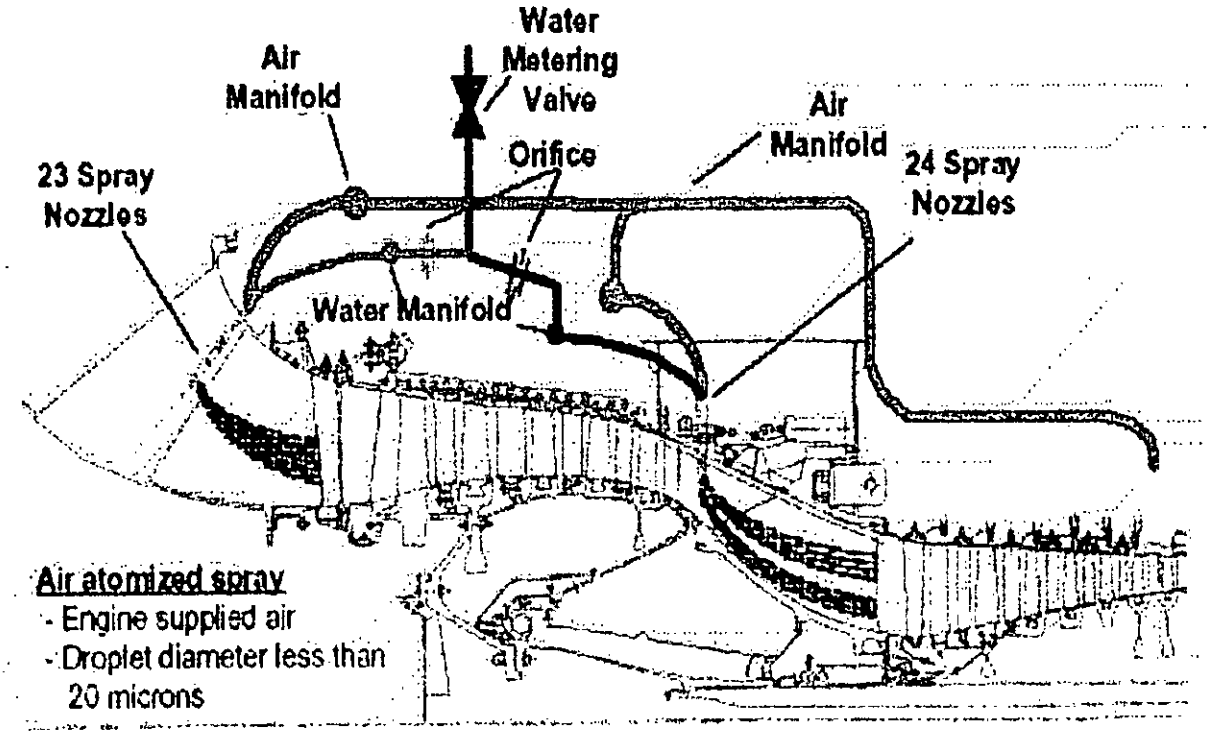
Table LC-FI-E6: Description of Proposed Project for Units 1 and 2 (per unit)

Pre and Post SPRINT Uprate Installation

Combined Fuel Firing

Data	No. 2 Fuel Oil (05/20/96)	Natural Gas (05/20/96)	Natural Gas (2006 uprate request)
General Information:			
• Power (MW)	38.9	39.5	50.2
• Heat Input (MMBtu/hr.)	424	423	435
• Annual Capacity Factor (%)	100	100	100
• Hours of Operation	240 (max.)	8760 (max.)	8760 (max.)
Volume Flow (acfm) = [(Mass flow (lb/hr) x 1,545 x (Temp (°F) + 460°F)] / {Molecular weight x 2116.8} / 60 min/hr			
• Mass Flow (lb/hr)	1,081,322	1,079,779	1,083,240
• Temperature (°F)	815	806	825
• Molecular Weight	28.38	28.03	28.13
• Volume Flow (acfm)	590,949	593,257	603,915
Volume Flow (dscfm) = [(Mass flow (lb/hr) x 1,545 x (68 °F + 460°F)] / {Molecular weight x 2116.8} / 60 min/hr x [(1 – Moisture (%)/10)}			
• Mass Flow (lb/hr)	1,081,322	1,079,779	1,083,240
• Temperature (°F)	68	68	68
• Molecular Weight	28.38	28.03	28.13
• Moisture (% vol.)	9.3	11.0	10.4
• Volume Flow (acfm)	221,963	220,208	245,565

Data	No. 2 Fuel Oil (05/20/96)	Natural Gas (05/20/96)	Natural Gas (2006 uprate request)
HRSG Stack Data:			
• Stack Height (ft)	100	100	100
• Diameter (ft)	11.0	11.0	11.0
Volume Flow (acfm) from HRSG = [Vol. Flow (acfm) from CT x (HRSG temp. (°F) + 460°F)] / CT temp (°F) + 460°F]			
• Volume Flow (acfm) from CT	590,949	593,257	603,915
• CT Temperature (°F)	815	806	825
• HRSG Temperature (°F)	232	232	232
• Volume Flow from the HRSG (acfm)	320,735	324,276	325,221
Velocity (ft/sec) = Volume Flow (acfm) from HRSG / [((diameter of stack)^2 / 4) x 3.14159] / 60 sec/min			
• Volume Flow (acfm) from HRSG	320,735	324,276	325,221
• Stack Diameter (ft)	11.0	11.0	11.0
• Velocity (ft/sec)	56.2	56.9	57.0

