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

Golder Associates

September 8, 2008

Our Ref.: 08389568

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

Re: PASCO COGENERATION FACILITY; REQUEST FOR AIR CONSTRUCTION PERMIT AND TITLE V REVISIONS
FACILITY NO. 1010071

Dear Mr. Holtom:

The enclosed air quality permit application package is submitted by Caithness Generation Services on behalf of Pasco Cogeneration, Limited, L.P. ("Pasco CoGen"), owners of a 110.5 MW (nominal) natural gas-fired cogeneration power plant in Dade City, Florida. This facility operates under the authority of Title V Air Operation Permit Number 1010071-004-AV, which has an effective date of September 14, 2007. This Title V permit expires on July 3, 2010, and a renewal application is due by January 4, 2010. This current version of the TV permit had incorporated the provisions of Air Construction Permit No. 1010071-002-AC, which was issued for a SPRINT upgrade. Therefore, the purpose of this application package is to request the following:

- Incorporate the newly installed CAIR program NOx CEMs as the designated method of NOx compliance, thus eliminating the need for a CAM Plan;
- Request the maximum heat input rate for firing with natural gas to be increased from 427 MMBtu/hr/CT to 450 MMBtu/hr/CT (~ 5.4 percent increase), based on better firing efficiency with the SPRINT upgrade and the reasonable assurance provided by the CEMs installation; and
- Eliminate the need for annual NOx source test and source test requirement resulting from use of temporary lease components during CT repair and/or service periods. The CEMs RATA testing would be conducted in lieu of annual NOx testing.

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

Sincerely,

Scott Osbourn, P.E.
Enclosure

cc: Tom Grace, Caithness Generation Services
Richard Christmas, Plant Manager, Pasco Cogen

Permit File Scanning Request from Elizabeth

Priority: ☐-ASAP (Public Records Request, etc.) ☒-Place in Normal Scanning Queue

Facility ID	Project#	Type	PSD #	Submittal Date	Batch #
1010071	006	AC	177E	SEP 30 2010	

☒ File Approved For Disposal ☐ Correspondence ☐ Intent ☐ Permit ☐ Draft

☐ Return File to BAR ☐ Amendment ☒ Application ☐ OGC ☐ Proposed

Document Date 9-11-08

Department of Environmental Protection

RECEIVED
SEP 11 2008
BUREAU OF AIR REGULATION

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Pasco Cogeneration Ltd.**	
2. Site Name: **Pasco Cogeneration**	
3. Facility Identification Number: **1010071**	
4. Facility Location... Street Address or Other Locator: **14850 Old State Road 23** City: **Dade City** County: **Pasco** Zip Code: **33523**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

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

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

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

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

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

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

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

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

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

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

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

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

Application Comment

The purpose for this permit revision is to do the following:

- **Incorporate the newly installed CAIR program NOx CEMs as the designated method of NOx compliance, eliminating the need for a CAM Plan. The CEMS RATA testing would be conducted in lieu of annual NOx testing;**
- **To request the maximum heat input rate for firing with natural gas to be increased from 427 MMBtu/hr/CT to 450 MMBtu/hr/CT, based on better firing efficiency with the SPRINT upgrade and the reasonable assurance provided by the CEMs installation; and**
- **Eliminate the need for annual NOx source test and source test requirement resulting from use of temporary lease components during CT repair and/or service periods. The CEMS RATA testing would be conducted in lieu of annual NOx testing.**

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001 002	Two GE LM-6000 Combustion Turbines (CTs), each with HRSG and Duct Burner (DB)	AF2C	0
	See Attachment PC-A1-AC for specifics		

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement **Not Applicable**

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

1. Owner/Authorized Representative Name :

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

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

4. Owner/Authorized Representative E-mail Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name: **Richard Christmas**

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, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Pasco Cogeneration Ltd.**
   Street Address: **14850 Old State Road 23**
   City: **Dade City** State: **Florida** Zip Code: **33523**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(352) 523 - 0062** ext. Fax: **(352) 523 - 0572**

5. Application Responsible Official E-mail Address: **rchristmas@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

   August 19, 2008
   Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Scott H. Osbourn**
   Registration Number: **57557**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **5100 Lemon Street, 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 E-mail 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 [X], 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 (che☐ 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

Date 9/8/08

(seal)

SCOTT OSBOURN LICENSE NO. 57557 STATE OF FLORIDA PROFESSIONAL ENGINEER

* Attach any exception to certification statement.

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

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **383.5** North (km) **3139.0**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **28° 22' 28"** Longitude (DD/MM/SS) **82° 11' 21"**	
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 : **Pasco Cogeneration facility consists of two GE LM-6000 combustion turbine units (CTs), each unit equipped with an inlet chiller and a supplementary fired duct burner (DB) and exhausting through Heat Recovery Steam Generator (HRSG) stacks. The CTs have dual fuel (natural gas and distillate fuel) capability. Both CTs recently underwent SPRINT upgrade for enhanced efficiency**			

Facility Contact

1. Facility Contact Name: **Richard Christmas, Plant Manager**
2. Facility Contact Mailing Address... Organization/Firm: **Pasco Cogeneration Ltd.** Street Address: **12850 Old State Road 23** City: **Dade City** State: **FL** Zip Code: **33532**
3. Facility Contact Telephone Numbers: Telephone: **(352) 523 - 0062** ext. Fax: **(352) 523 - 0572**
4. Facility Contact E-mail Address: **rchristmas@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: **Richard Christmas, Plant Manager**
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: **Pasco Cogeneration Ltd.** Street Address: **14850 Old State Road 23** City: **Dade City** State: **FL** Zip Code: **33523**
3. Facility Primary Responsible Official Telephone Numbers... Telephone: **(352) 523 - 0062** ext. Fax: **(352) 523 - 0572**
4. Facility Primary Responsible Official E-mail Address: **rchristmas@caithnessenergy.com**

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. [X] Title V Source	
4. [X] 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. [X] 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:

NSPS for stationary Combustion Turbines, 40 CFR 60 Subpart KKKK now applies in lieu of Subparts GG and Dc for the CTs and DBs, respectively. 40 CFR 60 Subpart Kb applies to the fuel oil storage tank vent.

As the result of Clean Air Interstate Rule (CAIR), the facility was required to install 40 CFR 75 certified CEMs monitoring systems for NOx monitoring. The use of this NOx CEMS for compliance eliminates the need for a NOx CAM Plan.

This permit revision is also to request an increase in the allowable heat input rate and to incorporate the installation of the CEMs technology required by CAIR and its ancillary monitoring, recordkeeping, reporting requirements to demonstrate emission compliance. Subsequently, the current CAM Plan, which relies on monitoring of the water-to-fuel (W/F) ratio, is no longer necessary.

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOx – Nitrogen Oxides	**A**	
CO – Carbon Monoxide	**A**	
PM – Particulate Matter - Total	**B**	
PM10 – Particulate Matter, 10 micron	**B**	
SO2 – Sulfur Dioxide	**B**	
VOC – Volatile Organic Compounds	**B**	

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

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

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)
   ☐ Attached, Document ID:_____ [x] Previously Submitted, Date: **07/29/04**
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)
   ☐ Attached, Document ID:_____ [x] Previously Submitted, Date: **07/29/04**
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)
   ☐ Attached, Document ID:_____ [x] Previously Submitted, Date: **07/29/04**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID:_____ [x] Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   [x] Attached, Document ID: **PC-FI**
3. Rule Applicability Analysis:
   [x] Attached, Document ID: **PC-FI**
4. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ [x] Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   ☐ Attached, Document ID:_____ [x] 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

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ 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: **PC-FI-C1**
   ☐ 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: **PC-FI-C2**
   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 Onsite 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: **PC-FI-C3** ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   [x] Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   [x] Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   [x] Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ [x] Previously Submitted, Date: **5/16/08**
   ☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   [x] Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

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

III. EMISSIONS UNIT INFORMATION

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

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

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

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

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.)

[x] 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).

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

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

2. Description of Emissions Unit Addressed in this Section:
Two SPRINT modified GE LM-6000 Combustion Turbines (CTs), each with HRSG and Duct Burner. SPRINT modifications incorporated in Operating Permit 1010071-004-AV.

3. Emissions Unit Identification Number: **EU 001 and EU 002**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		**1 July 1993**	**49**

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

[ ] Acid Rain Unit

[x] CAIR Unit

[ ] Hg Budget Unit

9. Package Unit: **GE LM-6000 CTs w/ Zurn HRSG, equipped w/chiller system.**
Manufacturer: Model Number:

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

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

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Water injection to control NOx emissions**
2. Control Device or Method Code: **028**

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

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 **450 (LHV @ 51°F) per CT**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year

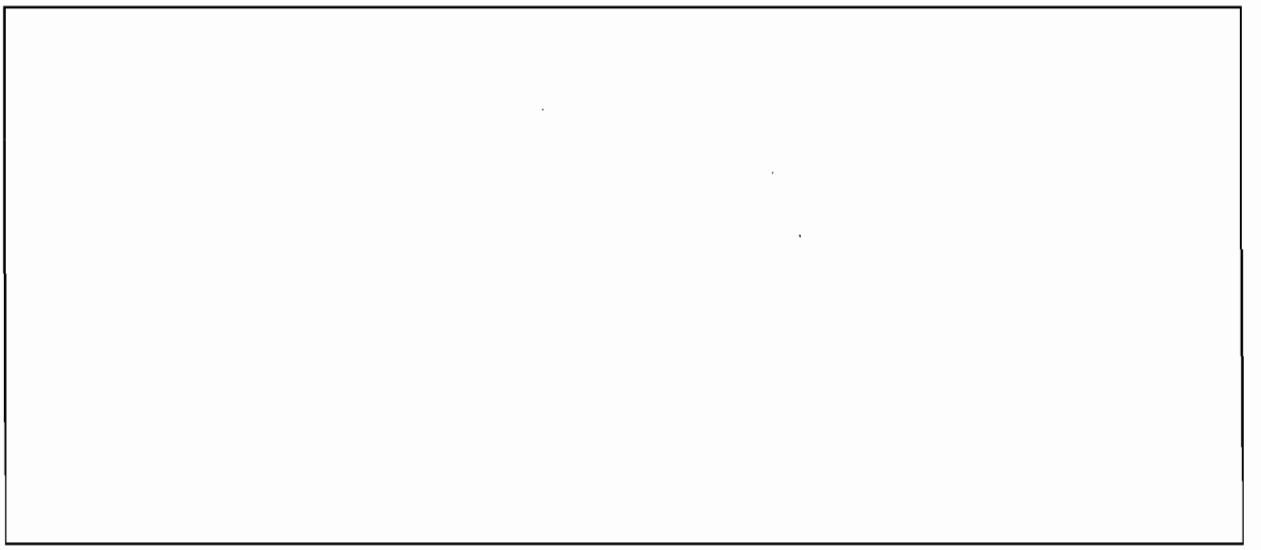
6. Operating Capacity/Schedule Comment:

1. **TV Permit No. 1010071-004-AV previously incorporated the SPRINT upgrade conducted under Air Construction Permit No. 1010071-002-AC, including the following:**

When firing natural gas, the maximum heat input was increased to 427 MMBtu/hr (LHV @ 51°F) with the SPRINT upgrade. Maximum heat input on fuel oil firing remains 424 MMBTU/hr/CT (LHV @ 51°F). The maximum heat input for the Duct Burners remains 90 MMBTU/hr/DB (HHV). The DBs only fire natural gas.

2. **As part of this revision submittal (therefore, the requested concurrent processing of an air construction permit application), it is requested that the maximum heat input, when firing on natural gas in either CT, be increased from 427 MMBtu/hr to 450 MMBtu/hr (LHV @ 51°F). Maximum heat input on fuel oil firing remains 424 MMBTU/hr/CT (LHV @ 51°F). The maximum heat input for the Duct Burners remains 90 MMBTU/hr/DB (HHV).**

The emissions assessment and regulatory applicability analysis for this request is provided in Attachment PC-FI of this application package.



C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Unit 1 stack (EU-001); Unit 2 stack (EU-002)**	
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: **250 °F**	9. Actual Volumetric Flow Rate: **320,253 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 individual CT unit. Emission point calculations are based upon baseload conditions at 51°F for natural gas firing.

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 Combustion Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million cubic feet burned**	
4. Maximum Hourly Rate: **0.433**	5. Maximum Annual Rate: **3,793**	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: 3,793. Maximum rate at 51°F with heat content (MMBtu/SCC) based upon LHV. Maximum percent sulfur: 2 grain/100 scf. DB rates are 90 MMBtu/hr and 525,000 MMBtu/yr each (~5,833 hr/yr/DB of operation).**		

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: **701.05**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05***	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **130**
10. Segment Comment: ***Under NSPS Subpart KKKK, the maximum fuel oil sulfur content is 0.05%. Maximum hourly and annual fuel usage based upon a permit limitation of 2,921 gal/hr/CT and 701,050 gal/yr/CT. The DBs do not fire fuel oil.**		

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			EL

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **90%**
3. Potential Emissions: **148.3** lb/hour **404.7** tons/year	4. Synthetically Limited? ☐ 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 permit limit. Hourly potential emission based on CTs at 51°F operating conditions on fuel oil. Annual based on current facility limit. Annual limit for NOx reflects firing < 701,050 gallons of fuel oil per unit per year.

11. Potential, Fugitive, and Actual Emissions Comment:

Hourly potential emissions based upon 51°F operating conditions on fuel oil. Annual based upon facility limit. AC51-196460. PSD-FL-177.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **85.5 lb/hr**	4. Equivalent Allowable Emissions: **85.5** lb/hour **404.7** tons/year
5. Method of Compliance: **Request change from Annual Compliance Test (EPA Method 7E or 20) to use of CAIR program CEMs unit and annual RATA**	
6. Allowable Emissions Comment (Description of Operating Method): **Total for both units combined when natural gas firing. CT units 1 and 2 are operated with wet injection design to produce 25 ppmvd NOx @ 15% O2. Allowable emissions established as BACT in AC Permit, Table 1A.**	

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

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: **18 lb/hr**	4. Equivalent Allowable Emissions: **18** lb/hour **404.7** 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/MMBtu**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **103.5 lbs/hr**	4. Equivalent Allowable Emissions: **103.5** lb/hour **404.7** tons/year
5. Method of Compliance: **Request change from Annual Compliance Test (EPA Method 7E or 20) to use of CAIR program CEMs unit and annual RATA.**	
6. Allowable Emissions Comment (Description of Operating Method): **Combined emissions limits for CTs and DBs as established as BACT. Annual emissions for facility. Natural gas firing only.**	

Allowable Emissions Allowable Emissions __ of ___

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

Allowable Emissions Allowable Emissions __ of ___

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **92** lb/hour **350.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **28 ppmvd for CT and 0.2 lb/MMBtu for DB** 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 CO 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 upon permit limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

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

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: **34.5 lb/hr**	4. Equivalent Allowable Emissions: **34.5** lb/hour **350.3** tons/year
5. Method of Compliance: **Five Year Renewal Compliance Test; EPA Method 10, if operated greater than 400 hr/year.**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing; CTs 1 and 2; established as BACT; basis of limit is 18 ppmvd.**	

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: **36 lb/hr**	4. Equivalent Allowable Emissions: **36** lb/hour **350.3** tons/year
5. Method of Compliance: **None**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing of the Duct Burners in Units 1 and 2. Established as BACT. Basis of limit is 0.2 lb/MMBtu.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **92 lb/hr**	4. Equivalent Allowable Emissions: **92** lb/hour **350.3** tons/year
5. Method of Compliance: **Five Year Renewal Compliance Test; EPA Method 10.**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing for CTs and DBs; established as BACT.**	

Allowable Emissions Allowable Emissions __ of ___

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

Allowable Emissions Allowable Emissions __ of ___

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **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 on permit limit.**	
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 Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **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 test; 10% or less**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing; CT Units 1 & 2, established as BACT in Permit; Table 1A; basis of limit is 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 VE test; 10% or less; only required if operated >400 hr/yr operation on fuel oil**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing; CTs 1 & 2; established as BACT; basis of limit is 0.026 lb/MMBtu.**	

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 Duct burners in Units 1 & 2; established as BACT; basis of limit 0.006 lb/ MMBtu.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 4 of 4

1. Basis for Allowable Emissions Code: **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 VE test; 10% or less**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing for CTs and DBs. Established as BACT**	

Allowable Emissions Allowable Emissions __ of ___

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

Allowable Emissions Allowable Emissions __ of ___

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM-10**	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. NOTE, as done in previous permit applications, PM-10 is assumed equal to PM-Total. Testing based upon non-condensable portion fraction of test only. If the FLDEP requires both condensable and non-condensable fractions, then the factor for PM-10 should be doubled to 0.052 and the potential emissions doubled to 40 lbs/ hr and 54 tons/yr, respectively. For the purpose of this application it has not been and it remains the same as in the original construction permit and Title V application.