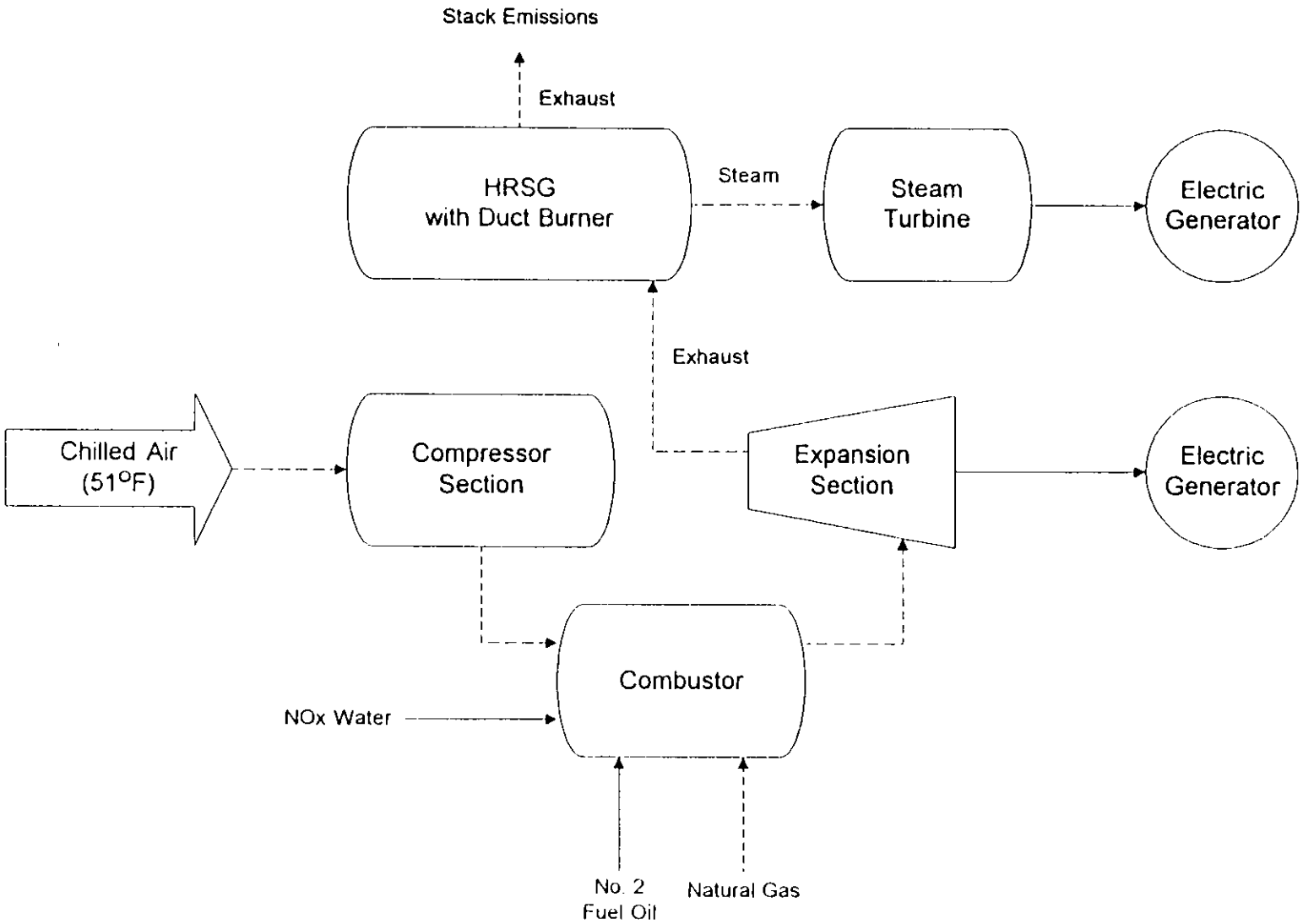


Schematic diagram of the Sprint system showing water droplets being injected into the LPC and HPC of an LM6000.

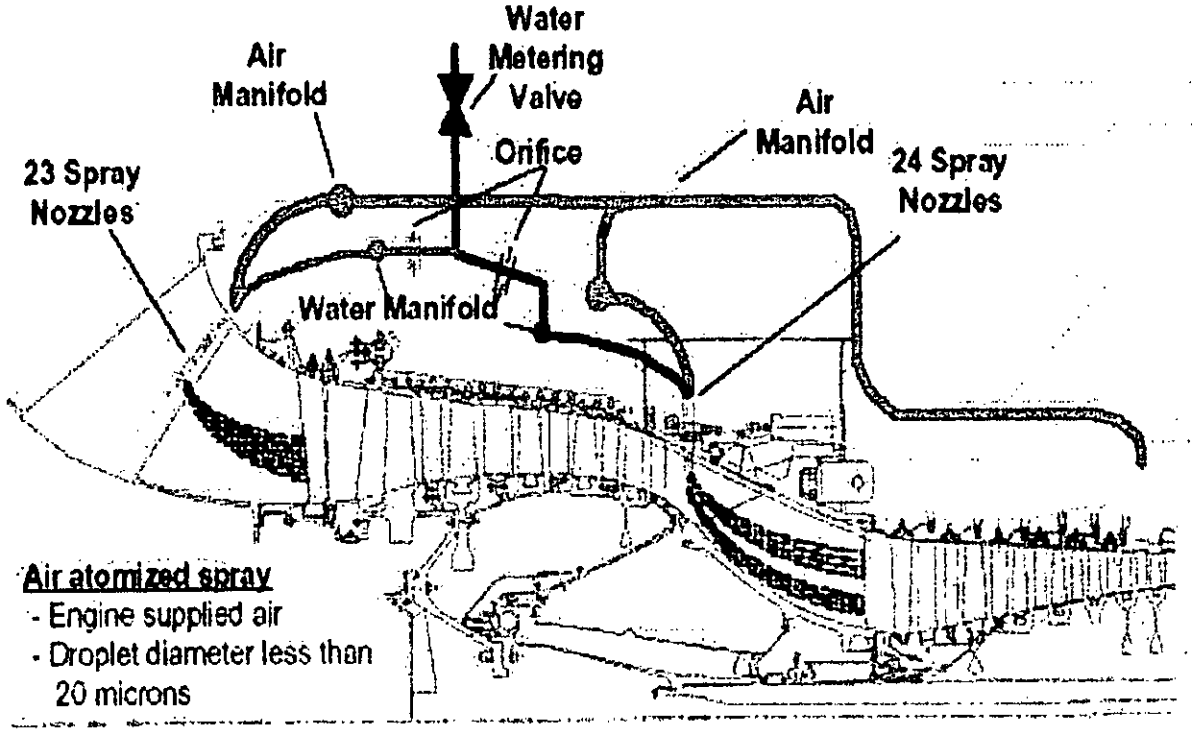
*

ATTACHMENT LC-E01-L1

PROCESS FLOW DIAGRAM



Attachment LC1-EUI1.VSD Lake Cogeneration, Ltd. Process Flow Diagram Umatilla, Florida	Process Flow Legend Solid / Liquid Gas	*Emission Unit:* Combustion Turbine Unit (1 and 2) *Process Area:* *Filename:* PC1-EUI1.VSD *Latest Revision Date:* 5/20/96	KBN Engineering and Applied Sciences, Inc.



Schematic diagram of the Sprint system showing water droplets being injected into the LPC and HPC of an LM6000.

ATTACHMENT LC-E01-L2

FUEL ANALYSIS OR SPECIFICATION

Florida Gas
Transmission-8001 Nov 02 2006 2:54 PM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
11/1/2006	1029	1.067	0.478	0.587	95.582	2.209	0.377	0.088	0.084	0.034	0.022	0.057	0	0	0	0
10/31/2006	1033	1.034	0.817	0.592	94.702	2.593	0.506	0.107	0.112	0.041	0.03	0.057	0	0	0	0
10/30/2006	1031	1.011	0.613	0.588	95.294	2.342	0.428	0.097	0.097	0.037	0.025	0.056	0	0	0	0
10/29/2006	1032	0.979	0.513	0.587	95.516	2.253	0.433	0.097	0.095	0.035	0.023	0.056	0	0	0	0
10/28/2006	1035	1.031	0.622	0.591	94.93	2.565	0.493	0.111	0.121	0.042	0.03	0.055	0	0	0	0
10/27/2006	1033	0.995	0.606	0.59	95.152	2.413	0.496	0.107	0.112	0.039	0.027	0.054	0	0	0	0
10/26/2006	1033	0.913	0.551	0.588	95.405	2.33	0.484	0.104	0.106	0.036	0.024	0.048	0	0	0	0
10/25/2006	1033	0.913	0.551	0.588	95.405	2.33	0.484	0.104	0.106	0.036	0.024	0.048	0	0	0	0
10/23/2006	1035	0.935	0.559	0.589	95.244	2.403	0.508	0.113	0.117	0.04	0.027	0.054	0	0	0	0
10/22/2006	1034	0.947	0.525	0.589	95.354	2.322	0.501	0.114	0.112	0.04	0.026	0.058	0	0	0	0
10/21/2006	1035	0.947	0.54	0.589	95.255	2.402	0.501	0.113	0.115	0.041	0.027	0.057	0	0	0	0
10/20/2006	1036	0.941	0.582	0.59	95.094	2.46	0.539	0.121	0.126	0.043	0.03	0.064	0	0	0	0
10/19/2006	1036	0.962	0.566	0.59	95.159	2.412	0.526	0.119	0.121	0.042	0.028	0.066	0	0	0	0
10/18/2006	1038	0.969	0.573	0.592	94.912	2.565	0.582	0.129	0.129	0.044	0.03	0.065	0	0	0	0
10/17/2006	1038	0.959	0.563	0.591	95.023	2.472	0.578	0.132	0.13	0.045	0.031	0.066	0	0	0	0
10/16/2006	1036	0.869	0.533	0.588	95.412	2.299	0.517	0.117	0.118	0.042	0.028	0.065	0	0	0	0
10/15/2006	1036	0.869	0.533	0.588	95.412	2.299	0.517	0.117	0.118	0.042	0.028	0.065	0	0	0	0
10/14/2006	1036	0.887	0.549	0.589	95.361	2.294	0.525	0.12	0.125	0.045	0.031	0.064	0	0	0	0
10/13/2006	1036	0.913	0.559	0.589	95.246	2.39	0.51	0.117	0.126	0.045	0.031	0.063	0	0	0	0
10/12/2006	1030	0.953	0.474	0.585	95.762	2.156	0.379	0.088	0.08	0.033	0.02	0.055	0	0	0	0
10/11/2006	1030	0.953	0.474	0.585	95.762	2.156	0.379	0.088	0.08	0.033	0.02	0.055	0	0	0	0
10/9/2006	1031	0.926	0.528	0.586	95.578	2.305	0.386	0.089	0.081	0.032	0.019	0.055	0	0	0	0
10/8/2006	1032	0.926	0.512	0.587	95.499	2.36	0.412	0.096	0.086	0.034	0.021	0.054	0	0	0	0
10/7/2006	1031	0.94	0.47	0.586	95.678	2.244	0.392	0.092	0.083	0.032	0.019	0.05	0	0	0	0
10/6/2006	1031	0.939	0.518	0.586	95.568	2.282	0.4	0.094	0.089	0.035	0.023	0.053	0	0	0	0
10/5/2006	1031	0.939	0.518	0.586	95.568	2.282	0.4	0.094	0.089	0.035	0.023	0.053	0	0	0	0
10/4/2006	1031	0.925	0.501	0.586	95.626	2.262	0.395	0.092	0.087	0.035	0.023	0.055	0	0	0	0
10/3/2006	1031	0.911	0.52	0.586	95.641	2.266	0.386	0.088	0.084	0.033	0.021	0.049	0	0	0	0
10/2/2006	1031	0.929	0.52	0.586	95.548	2.32	0.401	0.093	0.084	0.032	0.02	0.052	0	0	0	0
10/1/2006	1030	0.918	0.525	0.585	95.647	2.265	0.377	0.087	0.079	0.031	0.02	0.052	0	0	0	0
9/30/2006	1031	0.936	0.528	0.586	95.519	2.341	0.391	0.09	0.085	0.034	0.021	0.055	0	0	0	0
9/29/2006	1032	0.967	0.535	0.588	95.383	2.384	0.425	0.097	0.093	0.036	0.023	0.058	0	0	0	0
9/28/2006	1032	0.977	0.518	0.587	95.428	2.35	0.426	0.098	0.091	0.034	0.021	0.058	0	0	0	0
9/27/2006	1033	0.971	0.54	0.588	95.331	2.402	0.446	0.1	0.093	0.036	0.022	0.059	0	0	0	0
9/26/2006	1032	0.974	0.53	0.588	95.412	2.35	0.43	0.1	0.091	0.035	0.022	0.056	0	0	0	0
9/25/2006	1034	0.96	0.531	0.588	95.314	2.424	0.451	0.105	0.096	0.036	0.023	0.061	0	0	0	0
9/24/2006	1033	0.918	0.524	0.587	95.416	2.402	0.435	0.101	0.091	0.034	0.021	0.057	0	0	0	0
9/23/2006	1032	0.907	0.503	0.586	95.601	2.287	0.41	0.096	0.085	0.032	0.02	0.059	0	0	0	0
9/22/2006	1031	0.945	0.534	0.586	95.53	2.308	0.395	0.093	0.082	0.032	0.02	0.059	0	0	0	0
9/21/2006	1031	0.92	0.528	0.586	95.581	2.304	0.38	0.092	0.084	0.033	0.021	0.057	0	0	0	0
9/20/2006	1032	0.869	0.489	0.585	95.689	2.306	0.369	0.088	0.081	0.033	0.021	0.056	0	0	0	0
9/19/2006	1033	0.903	0.529	0.587	95.379	2.489	0.398	0.097	0.088	0.035	0.022	0.061	0	0	0	0
9/18/2006	1033	0.918	0.54	0.588	95.399	2.404	0.416	0.104	0.097	0.038	0.024	0.062	0	0	0	0
9/17/2006	1037	0.931	0.534	0.59	95.107	2.539	0.502	0.123	0.123	0.045	0.028	0.067	0	0	0	0
9/16/2006	1035	0.948	0.486	0.588	95.344	2.429	0.448	0.11	0.101	0.041	0.025	0.066	0	0	0	0

FGT
Last Updated 11/2/2006 14:56

Station Name	Total Sulfur Previous Day Avg ppm 11/01/2006	Total Sulfur Previous Day Avg Grains/hcf 11/01/2006
Perry 36" Stream #1	0.688	0.043
Perry 30" Stream #2	1.214	0.076
Perry 24" Stream #3	1.268	0.079
Brooker 24" Stream	4.866	0.304

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information provided.
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Perry 24" Stream #3 15SA24PSUL.A Avg Grains/hcf	Perry 24" Stream #3 Index Avg ppm	Perry 36" Brooker 24" Stream #1 Stream 15SA36PSUL.A BRO124PSUL.A Avg ppm	Perry 36" Brooker 24" Stream #1 Stream Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30" Stream #2 Avg Grains/hcf
10/31/2006	1.268	33	0.688	0.043	1.214	0.076
10/30/2006	2.823	32	0.833	0.052	2.655	0.166
10/29/2006	3.481	31	0.914	0.057	3.488	0.218
10/28/2006	2.752	30	0.828	0.052	2.742	0.171
10/27/2006	2.492	29	0.942	0.059	2.414	0.151
10/26/2006	2.064	28	1.113	0.070	2.074	0.130
10/25/2006	2.064	27	1.113	0.070	2.074	0.130
10/24/2006	1.793	26	1.255	0.078	1.802	0.113
10/23/2006	1.624	25	1.225	0.077	1.612	0.101
10/22/2006	2.329	24	1.452	0.091	2.330	0.146
10/21/2006	2.186	23	1.454	0.091	2.179	0.136
10/20/2006	2.175	22	1.615	0.101	2.148	0.134
10/19/2006	2.499	21	1.880	0.118	2.471	0.154
10/18/2006	2.395	20	1.441	0.090	2.365	0.148
10/17/2006	2.341	19	1.231	0.077	2.305	0.144
10/16/2006	2.193	18	1.087	0.068	2.157	0.135
10/15/2006	2.241	17	0.970	0.061	2.205	0.138
10/14/2006	2.156	16	0.838	0.052	2.067	0.129
			3.379	0.211		