11. Potential, Fugitive, and Actual Emissions Comment:

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

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

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

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 VE test; 10% or less; only if operated on fuel oil >400 hours per year**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing; CTs 1 & 2; established as BACT; basis of limit is 0.026 lb/ MMBtu.**	

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 Duct Burners Unit 1 & 2; established as BACT; basis of limit is 0.006 lb/ MMBtu.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **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 VE test; 10% or less.**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing for CTs and DBs. Established as BACT**	

Allowable Emissions Allowable Emissions __ of __

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

Allowable Emissions Allowable Emissions __ of __

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **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**	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 while operating on natural gas. Annual based upon permit limit.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 4

1. Basis for Allowable Emissions Code: **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 limit. (See permit Condition A11 of 1010071-004-AV).**	
6. Allowable Emissions Comment (Description of Operating Method): **Natural gas firing; CT units 1 and 2; established as permit limit in AC51-196460.**	

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 A11 of 1010071-004-AV).**	
6. Allowable Emissions Comment (Description of Operating Method): **Oil firing; CT units 1 & 2.**	

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): **Natural gas firing of Duct Burners 1 & 2. (Permit condition A11 of 1010071-004-AV indicates that testing required only if CO standard is exceeded).**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **8.8 lb/hr**	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): **Natural gas firing for CTs and DBs.**	

Allowable Emissions Allowable Emissions __ of __

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

Allowable Emissions Allowable Emissions __ of __

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **43.8** lb/hour **10.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05% sulfur in fuel oil.** Reference: **NSPS, Subpart KKKK**	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 NSPS Subpart KKKK and the permitted limit on hours of firing fuel oil.

11. Potential, Fugitive, and Actual Emissions Comment:

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

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

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

Allowable Emissions Allowable Emissions __ of __

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

Allowable Emissions Allowable Emissions __ of __

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour **0.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05% sulfur in fuel oil** Reference: **NSPS Subpart KKKK and 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 NSPS Subpart KKKK and permit limit when firing distillate fuel oil. Both CTs combined.

11. Potential, Fugitive, and Actual Emissions Comment:

Annual based upon permit limit for both units combined.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.4 tpy**	4. Equivalent Allowable Emissions: lb/hour **0.4** 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 51-196460, Table 1A for distillate oil firing. 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):	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **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 Permit AC51-196460; specific condition no. 6.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

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

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information... Manufacturer: **CISCO Systems** Model Number: **10008140**	Serial Number:
5. Installation Date: **01 July 1993 (original); Upgraded system 01 November 2007**	6. Performance Specification Test Date: **December 20, 2007**
7. Continuous Monitor Comment: **NOTE: in 2007 per CAIR requirements, a NOx CEMS was installed, tested and certified. This replaces the water-to-fuel ratio monitoring system for compliance purposes in the permit.**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

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:_____ [x] Previously Submitted, Date **07/29/04**

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)
   [ ] Attached, Document ID: _____ [x] Previously Submitted, Date **07/29/04**

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)
   [ ] Attached, Document ID: _____ [x] Previously Submitted, Date **07/29/04**

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)
   [ ] Attached, Document ID: _____ [x] Previously Submitted, Date **07/29/04**
   [ ] 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)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [x] Not Applicable

6. Compliance Demonstration Reports/Records:
   [x] Attached, Document ID: **PC-EU1-I1**
   Test Date(s)/Pollutant(s) Tested: **5/31- 6/1/07 for NOx and VE**
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] To be Submitted, Date (if known):_____
   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

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

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: _____ [x] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ [x] Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ [x] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: [x] Attached, Document ID: **PC-EU1-I2**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID:_____ [x] Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ [x] Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ [x] Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [2] of [2]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

[x] 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).

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

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

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

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		**1 July 1993**	**49**

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

[ ] Acid Rain Unit

[ ] CAIR Unit

[ ] Hg Budget Unit

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment: **This emissions unit consists of a fuel storage tank, facility-wide fugitive and vent emissions from various locations throughout the facility. These emission points are listed in PC-E02-B6. With the exception of NOx emissions from the 1,275 kW emergency generators, the cumulative emissions from these units are less than the reporting thresholds. List of exemptions : 62-210.300(3)(a)5,7,9,10,11,12,15,16,20,21,22,23, 24; 62-296.310(2) and (3). Trivial sources included for completeness**

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control ___ of ___

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **701,050 gal/ yr/CT**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	
This is the maximum process rate per CT to reflect fuel oil throughput from the oil storage tank.	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

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

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

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

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
VOCs			**NS**

G. VISIBLE EMISSIONS INFORMATION

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

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

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: Exceptional Conditions: Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: None	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation __ of ___

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION
Section [2] of [2]

H. CONTINUOUS MONITOR INFORMATION Not Applicable

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

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION
Section [2] of [2]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: NA ☐ 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)
   ☐ Attached, Document ID: NA ☐ 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)
   ☐ Attached, Document ID: NA ☐ 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)
   ☐ Attached, Document ID: NA ☐ 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)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   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: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

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: _____ [x] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ [x] Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ [x] 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: _____ [x] Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ [x] Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ [x] Not Applicable

Additional Requirements Comment

ATTACHMENT PC-AI-AC

APPLICATION COMMENT

ATTACHMENT PC-AI-AC

APPLICATION COMMENT

This air permit application id for Pasco Cogeneration Facility in Pasco County, Dade City, Florida.

The application structure is as follows:

<u>Emission Units</u>	
General:	2 combustion turbines (CTs) 2 heat recovery steam generators (HRSGs) 2 duct burners (DBs)
Emission Points (2):	2 stacks for CT/HRSG Units 1 & 2
Fuel Segments:	Natural gas and distillate oil only
<u>Pollutants</u>	
CT/HRSG	NOx, CO, PM/PM_{10}, VOC, and SO_2
<u>VE Emissions</u>	
CT/HRSG	VE limits applicable
<u>CEM</u>	
CT/HRSG	NOx, O_2, fuel consumption
<u>PSD</u>	
CT/HRSG	NOx, CO

ATTACHMENT PC-FI

EMISSIONS ASSESSMENT FOR HEAT INPUT INCREASE

ATTACHMENT PC-FI

Regulatory Applicability Analysis for Heat Input Increase

This attachment addresses the following items associated with this project:

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

PROJECT DESCRIPTION

The Pasco Cogeneration facility consists of two GE LM-6000 combustion turbine units (CTs), each unit equipped with an inlet chiller and a supplementary fired duct burner (DB) and exhausting through Heat Recovery Steam Generator (HRSG) stacks. The CTs have dual fuel (natural gas and distillate fuel) capability. Both CTs recently underwent a SPRay INTercooling (SPRINT) upgrade for enhanced efficiency. Compliance testing was conducted which demonstrated compliance with the limits associated with this upgrade.

Subsequently, it was discovered that the SPRINT turbine upgrade could allow additional firing of the unit beyond the level requested. Therefore, this application also serves to request an additional heat input increase of 5.4 percent [i.e., from the current allowable heat input of 427 MMBtu/hr (LHV) to 450 MMBtu/hr (LHV)]. The vendor of the compressor upgrade has provided guarantees to Pasco Cogen that the plant will continue to meet the NO_x and CO permit emission limitations of 25 ppmdv@15% O_2 and 28 ppmdv, respectively.