10/13/2006	15	0.958	0.060	2.409	0.151
2.428	0.152	4.206	0.263		
10/12/2006	14	0.809	0.051	2.868	0.179
3.028	0.189	5.379	0.336		
10/11/2006	13	0.876	0.055	2.749	0.172
2.861	0.179	3.370	0.211		
10/10/2006	12	0.865	0.054	2.342	0.146
2.671	0.167	3.370	0.211		
10/09/2006	11	1.008	0.063	2.139	0.134
2.915	0.182	3.370	0.211		
10/08/2006	10	0.813	0.051	2.959	0.185
3.227	0.202	3.370	0.211		
10/07/2006	9	0.801	0.050	2.072	0.129
2.393	0.150	3.370	0.211		
10/06/2006	8	0.652	0.041	1.299	0.081
1.401	0.088	3.164	0.198		
10/05/2006	7	0.724	0.045	1.779	0.111
1.881	0.118	4.995	0.312		
10/04/2006	6	0.702	0.044	1.524	0.095
1.570	0.098	4.995	0.312		
10/03/2006	5	0.592	0.037	1.158	0.072
1.221	0.076	4.458	0.279		
10/02/2006	4	0.651	0.041	1.212	0.076
1.255	0.078	0.499	0.031		
10/01/2006	3	0.638	0.040	1.373	0.086
1.476	0.092	0.499	0.031		
09/30/2006	2	0.509	0.032	0.995	0.062
1.142	0.071	0.052	0.003		
09/29/2006	1	0.651	0.041	1.493	0.093
1.684	0.105	0.043	0.003		

\\gthou-apgc01p\GCUsers\fgt\fgtscada.txt

Intertek Caleb Brett

Report of Analysis

Lab Number: 200-0273
Job Number: T1101
Date Sampled: 04/04/06
Date Submitted: 04/04/06
Date Tested: 04/04/06
Designated As: ***No. 2 Fuel Oil***
Taken From: Submitted Sample
Location: Lake Cogeneration
Sample Tested: Submitted Sample

Customer Reference: PO# 7513
Our Reference: TA/10-C011101

To: Lake Cogeneration

By: Lake Cogeneration

Test	Method	Result	Unit
Ash Content	ASTM D482	0.005	wt%
Sulfur Content	ASTM D2622	684	ppm
Vanadium	ASTM D3605	<0.1	ppm
Lithium+Potassium+Sodium	ASTM D3605	<0.1	ppm
Calcium	ASTM D3605	<0.1	ppm
Lead	ASTM D3605	<0.1	ppm
Demulsification	ASTM D1401	40-40-0	
Ramsbottom Carbon Residue	ASTM D524	0.15	wt%
Particulate Contamination	ASTM D6217	2.5	mg/L
Water and Sediment	ASTM D2709	0	vol%
Flash Point, PMCC	ASTM D93A	166	deg F
Copper Corrosion	ASTM D130	1a	
Hydrogen	ASTM D5291	12.24	wt%
Cetane Index	ASTM D976	45.7	
Viscosity @ 40 deg C	ASTM D445	2.637	cSt
Density @ 15 deg C	ASTM D4052	853.6	kg/m^3
Cloud Point	ASTM D2500	-17	deg C
Pour Point	ASTM D97	-24	deg C
Bateria and Fungi	Easi-Cult	Negative	
Oxidation Stability	ASTM D2274	1.9	mg/100mL
Distillation	ASTM D86		
Initial Boiling Point		359.0	deg F
10% Recovered		423.8	deg F
50% Recovered		509.5	deg F
90% Recovered		604.8	deg F
End Point		657.7	deg F
Recovery		98.6	%
Residue		1.4	%

Daniel Thompson
Intertek Caleb Brett

4951A Adamo Drive, Suite 130, Tampa, Florida 33605
Post Office Box 75435, Tampa, FL 33675
Telephone: 813/248-5154 Fax 813/247-8762

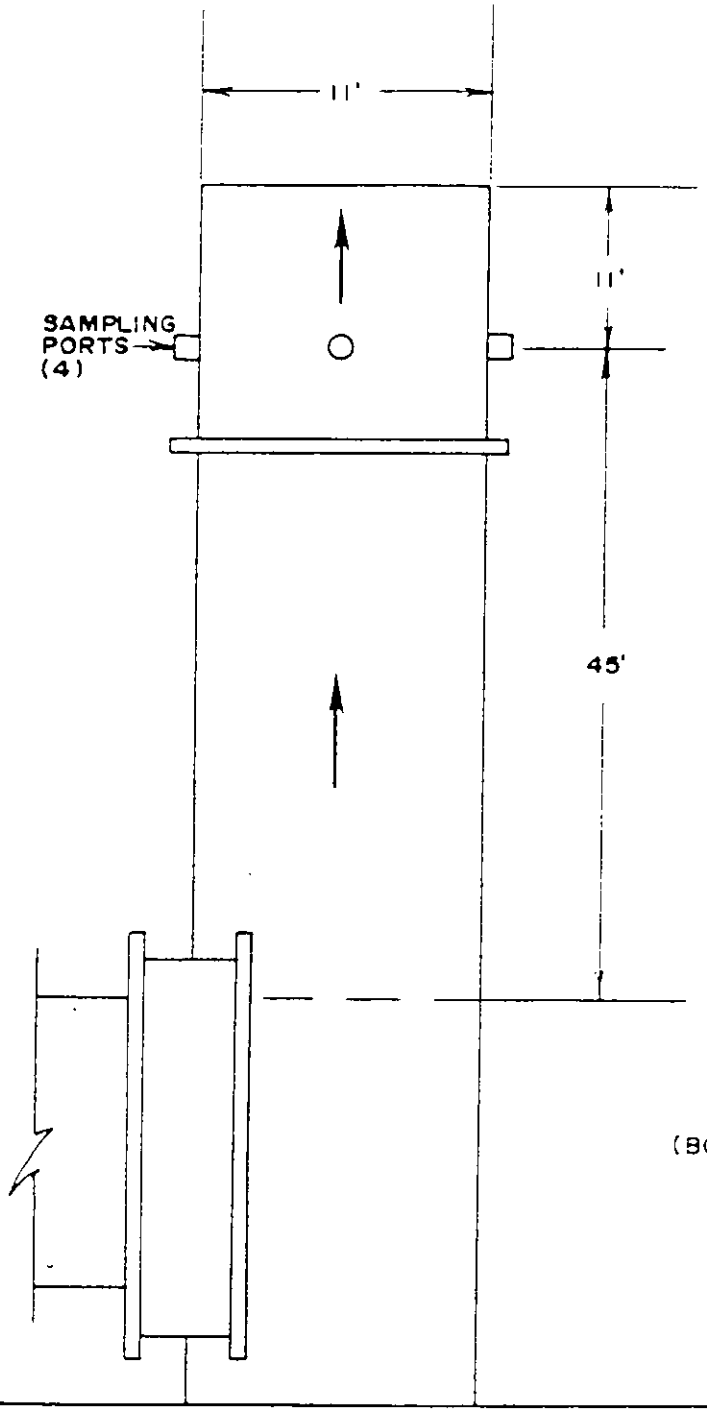
ATTACHMENT LC-E01-L4

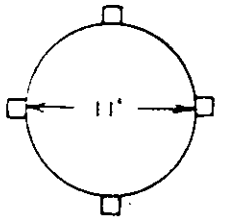
DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT LC-E01-L4
DESCRIPTION OF STACK SAMPLING FACILITIES

Lake Cogen is required by Permit AC35-196459 to perform annual stack testing for emissions from the combustion turbine in accordance with standard EPA reference methods. Pursuant to FAC 62-297.310(7), the annual stack test required is performed with the required stack sampling facilities. As specified by rule, the permanent test facilities meet the following:

- The exhaust stack is circular with a diameter of 11 feet.
- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports meet FAC 62-297.310(6) requirements (i.e., 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances).
- There are four sampling ports, 90 degrees apart have been installed on the circular stack.
- The working platform is at least 24 square feet in area, at least 3 feet wide, extends 180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety apparatus.





TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
1	2.77
2	8.84
3	15.54
4	23.36
5	33.00
6	46.99

(BOTH UNITS ARE IDENTICAL.)

NOTE: NOT TO SCALE

FIGURE 1.
SAMPLING POINT LOCATION
UNITS 1 & 2
LAKE COGEN LIMITED
UMATILLA, FLORIDA

AIR CONSULTING
and
ENGINEERING

ATTACHMENT LC-EOI-L5

OPERATIONS AND MAINTENANCE PLAN

ATTACHMENT LC-EOI-L5

OPERATIONS AND MAINTENANCE PLAN

The operation and maintenance of the two Lake Cogen combustion turbines and the ancillary equipment are performed in accordance with original equipment manufacturer's (OEM) specifications and requirements as stipulated in GE's owner/operator instructions – GEK 98493, vol. 1 – On-site Operation and Maintenance Manual (See attached cover page).

GEK 98493
Volume I

ON-SITE OPERATION AND MAINTENANCE MANUAL FOR GENERAL ELECTRIC LM6000 PA SERIES GAS TURBINES

GE INDUSTRIAL AERODERIVATIVE GAS TURBINES

GE PROPRIETARY INFORMATION

GE INDUSTRIAL AERODERIVATIVE GAS TURBINES
GENERAL ELECTRIC COMPANY
CINCINNATI, OHIO 45215-6301

31 December 1997
Change 5 30 May 2003

ATTACHMENT LC-E01-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT LC-EOI-L6

PROCEDURES FOR STARTUP/SHUTDOWN

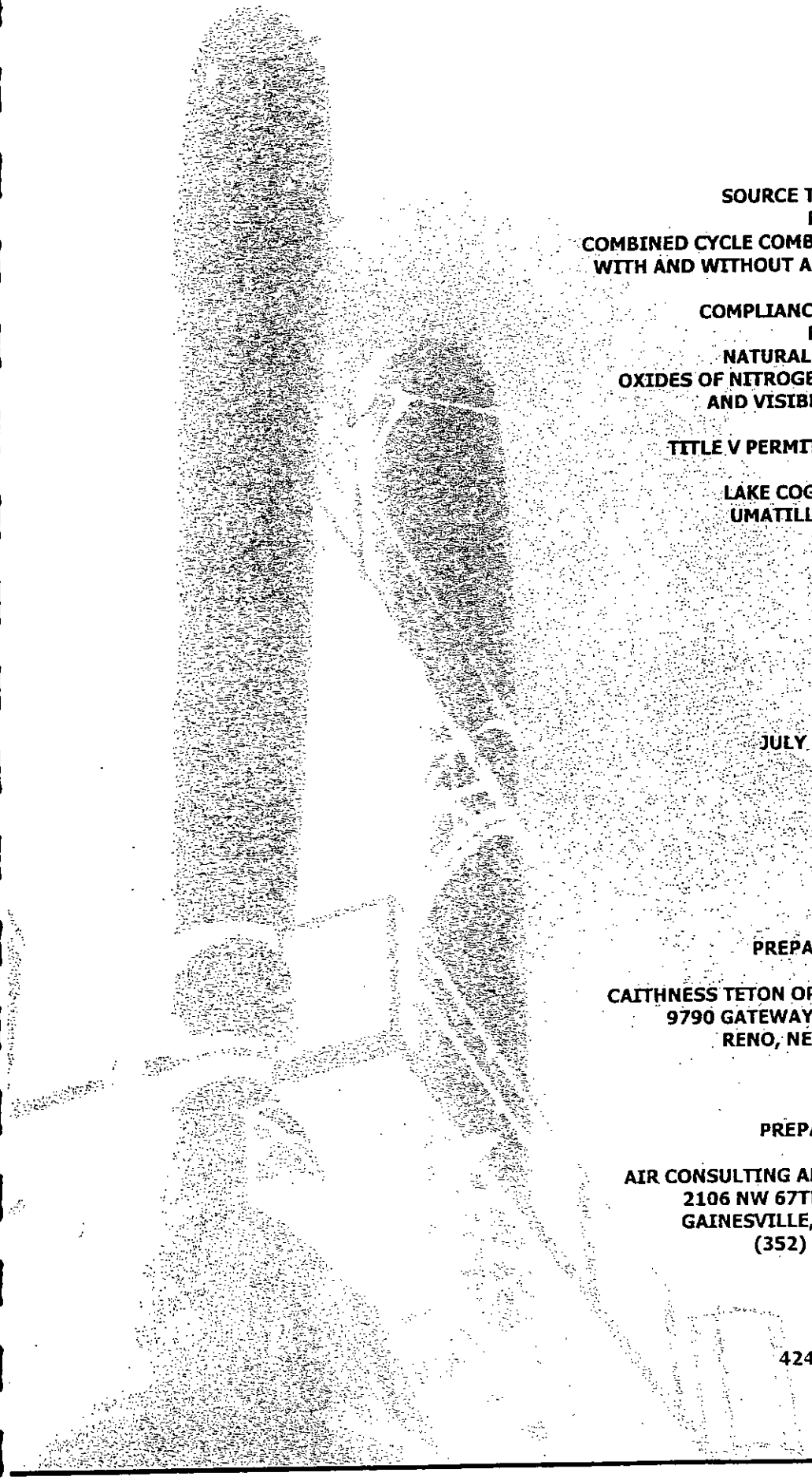
Startup for the combustion turbines begins with "lighting off" of the machines on natural gas or distillate oil. A period of from one to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, before putting the unit "on the line" and sending electrical power to the grid.