EMISSION ESTIMATES

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

As stated previously, the improved compressor blade design is expected to increase the firing capability of the combustion turbine by up to an additional 5.4 percent. Table 1F presents the highest 2-year average baseline and Table 1G provides the projected annual emissions which are achievable after the completion of the upgrade project (i.e., an additional 5.4 percent increase in the allowable heat input).

REGULATORY REVIEW

The first aspect of the regulatory review involves the classification of the change from a programmatic perspective. The facility is considered an existing major source for the Prevention of Significant Determination (PSD) regulations as the permitted potential emissions for the site exceed the 100 ton per year threshold for both oxides of nitrogen (NO_x) and carbon monoxide (CO). Hence, the projected emissions increases (past actual to future projected actual) are compared to the PSD Significant Emission Rates (SERs). The emission increases are presented in Table 1G. The projected criteria pollutant emission increases are considerably less than the corresponding PSD SERs. Hence, PSD review is not required for this construction permit application.

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

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

Note that the emission netting information was developed using the simplifying assumption that the compressor upgrade would produce the maximum heat input increase of 5.4 percent compared to baseline operations. This assumption greatly overestimates the likely emission change, as the additional heat input capability would only be exercised during those periods in which the plant is operating the turbine at base load in order to sell power into the grid during conditions of extremely high demand. The impact of the compressor upgrade on fuel firing and emissions during the typical plant dispatch conditions will likely be to reduce fuel firing and emissions as compared to the existing condition. This reduction is because the improved capabilities of the combustion turbine after the compressor upgrade will allow the plant to operate at a more efficient heat rate. Even with the use of conservative simplifying assumptions, Table 1G demonstrates that emissions increases after the compressor upgrade will not exceed the SERs that would trigger PSD review for affected pollutants.

A previous request for a heat input increase had triggered applicability of the recently promulgated New Source Performance Standard (NSPS), Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines*. This applicability is due to the fact that this request constitutes a change in the method of operation accompanied by an increase in the actual hourly emission rate of a regulated pollutant, commencing after February 18, 2005. The facility, as currently permitted, will meet the allowable emissions requirements in this newly promulgated NSPS. This NSPS regulates the pollutants SO_2 and NO_x.

TABLE 1-A

2003 FACILITY EMISSIONS SUMMARY
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Emission Unit 001		Emission Unit 002		Total 2003 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	79.8	0.0	76.4	0.0	156.2
NO_x	122.0	0.0	117.0	0.0	239.0
PM	7.9	0.0	7.5	0.0	15.4
PM_{10}	7.9	0.0	3.5	0.0	11.4
SO_2	3.6	0.0	3.5	0.0	7.1
VOC	4.8	0.0	4.6	0.0	9.4

Reviewed by:
Reviwed on:

TABLE 1-B

2004 FACILITY EMISSIONS SUMMARY
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Emission Unit 001		Emission Unit 002		Total 2004 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	79.5	0.0	78.8	0.0	158.3
NO_x	121.6	0.0	120.6	0.0	242.2
PM	7.8	0.0	7.8	0.0	15.6
PM_{10}	7.8	0.0	7.8	0.0	15.6
SO_2	3.6	0.0	3.6	0.0	7.2
VOC	4.8	0.0	4.8	0.0	9.6

TABLE 1-C

2005 FACILITY EMISSIONS SUMMARY
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Emission Unit 001		Emission Unit 002		Total 2005 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	68.0	0.0	65.1	0.0	133.1
NO_x	104.0	0.0	99.7	0.0	203.7
PM	6.7	0.0	6.4	0.0	13.1
PM_{10}	6.7	0.0	6.4	0.0	13.1
SO_2	3.1	0.0	3.0	0.0	6.1
VOC	4.1	0.0	3.9	0.0	8.0

Reviewed by:
Reviwed on:

TABLE 1-D

2006 FACILITY EMISSIONS SUMMARY
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Emission Unit 001		Emission Unit 002		Total 2006 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	60.9	0.0	63.2	0.0	124.1
NO_x	93.1	0.0	96.7	0.0	189.8
PM	6.0	0.0	6.2	0.0	12.2
PM_{10}	6.0	0.0	6.2	0.0	12.2
SO_2	2.8	0.0	2.9	0.0	5.7
VOC	3.7	0.00	3.8	0.0	7.5

Reviewed by:
Reviwed on:

Golder Associates

TABLE 1-E

2007 FACILITY EMISSIONS SUMMARY
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Emission Unit 001		Emission Unit 002		Total 2007 Emissions (TPY)
	Nat. Gas (TPY)	Dist. Oil (TPY)	Nat. Gas (TPY)	Dist. Oil (TPY)	
CO	65.8	0.0	67.5	0.0	133.3
NO_x	100.8	0.0	103.4	0.0	204.2
PM	6.5	0.0	6.7	0.0	13.2
PM_{10}	6.5	0.0	6.7	0.0	13.2
SO_2	3.0	0.0	3.1	0.0	6.1
VOC	4.0	0.0	4.1	0.0	8.1

Reviewed by:
Reviwed on:

TABLE 1-F

EMISSION ANALYSIS
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Total 2003 Emissions (Tons/Year)	Total 2004 Emissions (Tons/Year)	Total 2005 Emissions (Tons/Year)	Total 2006 Emissions (Tons/Year)	Total 2007 Emissions (Tons/Year)	Highest 2-yr Average	CY
CO	156.2	158.3	133.1	124.1	133.3	157.3	2003-2004
NO_x	239.0	242.2	203.7	189.8	204.2	240.6	2003-2004
PM	15.4	15.6	13.1	12.2	13.2	15.5	2003-2004
PM_{10}	11.4	15.6	13.1	12.2	13.2	14.4	2004-2005
SO_2	7.1	7.2	6.1	5.7	6.1	7.2	2003-2004
VOC	9.4	9.6	8.0	7.5	8.1	9.5	2003-2004

TABLE 1-G

EMISSION ANALYSIS
Pasco Cogeneration Facility - ID No. 1010071

Air Pollutant	Highest 2-yr Average (TPY)	5.4 % HI Increase (TPY)*	PSD Netting Analysis		
			Increase (TPY)	PSD SER	PSD ?
CO	157.3	165.7	8.5	100	NO
NO_x	240.6	253.6	13.0	40	NO
PM	15.5	16.3	0.8	25	NO
PM_{10}	14.4	15.1	0.8	15	NO
SO_2	7.2	7.5	0.4	40	NO
VOC	9.5	10.0	0.5	40	NO

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Air Permit No. 1010071-002-AC
Addition of SPRINT Inter-Cooling to Existing 2-on-1 Combined Cycle Gas Turbine Unit
(Emissions Units 001 and 002)

COUNTY

Pasco County, Florida

APPLICANT

Pasco Cogeneration, Limited
ARMS Facility ID No. 1010071

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

October 28, 2003

{Filename: 1010071-002-AC - TEPD}

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Pasco Cogeneration, Limited
20 West 9th Street
Kansas City, MO 64105

Authorized Representative:
Mr. Leo Rajter, Vice President

Processing Schedule

06/10/03 Received the application for a minor source air pollution construction permit to avoid PSD review.
06/20/03 Department requested additional information.
09/17/03 Department received additional information.
10/07/03 Department requested additional information.
10/22/03 Department received additional information; application complete.

Facility Description and Location

The existing facility primarily consists of two 42 MW combined cycle gas turbines (EU-001 and EU-002) configured with chiller systems to maintain the inlet compressor air at 51° F and 100% relative humidity. Each combined cycle unit incorporates a 90 MMBtu per hour, gas-fired duct burner system in the heat recovery steam generator (HRSG). Each HRSG directs steam to a common steam turbine-electrical generator set, which produces another 26.5 MW of electricity. Alternatively, steam may be delivered to an adjacent citrus processing plant. The gas turbines primarily fire natural gas, but can also fire No. 2 distillate oil as a restricted alternate emergency backup fuel. Other sources of air pollution include a 170,000 gallon oil storage tank (EU-003), two 1274 kW diesel emergency generators (EU-004), and fugitive emissions (EU-005). [1]

The existing facility is located in Pasco County at 14850 Old State Road 23, Dade City, Florida. The UTM Coordinates are Zone 17, 383.5 km East and 3139.0 km North.

SIC No. 4931 – Electric and other services combined (cogeneration)

Regulatory Categories

Title III: Based on the application, the existing facility is not a major source of hazardous air pollutants (HAP).

Title IV: Based on the application, the existing facility has no units subject to the acid rain provisions.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

Project Description

Initial Permit No. PSD-FL-177 to construct the 2-on-1 combined cycle gas turbine system was issued on November 20, 1991. The gas turbines began operation in 1995. The applicant proposes to add SPRINT technology to the two existing gas turbines to enhance performance. "SPRINT" stands for *SPR*ay *INT*ercooling, which involves the injection of atomized water into the compressor between the high-pressure and low-pressure compressors. This results in evaporative cooling of the compressor inlet air and higher mass flow rates. Benefits include increased power output with more efficient fuel usage. The maximum heat input rate when firing natural gas is expected to increase from 423 to 427 MMBtu per hour. The power output is expected to increase from 39.5 to 50.2 MW depending on ambient conditions. [2] The applicant initially provided the

following PSD applicability analysis with regard to CO and NOx emissions.

Table 1A. Applicant's Initial CO and NOx PSD Applicability Analysis

Pollutant	2-Year Avg. TPY	Proposed Cap TPY	Difference TPY	PSD SER TPY	Subject to PSD?
Carbon Monoxide (CO)	237.6	337.0	99.4	100	No
Nitrogen Oxides (NOx)	328.4	368.0	39.6	40	No

The 2-year average shown in the table is based on 1998 and 1999 operation data. During these years, the gas turbines averaged about 7850 hours per year of operation. The applicant initially proposed CO and NOx emission caps just below the PSD significant emissions rates to avoid PSD preconstruction review for the project.[2] However, the applicant later changed this request. As an electric utility steam generating unit, the applicant does not believe the proposed project will result in actual increased annual emissions discounting any emissions that can be attributed to demand growth. As such, the applicant requests a permit to authorize the construction and reporting requirements to demonstrate that the proposed project did not result in PSD-significant emissions increases.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

Federal Regulations

This project is also subject to the applicable federal provisions regarding air quality as established by the EPA in the following sections of the Code of Federal Regulations (CFR).

Title 40, CFR	Description
Part 60	Subpart A - General Provisions for NSPS Sources
	NSPS Subpart Dc - Small Industrial-Commercial-Institutional Steam Generating Units
	NSPS Subpart GG – Gas Turbines
	Applicable Appendices

General PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required only in areas currently in attainment with the National

Ambient Air Quality Standard (AAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories (Table 62-212.400-1, F.A.C.), or
- 5 tons per year of lead.

For new projects at existing PSD-major sources, actual pollutant emissions increases are reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in Table 62-212.400-2, F.A.C. Increases in actual pollutant emissions resulting from the project that exceed these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The existing plant site is located in Pasco County, which is an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standard (AAQS). Actual and potential emissions of carbon monoxide (CO) and nitrogen oxides (NOx) are greater than 250 tons per year. Therefore, the existing plant is a PSD-major facility in accordance with Rule 62-212.400, F.A.C. Therefore, new projects must undergo a review for PSD applicability.

3. DEPARTMENT'S REVIEW

Description of SPRINT Technology

As previously mentioned, "SPRINT" is an acronym for *SPR*ay *INT*er-cooling, which can provide up to 20% more power output for the given ambient conditions. An automated control system meters approximately 6-7 gpm of de-mineralized water to a series of 24 spray nozzles. The water is atomized into droplets that are less than 20 μm in diameter, which are then injected between the high-pressure and low-pressure compressors. The LM6000 is a high-pressure ratio gas turbine design, which carefully controls the compressor discharge temperature because the compressed air is used to cool the hot section components. Injecting atomized water just before the high-pressure compressor significantly reduces the temperature, which increases the mass flow rate and provides a greater compression ratio. The result is higher output and improved efficiency. The following figure is a half section view of the LM6000 SPRINT gas turbine, which shows the location of the spray nozzles between the low pressure and high pressure compressors. [3, 4, 5]

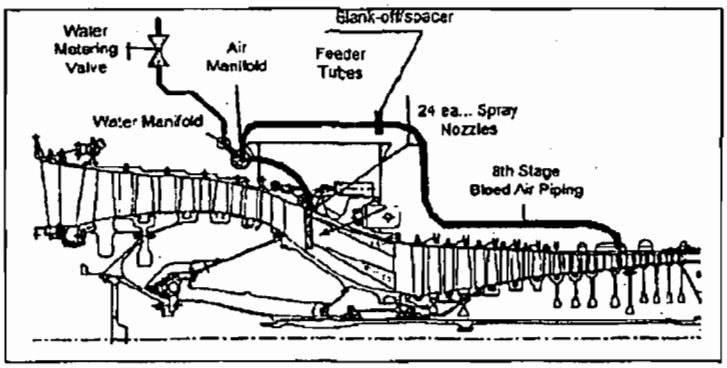


Figure 3-1. Half Section View of LM6000 Gas Turbine Compressor Section [3]

The benefits of SPRINT are more pronounced at high ambient temperatures. At ISO conditions (59° F), SPRINT can provide an additional 9% more power. However, at an ambient temperature of 90° F, SPRINT can provide 20% more power. The following figure schematically shows the impacts of SPRINT inter-cooling.

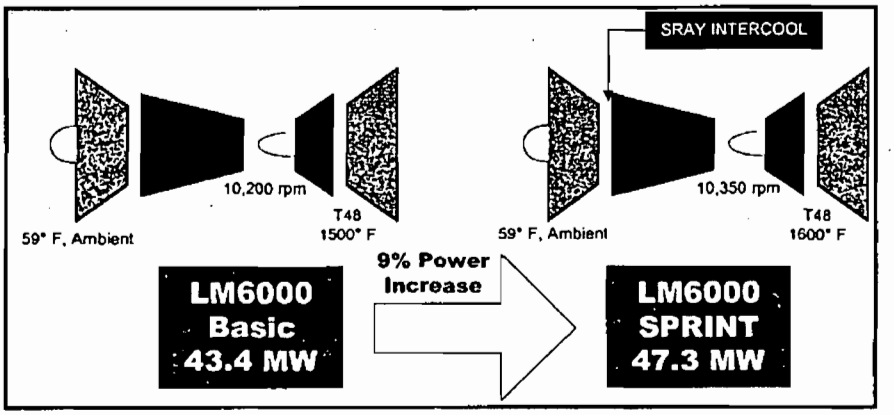


Figure 3-2. Schematic of SPRINT Inter-Cooling Technology[4]

SPRINT technology can be incorporated into new units or be retrofitted to either existing LM6000 PC model (conventional combustors) or the LM6000PD (dry low emissions combustors) model gas turbines systems. The Pasco Cogeneration gas turbines use the more conventional combustors with water injection to reduce NOx emissions. For the LM6000 gas turbine, SPRINT can improve the maximum output to nearly 55 MW with a thermal efficiency of 52%. In previous retrofit applications, SPRINT allowed some plants to shut off, or greatly reduce, usage of existing chiller systems to save associated operating and maintenance costs.

Hourly Emission Rates

The following table shows the maximum expected hourly emission rates before and after the addition of SPRINT.[2]

Table 3A. Comparison of Short Term Emission Rates

Pollutant	Current, lb/hr		Proposed, lb/hr		SPRINT Difference, lb/hr	
	Gas Only	Gas w/DB	Gas Only	Gas w/DB	Gas Only	Gas w/DB
Carbon Monoxide (CO)	56.0	92.0	56.5	92.5	0.5	0.5
Nitrogen Oxides (NOx)	85.5	103.5	86.0	104.0	0.5	0.5
Particulate Matter (PM/PM10)	5.0	7.6	5.0	7.6	Neg.	Neg.
Sulfuric Acid Mist (SAM)	0.2	0.3	0.2	0.3	Neg.	Neg.
Sulfur Dioxide (SO_2)	4.6	5.6	4.6	5.6	Neg.	Neg.
Volatile Organic Compounds (VOC)	3.4	8.8	3.4	8.8	Neg.	Neg.