The combustion turbines (CTs) utilize water injection for NOx control during startup and shutdown. Emissions are continuously monitored by Continuous Monitor in System (CMS) for water to fuel ratio. If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with corrective actions taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control, or changing fuel combination(s). Best Operating Practices are adhered to and all efforts minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to a stop. The CT is then put "on turning gear" to prevent possible disfiguration of the turbine components.

ATTACHMENT LC-EOI-L7

COMPLIANCE DEMONSTRATION REPORTS / RECORDS



SOURCE TEST REPORT
FOR
COMBINED CYCLE COMBUSTION TURBINE – UNIT 1
WITH AND WITHOUT AUXILIARY DUCT BURNERS

COMPLIANCE EVALUATION
FOR
NATURAL GAS FIRING
OXIDES OF NITROGEN, CARBON MONOXIDE
AND VISIBLE EMISSIONS

TITLE V PERMIT 0694801-005-AV

LAKE COGEN LIMITED
UMATILLA, FLORIDA

JULY 11, 2006

PREPARED FOR:

CAITHNESS TETON OPERATING SERVICES, LLC
9790 GATEWAY DRIVE, SUITE 220
RENO, NEVADA 89521

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

424-06-03

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AIR CONSULTING
& ENGINEERING, INC.

2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32653
(352) 335-1889 FAX (352) 335-1891

REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Dagmar Fick

Dagmar Fick, Staff Engineer

8/2/2006

Date

EXECUTIVE SUMMARY

The annual compliance test results for the Unit 1 Combustion Turbine meet all mass emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 0694801-005-AV. All tests were conducted on natural gas firing only. The Unit is limited to 42.5 MW generation by General Electric.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions
NO_x	CT	36.51 lbs/hr, 23 ppm_vd @ 15% O_2	82.7 lbs/hr, 25ppm_vd @ 15% O_2
	DB	-1.21 lbs/hr, 0 lbs/MMBTU	18.0 lbs/hr, 0.1 lbs/MMBTU
	CT & DB	35.3 lbs/hr	100.7 lbs/hr
CO	CT	21.32 lbs/hr, 24 ppm_vd	54.6 lbs/hr, 28 ppm_vd
	DB	8.5 lbs/hr, 0.2 lbs/MMBTU	36.0 lbs/hr, 0.2 lbs/MMBTU
	CT & DB	29.85 lbs/hr	90.6 lbs/hr

Emission results are provided in Table 1.

No visible emissions were detected from the gas turbine or the gas turbine plus duct burner at full load.

SO_2 emissions based on fuel analysis was 0.0103 lb/hr at 42.5 MW.

1.0 INTRODUCTION

On April 25 and 26, 2005 Air Consulting and Engineering, Inc. performed annual compliance testing for Carbon Monoxide (CO), Oxides of Nitrogen (NO_x), Oxygen content (O_2) and Visible Emissions (VE) on the Unit 1 Combustion Turbine (CT) at Lake Cogen Limited in Umatilla, Florida.

The United States Environmental Protection Agency (EPA) Methods 20 (NO_x), 3A (O_2), 10 (CO), and 9 (VE) were used to conduct the tests.

Unit 1 Turbine was tested at full load with and without Duct Burners (DB) operating at maximum capacity and at three lower load levels, 25, 30 and 35 megawatts (MW).

Mr. Jim Miller of Lake Cogen coordinated the tests and Mr. Garry Kuberski of the Florida Department of Environmental Protection (FDEP) observed a portion of the testing.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the emission tests are summarized in Table 1, showing full load conditions with and without duct burners. Test results at different load levels are presented in Table 2.

The maximum power output of the combustion turbine was 42.5 megawatts (MW) during the test series.

The contribution of NO_x and CO emissions of the gas fired duct burners was determined by performing a test series with and without duct burner firing. The difference in emission rates was attributed to the duct burners (DB). This differential is difficult to obtain accurately as the turbine firing condition must be identical during the two test series, which is difficult to achieve. NO_x Duct Burner contribution was slightly negative (-0.03 lbs/MMBTU). Inlet Air Temperature and Water Flow Rates were 58.5° F and 43.1 GPM for CT operation only and 58.2° F and 43.1 GPM for CT plus Duct Burner Operations. The Water to Fuel Ratio was 1.107 for both operating conditions (see Appendix F for Plant Data). The cause of the negative NO_x contribution of the DB could be the fact, that the true differential is a very small margin, in this case the DB heat input is only 8.5% of the total heat input.

Duct burner emissions were calculated using the following formula:

$$\text{lbs/MMBTU DB} = \frac{(\text{lbs/hr CT+DB}) - (\text{lbs/hr CT})}{\text{DB Heat input MMBTUH (HHV)}}$$

Mass emissions of NO_x and CO were determined by multiplying the fuel factor (8710) derived lbs/MMBTU value by the heat input in terms of higher heating value.

Visible emissions with and without duct burners averaged 0.0 percent opacity for the highest six-minute period of each one-hour test (see Appendix D for VE data).

Compete emission summaries and data logger entries and strip chart copies are presented in Appendices B and C.

Table 1. Emission Summary
Unit 1 Combustion Turbine - Gas Fired
Lake Cogeneration, Ltd.
Umatilla, Florida
July 11, 2006

Run Number	Time	Oxygen	NOx Emissions				CO Emissions			CT Gas Flow	CT Heat Input		CT + DB Heat Input
		%	ppm	ppm 15% O2	lbs/hr	lbs/MMBTU	ppm	lbs/hr	lbs/MMBTU	scfm	MMBTUH HHV	MMBTUH LHV	MMBTUH HHV
Full Load CT only at 42.5 MW													
1	1102-1212	14.45	24.31	22.23	35.76	0.0819	24.95	22.33	0.0512	7051	436.6	394.9	NA
2	1231-1339	14.46	24.70	22.63	36.54	0.0834	23.60	21.25	0.0485	7080	438.4	396.6	NA
3	1353-1504	14.47	25.21	23.14	37.24	0.0853	22.66	20.38	0.0466	7054	436.8	395.1	NA
Average	---	14.46	24.74	22.67	36.51	0.0835	23.74	21.32	0.0488	7062	438.1	395.5	NA
Full Load CT at 42.5 MW with Duct Burner													
1	1539-1649	13.87	24.36	20.45	35.95	0.0753	32.20	28.92	0.0606	7054	436.8	395.1	477.2
2	1731-1839	13.85	23.48	19.64	34.61	0.0724	34.21	30.69	0.0642	7057	437.0	395.3	478.2
3	1851-2000	13.86	23.88	20.00	35.33	0.0737	33.25	29.94	0.0624	7077	438.2	396.4	479.6
Average	—	13.86	23.91	20.03	35.30	0.0738	33.22	29.85	0.0624	7063	437.3	395.6	478.3