Notes:

a. Consistent with the current permits, hourly emissions are the total for both gas turbine units.

b. Maximum hourly emission rates are from the current Title V permit and the proposed application.

c. SO_2 emissions from gas firing were estimated based on the maximum heat input rates and a conservative assumption for fuel sulfur of 2 grains of sulfur per 100 scf of natural gas.

d. Similar to oil firing calculations, SAM emissions were assumed to be 4% of the SO_2 emissions.

The following table summarizes CO and NOx emissions test data as compiled form the Department's ARMS database.

Table 3B. Actual Hourly CO and NOx Emissions, Firing Natural Gas

Test Date [1]	Unit 1		Unit 2	
	CO ppmvd	NOx ppmvd @ 15% O2	CO ppmvd	NOx ppmvd @ 15% O2
09/1996	---	23.5 21.32 w/DB	---	23.4 22.5 w/DB
09/1997	23.6 19.1 w/DB	20.9 18.0 w/DB	16.0 13.4 w/DB	23.1 18.5 w/DB
07/1998	---	24.1	---	24.6
03/1999	21.3	24.9	---	---
08/1999	---	25.0	---	24.9
07/2000	---	25.0	---	24.5
07/2001	---	---	---	24.6
08/2001	---	23.7	---	---
08/2002	---	23.4	---	23.8
07/2003	---	---	---	24.3
08/2003	---	24.5	---	---

Notes:

a. Based on information in the Department's ARMS database.

b. Tests conducted in September of 1995 were reported in terms of "lb/hour". The Department did not have enough information to estimate emissions in terms of "ppmvd".

In general, the test data shows that actual CO and NOx emissions are maintained below the emissions standards of 28 and 25 ppmvd, respectively. It is interesting to note that both the CO and NOx concentrations when duct firing were lower than without duct firing.

Annual Emission Rates

As shown in the table for hourly emission rates, the project is expected to have a negligible impact with regard to emissions of PM/PM10, SAM, SO2, and VOC. Therefore, the potential annual emissions increases from both gas turbines will remain less than the PSD significant emission rates for these pollutants. In addition, the gas turbines have fired little oil. Based on past Annual Operating Reports, the maximum oil firing occurred in 1998 when Unit 1 fired oil for approximately 7 hours (19,690 gallons) and Unit 2 for approximately 17 hours (48,380 gallons). According to the plant engineer, oil is only occasionally fired to prove to the steam host that it is reliable as a backup fuel.[6] Therefore, this review does not consider oil firing because oil firing is restricted to emergency backup operation ($\leq$ 240 hours per year) and the project will not change any conditions related to oil firing. The remainder of this review will focus on emissions of carbon monoxide (CO) and nitrogen oxides (NOx) from gas firing. The following table shows the future potential emissions with SPRINT compared to the two-year annual average emissions from the two gas turbines combined.

Table 3C. Comparison of Past Actual to Future Potential Annual Emissions

Pollutant	2-Year Avg. TPY	Future Potential TPY	Difference TPY	PSD SER TPY	Subject to PSD?
Carbon Monoxide (CO)	237.6	344.8	107.2	100	Potentially
Nitrogen Oxides (NOx)	328.4	406.9	78.5	40	Potentially

Notes:

a. The 2-year average actual emission rate is based on the Annual Operating Reports for 1998 and 1999 and includes gas combustion in the duct burner system.

b. Future potential emissions are based on the maximum expected hourly emissions from firing only natural gas and an average turbine inlet temperature of 59° F.

c. Maximum annual emissions are based on 8760 hours per year of gas firing, of which 5833 hours include duct burning. Originally, each HRSG duct burner was specified at 150 MMBtu per hour and limited to 525,000 MMBtu per year, which is equivalent to 3500 hours per year of full load operation. Each installed HRSG duct burner is actually 90 MMBtu per hour, which results in about 5833 hours of operation per year based on the annual gas firing limitation.

The above table shows that a direct comparison of the past actual to future potential annual emissions could trigger PSD applicability. For this reason, the applicant initially requested a CO cap of 337 tons per year and a NOx cap of 368 tons per year, which result in net emissions increases just below the PSD significant emission rates. However, in accordance with Rule 62-210.200(97), F.A.C., the existing combined cycle unit is considered *electric utility steam generating unit*, which is defined as:

> "Any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the unit."

As previously mentioned, the rated capacity of the steam turbine electrical generator in the existing 2-on-1 combined cycle unit is 26.5 MW. In addition, steam that is supplied to the steam host represents only a small fraction of the potential capacity. Therefore, the existing 2-on-1 combined cycle system is considered an electric utility steam generating unit. Rule 62-212.200(11)(d), F.A.C. defines *actual emissions* for these units as:

> "For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following a physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the owner or operator maintains and submits to the Department on an annual basis, for a period of 5 years representative of normal post-change operations of the unit, within the period not longer than 10 years following the change, information demonstrating that the physical or operational change did not result in an emissions increase. The definition of "representative actual annual emissions" found in 40 CFR 52.21(b)(33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C."

40 CFR 52.21(b)(33) defines *representative actual annual emissions* as:

> "Representative actual annual emissions means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within 10 years after that change, where the Administrator determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Administrator shall:
>
> (i) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act; and
>
> (ii) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to

the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole."

As an electric utility steam generating unit, Pasco Cogeneration Ltd. projects that the addition of SPRINT will have little impact with regard to actual emissions from these units. In other words, future representative actual emissions due to the addition of SPRINT technology would be less than the 2-year average actual annual emissions discounting any emissions due to demand growth that could have been accommodated prior to the change. The applicant agrees to submit the required reports for a period of 5 years demonstrating that the SPRINT project did not result in a net actual annual emissions increase.

Conclusion

Based on conversations with the applicant[6], current operating practices for the plant include the following:

- Both units operate near capacity during the day;
- One unit shuts down at night and one unit continues to operate as necessary;
- Units are cycled each day for the nighttime shutdown to maintain equivalent hours on each unit;
- Duct burners are used for on-peak demand;
- Chiller system is used for on-peak demand, mostly during the summer; and
- Units only fire distillate oil as a restricted emergency backup fuel (< 240 hours per year).

Although the addition of SPRINT is a substantial investment (~ $7 million for both units combined), it will not change the current operating practices at the plant. SPRINT will be used nearly all of the time, which is expected to decrease operation of the chiller system and duct firing in order to save on operational expenses. SPRINT will also be used when firing oil, but will have a negligible impact with regard to emissions for the 240 hours per year allowed for oil firing. For comparison purposes, the following table shows the maximum annual emissions increases due *solely* to the addition of SPRINT technology when firing natural gas and neglecting emissions from other operating conditions.

Table 3C. Potential Annual Emissions Increases Due Solely to the Addition of SPRINT

Pollutant	Gas Only TPY	Gas w/DB TPY	Total TPY
Hours per Year	2927	5833	8760
Carbon Monoxide (CO)	0.7	1.5	2.2
Nitrogen Oxides (NOx)	0.7	1.5	2.2

Notes:

a. Potential annual emissions are the total for both units firing natural gas.

b. Potential annual emissions are based on the difference between the current permitted maximum hourly emission rate and the proposed maximum hourly emissions rate with SPRINT.

c. Maximum annual emissions are based on 8760 hours per year of gas firing, of which 5833 hours include duct burning.

As shown, the maximum expected impacts due only to SPRINT appear minimal. Although SPRINT allows operation at a higher generating capacity with slightly increased emissions, it will also tend to replace operation of the existing chiller and duct burner systems, which provide similar benefits. Therefore, it is unlikely that the SPRINT project will result in increased actual emissions.

4. PRELIMINARY DETERMINATION

The Department approves the applicant's request and will issue a draft permit to authorize the project with the following requirements:

- Authorization to install SPRINT inter-cooling technology on each unit.

- Modification of the maximum hourly CO and NOx mass emission rates (lb/hour) when using SPRINT.
- Requirement for initial and annual CO and NOx emissions tests that will establish the actual emission rates from each modified unit.
- Identification of the 2-year average CO and NOx annual emissions.
- Submittal of reports for at least 5 years following the SPRINT project to demonstrate that the project did not result in PSD-significant net emissions increases.
- Requirement for PSD preconstruction review should the SPRINT project result in actual net emissions increases greater than the PSD significant emission rates.

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in significant net emissions increases. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

REFERENCES

1. Title V Air Operation Permit No. 1010071-001-AV for Pasco Cogeneration Ltd.
2. Application by Pasco Cogeneration Ltd. Requesting an Air Construction Permit to Add SPRINT Technology to the Two Existing Gas Turbines (Project No. 1010071-002-AC).
3. "LM6000 SPRINT in Service with British REC"; Article from the magazine *International Turbomachinery* dated September/October 1998
4. "LM6000 Now with SPRINT Power Boost"; Article from a 1999 Company Brochure by S&S Energy Products: A GE Power Systems Business
5. "Inter-cooling for LM6000 Gas Turbines" by Mark McNeely; Article from the 1998 July/August Edition of the magazine *Diesel and Gas Turbine Worldwide*
6. Phone conference between the Department (Jeff Koerner) and the applicant (Tom Grace and plant engineer); October 1, 2003

ATTACHMENT PC-FI-C1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

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

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

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

Chapter 62-4, F.A.C.

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

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

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 PC-FI-C2

COMPLIANCE REPORT AND PLAN

PASCO COGEN, LTD.
NCP DADE POWER, LLC., GENERAL PARTNER

14850 Old State Road 23 • Dade City, FL 33525
Tel (352) 523-0062 • Fax (352) 523-0572

January 21, 2008

Mr. Bill Schroeder
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

RE: Pasco Cogen Ltd., Facility ID No. 1010071-001-AV,
Year 2007 Annual Title V Permit Certification Submittal

Dear Mr. Schroeder:

Attached for your review and use is the Year 2007 Title V Compliance Statement for the Pasco Cogen facility. A copy of this report is also being submitted to USEPA Region IV as previously requested by the Department.

All reporting issues and operational discrepancies were brought to the Department's attention in the four quarterly facility summary and excess emission reports submitted for calendar year 2007.

The four quarterly summary and excess emission reports were submitted to the Department on April 2006, July 2006, October 2006 and January, 2007. There were a number of minor emission limit exceedances. All of the minor exceedances described in these reports were attributed to startup/ shutdown situations or equipment malfunction, and were allowable and acceptable under operating conditions stipulated in the Operating Permit. All exceedances were within the recovery time allowed under the site permit.

The failure to provide the Department full 15 day notice prior to conducting a source test, as delineated in the Department's Warning Letter of September 13, 2007 is also addressed in this submittal. As required under Section C of the attached Annual Certification Form, the following summarizes the incident (as defined in the Department's Warning Letter of September 13, 2007):

1. Emissions unit identification number.
   - Emission Unit 001 was the affected unit.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
   - Specific condition no. 24 of permit. There was no change to the permit condition.
3. Description of the requirement of the permit condition.
   - Requires at least 15 days notice prior to the date on which each formal compliance test is to begin.

4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).

   - Failure to provide proper written notification for the compliance testing performed over January 3, 4 & 5, 2007 was noted in the Departments warning letter dated September 13, 2007.

5. Beginning and ending dates of periods of noncompliance.

   - Test was performed over January 3, 4 & 5, 2007.

6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.

   - Failure to provide timely written notice of formal compliance test. Matter resolved via discussion with the Department and with the review of permit condition with plant management.

7. Dates of any reports previously submitted identifying this incident of noncompliance.

   - Item not applicable.

Based upon reasonable inquiry and review of the Pasco Cogen facility's performance, we believe we have provided you with a reasonable report that reflects the facility's compliance status during the year 2007. If you have any questions or require additional information with regard to this submittal please feel free to contact me. My telephone number is (775) 850-2248.

For Pasco Cogeneration LP
Sincerely,

Thomas A. Grace, CHMM
Manager, Environmental Resources

W/attachment

Cc: USEPA Region IV
Atlanta Federal Center
Attn: Air and EPCRA Enforcement Branch
61 Forsyth Street SW
Atlanta, GA 30303-3104
(404) 562-9099

J. Delgado
R. Christmas @ Pasco

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

x **Annual Requirement**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
01/01 through 12/31 of 2007 (year)	03/01/08

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Pasco Cogeneration Ltd.

Site Name: Pasco Cogeneration Facility ID No. 1010071 County: Pasco

COMPLIANCE STATEMENT (Check only one of the following three options)

____ **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

____ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

X **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

Richard X Christmas — JAN. 21, 2008

(Signature of Title V Source Responsible Official) *(Date)*

Name: Richard Christmas Title: Plant Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

_____ _____

(Signature of Acid Rain Source Designated Representative) *(Date)*

Name:_____ Title:_____

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

ATTACHMENT PC-FI-C3

REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

Section I. Facility Information.
Subsection A. Facility Description.
This facility consists of two combustion turbines (CT), each with a chiller system (to maintain inlet combustion air at 51 °F and 100% relative humidity), duct burners (DB) and heat recovery steam generators (HRSG). Each of the combustion turbines is connected to an electric generator rated at 42 MW, while the two heat recovery steam generators furnish steam to a citrus processing facility and service a common steam turbine which is connected to a electric generator rated at 26.5 MW. The gas turbines are fired with natural gas with No. 2 fuel oil as a backup fuel, and the duct burners are fired with natural gas only. Nitrogen oxides (NOx) emissions from the CTs are controlled by water injection.

~~Compliance Assurance Monitoring (CAM) is applicable to the two combustion turbines for the water injection NOx control systems.~~

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

Based on the Title V permit renewal application received July 29, 2004, this facility is not a major source of hazardous air pollutants (HAPs). It is a major source of nitrogen oxides (NOx) and carbon monoxide (CO).

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

E.U.ID No.	Brief Description
001	Unit No. 1 - Combustion Turbine with chiller system, DB, and HRSG
002	Unit No. 2 - Combustion Turbine with chiller system, DB, and HRSG

Unregulated Emission Units and/or Activities

003	Fuel Oil Storage Tank (170,000 gal.)
004	Diesel Fuel Fired Emergency Generators (2 @ 1,275 kW)
005	Facility-Wide Fugitive and Vent Emissions

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

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History
Statement of Basis

These documents are on file with permitting authority:
Title V permit renewal application received July 29, 2004
Additional information submitted December 14, 2004
Title V revision application dated October 12, 2006

16. Record Retention - All of the records required by this facility shall be kept for the most recent 5-year period and made available to the Department upon request.
[Rule 62-213.440(1)(b)2.b, F.A.C.]

17. Record Maintenance - At a minimum, all records and logs required by this permit shall be updated monthly. [Rule 62-4.070(3), F.A.C.]

*(**Note to Permittee:** Also reference Appendix TV-6, items 12.(14)(b) and (c) and 43. for additional recordkeeping requirements.)*

Excess Emissions

18. Startup, Shutdown, Malfunction - Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

~~*(Permitting Note: This rule is not applicable to sources subject to PSD, NSPS, or NESHAP regulations.)*~~

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

20. Sudden and Unforeseeable Events - A statement that 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).
[Rule 62-213.440(1)(d)5, F.A.C.]

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

Testing Requirements

22. Stack Sampling Facilities - The requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., Stationary Sources - Emission Monitoring, and 40 CFR 60, Appendix A. (See attached Appendix SS-1 - Stack Sampling Facilities.)
[Rule 62-297.401, F.A.C.]

Section III. Emissions Unit(s) and Conditions.

*(**Effective Date Note**: Unless otherwise noted, the effective date of the specific conditions in this section is 07/03/05, which was the effective date for Title V renewal operation permit 1010071-003-AV.)*

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001	Unit No. 1 - Combustion Turbine (CT) with chiller system, SPRINT spray inter-cooling, duct burner (DB), and heat recovery steam generator (HRSG).
002	Unit No. 2 - Combustion Turbine (CT) with chiller system, SPRINT spray inter-cooling, duct burner (DB), and heat recovery steam generator (HRSG).