Natural Gas Fd-Factor = 8710 MMBTU/dscf *MW CO = 28 lbs/lb-mole* *MW NOx = 46 lbs/lb-mole*
Heat Input HHV = (gas flow)(1032 dry Btu/cf)(60 min/hr)/10E6
lbs/hr = ppm(2.595 x 10^E-9)MW (20.9/20.9-%O2)(Fd)(Heat Input HHV)

SO2 Emissions (Subpart GG NSPS) = 1.03E-02 lbs/hr

Allowable Emissions
NOx =25 ppmvd @ 15%O2
CO = 28 ppmvd
DB NOx = 0.1 lbs/MMBTU
DB CO = 0.2 lbs/MMBTU

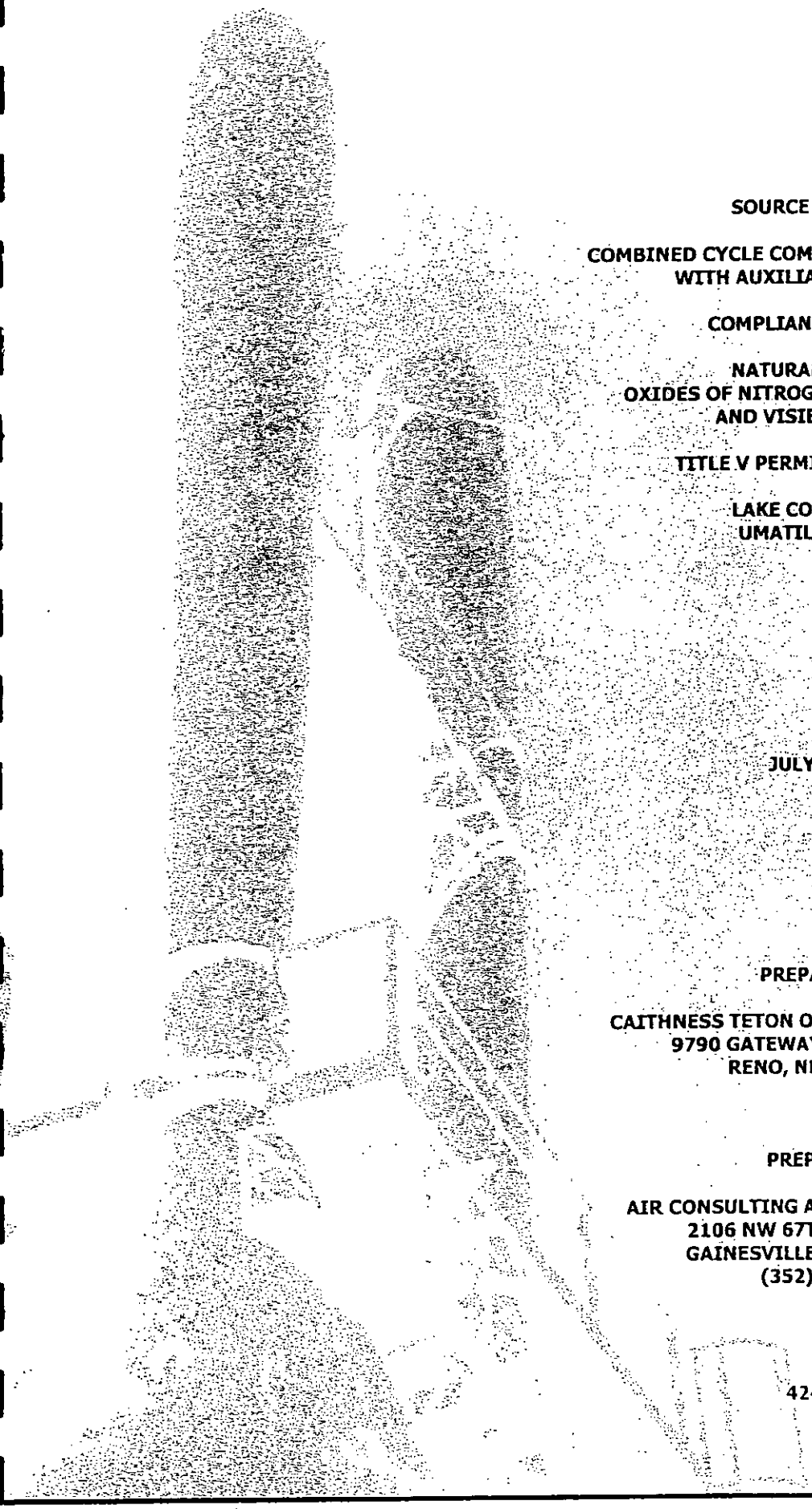
Duct Burner

Run	Gas Flow dscfm	HHV MMBTUH	LHV MMBTUH	NOx Contr. lbs/MMBTU	CO Contr. lbs/MMBTU
1	652	40.40	36.54	0.005	0.2
2	667	41.28	37.34	-0.047	0.2
3	668	41.38	37.43	-0.046	0.2
Average	**662**	**41.02**	**37.10**	**-0.029**	**0.2**

Table 2. NOx Emission Summary at Different Load Levels
Unit 1 Combustion Turbine - Gas Fired
Lake Cogeneration, Ltd.
Umatilla, Florida
July 11, 2006

Run Number	Time	Oxygen %	NOx Emissions ppm	NOx Emissions ppm 15% O2	NOx Emissions lbs/hr	NOx Emissions lbs/MMBTU	Gas Flow scfm	Heat Input MMBTUH HHV
25 MW								
1	0712-0728	15.51	17.87	19.54	20.25	0.0720	4542	281.2
2	0737-0753	15.50	18.08	19.76	20.35	0.0728	4515	279.6
3	0801-0817	15.53	18.60	20.43	21.10	0.0753	4535	280.8
Average	—	15.51	18.18	19.91	20.57	0.0734	4531	280.5
30 MW								
1	0827-0842	15.26	19.88	20.26	24.07	0.0746	5208	322.5
2	0852-0908	15.27	19.49	20.10	23.90	0.0740	5210	322.6
3	0917-0933	15.27	19.42	20.09	23.90	0.0740	5218	323.1
Average	—	15.27	19.60	20.15	23.96	0.0742	5212	322.7
35 MW								
1	0942-0958	14.99	21.68	21.66	29.00	0.0798	5868	363.3
2	1006-1022	14.97	21.58	21.47	28.80	0.0791	5877	363.9
3	1030-1046	14.99	21.71	21.69	29.10	0.0799	5889	364.6
Average	—	14.98	21.66	21.61	28.97	0.0796	5878	364.0

Natural Gas Fd-Factor = 8710 MMBTU/dscf
Heat Input HHV = (gas flow)(1032 dry Btu/cf)(60 min/hr)/10E6
lbs/hr = ppm(2.595 x 10^E-9)MW (20.9/20.9-%O2)(Fd)(Heat Input HHV)
MW NOx = 46



SOURCE TEST REPORT
FOR
COMBINED CYCLE COMBUSTION TURBINE – UNIT 2
WITH AUXILIARY DUCT BURNERS

COMPLIANCE EVALUATION
FOR
NATURAL GAS FIRING
OXIDES OF NITROGEN, CARBON MONOXIDE
AND VISIBLE EMISSIONS

TITLE V PERMIT 0694801-005-AV

LAKE COGEN LIMITED
UMATILLA, FLORIDA

JULY 12, 2006

PREPARED FOR:

CAITHNESS TETON OPERATING SERVICES, LLC
9790 GATEWAY DRIVE, SUITE 220
RENO, NEVADA 89521

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

424-06-03

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AIR CONSULTING
& ENGINEERING, INC.

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(352) 335-1889 FAX (352) 335-1891

REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Dagmar Fick

Dagmar Fick, Staff Engineer

8/3/2006

Date

EXECUTIVE SUMMARY

The annual compliance test results for the Unit 2 Combustion Turbine meet all mass emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 0694801-005-AV. All tests were conducted on natural gas firing only. The Unit is limited to 42.5 MW generation by General Electric.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions
NO_x	CT	39.6 lbs/hr, 24 ppm_vd @ 15%O_2	82.7 lbs/hr, 25ppm_vd @ 15% O_2
	DB	-0.16 lbs/hr, 0 lbs/MMBTU	18.0 lbs/hr, 0.1 lbs/MMBTU
	CT & DB	39.4 lbs/hr	100.7 lbs/hr
CO	CT	22.2 lbs/hr, 25 ppm_vd	54.6 lbs/hr, 28 ppm_vd
	DB	3.85 lbs/hr, 0.1 lbs/MMBTU	36.0 lbs/hr, 0.2 lbs/MMBTU
	CT & DB	26.0 lbs/hr	90.6 lbs/hr

Emission results are provided in Table 1.

No visible emissions were detected from gas turbine or gas turbine plus duct burner at full load.

SO_2 emissions based on fuel analysis were 9.51E-03 lbs/hr at 42.4 MW.

1.0 INTRODUCTION

On July 12, 2006 Air Consulting and Engineering, Inc. performed annual compliance testing for Carbon Monoxide (CO), Oxides of Nitrogen (NO_x), Oxygen content (O_2) and Visible Emissions (VE) on the Unit 2 Combustion Turbine (CT) at Lake Cogen Limited in Umatilla, Florida.

The United States Environmental Protection Agency (EPA) Methods 20 (NO_x), 3A (O_2), 10 (CO), and 9 (VE) were used to conduct the tests.

Unit 2 Turbine was tested at full load and at full load with Duct Burners (DB) operating at maximum capacity.

Mr. Jim Miller of Lake Cogen coordinated the tests and Mr. Garry Kuberski of the Florida Department of Environmental Protection (FDEP) observed a portion of the testing.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the emission tests are summarized in Table 1 showing full load conditions with and without duct burners.

The power output of the combustion turbine was 42.4 megawatts (MW) with and without duct burners. Inlet Air Temperature and Water Flow Rates were 58.7° F and 43.1 GPM for CT operation only and 58.6° F and 42.7 GPM for CT plus Duct Burner Operations. The NO_x water to fuel ratio averaged 1.104 without duct burners and 1.107 with duct burners on (see Appendix F for Plant Data).

The contribution of NO_x and CO emissions of the gas fired duct burners was determined by performing a test series with and without duct burner firing. The difference in emission rates is attributed to the duct burner contribution. This differential is difficult to obtain accurately as the turbine firing condition must be identical during the two test series, which is difficult to achieve. Correct evaluation of the DB contribution is also made difficult due to the low ratio of the DB/CT heat input. The current test results show the DB NO_x contribution as slightly negative (-0.004 lbs/MMBTU). This apparent difficulty is attributable to the small increase in water to fuel ratio between testing the CT and CT/DB. The increase would reduce NO_x levels while increasing CO levels. It is also noticed that there was a slight decrease in turbine load during DB firing.

Duct burner emissions were calculated using the following formula:

$$\text{lbs/MMBTU DB} = \frac{(\text{lbs/hr CT+DB}) - (\text{lbs/hr CT})}{\text{DB Heat input MMBTUH (HHV)}}$$

Mass emissions of NO_x and CO were determined by multiplying the fuel factor (8710) derived lbs/MMBTU value by the heat input in terms of higher heating value. All values were bias-corrected (see Appendix B, Emission Test Results).

Visible emissions with and without duct burners averaged 0.0 percent opacity for the highest six-minute period of each one-hour test (see Appendix D for VE data).

Compete emission summaries with data logger entries and strip chart copies are presented in Appendices B and C.

Table 1. Emission Summary
Unit 2 Combustion Turbine - Gas Fired
Lake Cogeneration, Ltd.
Umatilla, Florida
July 12, 2006

Run Number	Time	Oxygen	NOx Emissions				CO Emissions			CT Gas Flow	CT Heat Input		CT + DB Heat Input
		%	ppm	ppm 15% O2	lbs/hr	lbs/MMBTU	ppm	lbs/hr	lbs/MMBTU	scfm	MMBTUH HHV	MMBTUH LHV	MMBTUH HHV
Full Load CT only at 42.4 MW													
1	1200-1308	14.41	27.03	24.57	39.61	0.0905	23.18	20.67	0.0472	7076	437.7	395.9	NA
2	1324-1432	14.38	27.22	24.65	39.81	0.0908	25.61	22.79	0.0520	7085	438.3	396.4	NA
3	1445-1553	14.45	26.50	24.25	39.30	0.0893	26.52	23.09	0.0544	7109	439.8	397.8	NA
Average	—	14.41	26.92	24.49	39.57	0.0902	25.10	22.18	0.0512	7090	439.9	396.7	NA
Full Load CT at 42.4 MW with Duct Burner													
1	1621-1729	13.75	26.64	21.99	38.80	0.0810	29.72	26.34	0.0550	7103	439.4	397.5	479.0
2	1745-1854	13.78	27.13	22.47	39.62	0.0828	28.67	25.75	0.0538	7099	439.1	397.2	478.7
3	1906-2013	13.80	27.24	22.63	39.80	0.0834	29.19	26.00	0.0544	7091	438.6	396.8	477.5
Average	—	13.78	27.00	22.36	39.41	0.0824	29.19	26.03	0.0544	7098	439.1	397.2	478.4

Natural Gas Fd-Factor = 8710 MMBTU/dscf ***MW CO = 28 lbs/lb-mole*** ***MW NOx = 46 lbs/lb-mole***
Heat Input HHV = (gas flow)(1031 dry Btu/cf)(60 min/hr)/10E6
lbs/hr = ppm(2.595 x 10^E-9)MW (20.9/20.9-%O2)(Fd)(Heat Input HHV)

SO2 Emissions (Subpart GG NSPS) = 9.51E-03 lbs/hr CT

Allowable Emissions
NOx =25 ppmvd @ 15%O2
CO = 28 ppmvd
DB NOx = 0.1 lbs/MMBTU
DB CO = 0.2 lbs/MMBTU

Duct Burner

Run	Gas Flow dscfm	HHV MMBTUH	LHV MMBTUH	NOx Contr. lbs/MMBTU	CO Contr. lbs/MMBTU
1	641	39.65	35.87	-0.020	0.1
2	640	39.59	35.81	-0.005	0.1
3	628	38.87	35.16	0.013	0.1
Average	**636**	**39.37**	**35.61**	**-0.004**	**0.1**