This nominal 109 MW cogeneration facility consists of two identical GE LM-6000 combustion turbines (CTs), each with a chiller system (to maintain inlet combustion air at 51 °F and 100% relative humidity), SPRINT spray inter-cooling, a duct burner (DB), and a Zurn heat recovery steam generator (HRSG). Each of the combustion turbines is connected to an electric generator rated at 42 MW without SPRINT and approximately 52 MW with SPRINT, while the two heat recovery steam generators furnish steam to a citrus processing facility and service a common steam turbine which is connected to a electric generator rated at 26.5 MW. The gas turbines are fired with natural gas, with low sulfur No. 2 fuel oil as a backup fuel, at a maximum permitted heat input rate of 424 MMBtu/hour without SPRINT and approximately 427 MMBtu/hour with SPRINT. The duct burners are each fired with natural gas at a maximum permitted heat input rate of 90 MMBtu/hour. Water injection is used to reduce NOx emissions from the combustion turbines when firing natural gas and low sulfur distillate oil. ~~Continuous Assurance Monitoring (CAM) applies for NOx.~~ General Electric's "SPRINT" spray inter-cooling technology consists of a system that will automatically meter approximately 9 to 12 gpm of de-mineralized water to a series of 24 spray n nozzles and injected between the high pressure and low pressure compressors. This significantly reduces the temperature which increases the mass flow rate resulting in higher output and increased efficiency.

Permitting note: (***IMPORTANT REGULATORY CLASSIFICATIONS*** - These emission units are regulated under NSPS - 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, and NSPS - 40 CFR 60, Subpart A, all adopted and incorporated by reference in Rule 62- 204.800(8), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration; Construction Permit PSD-FL-177, and the Best Available Control Technology (BACT) Determination, dated November 20, 1991. These units are not affected by the Acid Rain Program since they meet the requirements of 40 CFR 72.6(b)(4).

The following conditions apply to the emissions units listed above:

Permitting Notes:

All references to Construction Permit AC51-196460 refer to permit AC51-196460 (PSD-FL-177) as amended on March 14, 1994 and April 25, 1994.

All references to tons per year are defined as tons per any 12 consecutive month period.

All temperatures cited in this Subsection refer to turbine inlet air temperatures.

Essential Potential to Emit (PTE) Parameters

A1. Methods of Operation – Fuels

a. Combustion Turbines (CT): Only natural gas as the primary fuel, with an emergency backup fuel of distillate (No. 2) fuel oil having a maximum sulfur content of 0.1 percent by weight, shall be fired in the combustion turbines. *(Note : See also Cond. No. A10.a.2.for a more stringent NSPS sulfur limit.)*

b. Duct Burners (DB): Only natural gas shall be fired in the duct burners.

[Rules 62-4.160(2), 62-213.410(1), and 62-212.400, (BACT) F.A.C.; and Construction Permit AC51-196460]

A2. Permitted Capacity - Maximum Heat Input Rate

a. Combustion Turbines (CTs) (when not utilizing SPRINT system):

When not utilizing SPRINT system:

1. Natural Gas: The maximum heat input to each of the combustion turbines (CT), as determined using a lower heating value (LHV), shall not exceed 423 MMBtu/hr per CT at 51°F, nor 403 MMBtu/hr per CT at International Standards Organization (ISO) conditions *(Note: ISO standard day conditions are 288°K, 60% humidity and 101 kilopascals pressure)*, while firing natural gas.

2. Fuel Oil: The maximum heat input to each of the combustion turbines (CT), as determined using a lower heating value (LHV), shall not exceed 424 MMBtu/hr per CT at 51°F, nor 406 MMBtu/hr per CT at International Standards Organization (ISO) conditions, while firing No. 2 (distillate) fuel oil.

When utilizing SPRINT system:

3. At a turbine inlet temperature of 51° F, the maximum heat input rate from firing natural gas (LHV) when utilizing the SPRINT system is ~~427~~ 450 MMBtu per hour, which produces approximately 52 MW of direct power. [Construction Permit 1010071-002-AC] *{Effective Date xx/xx/xx}*

b. Duct Burners (DB): The maximum heat input to each of the duct burners (DB), as determined using the higher heating value (HHV) *(approximately ~~1054.5~~ 1,040 Btu/ft³ for natural gas)*, shall not exceed 90 MMBtu/hr.

Note: *For Emissions Unit Operating Rate Limitation After Testing see Condition No. A26.*

[Rules 62-4.160(2), and 62-213.410(1), F.A.C.; Construction Permits AC51-196460 and 1010071-002-AC] *{Effective Date 09/14/07}*

A5. *(continued)*

Performance Tests
60.4400 How do I conduct the initial and subsequent performance tests, regarding NOx?
(entire section)
60.4415 How do I conduct the initial and subsequent performance tests for sulfur?
60.4415(a)
Definitions
60.4420 What Definitions apply to this subpart?
(entire section)

Table 1. to Subpart KKKK of Part 60 – Nitrogen Oxides Emission Limits
(entire table)

(Permitting Note: These applicability references are based upon current operations as reflected in the Title V permit revision application dated 10/12/06. Any change in operations may change the applicable provisions.)*

[Rule 62-204.800(8)(B), F.A.C.; 40 CFR 60 Subparts A and KKKK]
{Effective Date 09/14/07}

A6. Visible Emissions Limitation - Visible emissions (VE) from the combustion turbine/HRSG exhaust stacks shall not exceed 10% opacity.
[Construction Permit AC51-196460]

A7. Nitrogen Oxides (NOx) Emission Limitations - Nitrogen oxides emissions shall not exceed the following:

a. Combustion Turbines (CTs) (mass (pounds per hour) limitations are total for both CTs combined):
1. while firing natural gas:
(a) 25 ppmvd at 15% oxygen (BACT limitation); nor
(b) 82.7 pounds per hour at 59°F and 60% relative humidity (ISO conditions);nor
(c) 85.5 pounds per hour at 51°F ~~(Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)~~; nor
(d) shall not exceed 86.0 pounds per hour when utilizing SPRINT based on a turbine inlet temperature of 51° F. [Construction Permit 1010071-002-AC]
{Effective Date xx/xx/xx}
2. while firing No. 2 (distillate) fuel oil:
(a) 42 ppmvd at 15% oxygen (BACT limitation); nor
(b) 143.9 pounds per hour at 59°F and 60% relative humidity (ISO conditions); nor
(c) 148.3 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

3. *{NSPS Subpart KKKK}* Pursuant to NSPS Subpart KKKK 40 CFR 60.4320, 60.4325 and Table 1 to Subpart KKK, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine and associated duct
(continued)

A7.a.3 *(continued)*

burner, any gases which contain nitrogen oxides in excess of 42 ppm by volume at 15 percent oxygen, dry basis, when firing natural gas; nor 96 ppm by volume at 15 percent oxygen, dry basis, when total heat input is greater than 50% fuels other than natural gas.
[Rule 62-210.800(8), F.A.C.; 40 CFR 60.4320 and 60.4325]
{Effective Date 09/14/07}

(NSPS 40 CFR 60 Subpart KKKK Note: The BACT limitations contained in items 1. and 2. above are more stringent than the above NSPS Subpart KKKK limitations and demonstration of compliance with these BACT limitations will also document compliance with the NSPS requirements.)

b. Duct Burners (mass (pounds per hour) limitations are total for both DBs combined)

1. while firing natural gas:
(a) 0.1 lb/MMBtu (BACT limitation); nor
(b) 18.0 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

c. Combustion Turbines and Duct Burners (mass limitations are total for all CTs and DBs combined)
1. while firing natural gas *(Note: This is the only possible CT+DB scenario since if CTs are firing on fuel oil (emergency fuel) then that means that natural gas supply is curtailed and DBs cannot be operating.)*
(a) 100.7 pounds per hour at 59°F and 60% relative humidity (ISO conditions); nor
(b) ~~103.5~~ 104.0 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. Maximum annual emissions:
(a) 393.6 tons per year, at 59°F and 60% relative humidity (ISO conditions); nor
(b) 404.7 tons per year, at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

[Rules 62-204.800(8), and 62-212.400(BACT), F.A.C.; and Construction Permits AC51-196460 and 1010071-002-AC]

A19. Nitrogen Oxides (NOx) Compliance Testing Requirements - The owner or operator shall determine compliance with the nitrogen oxides standard as follows:

a. U.S. EPA. Method 7E and EPA Method 3, 3A or 3E (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen.

b. The annual NOx stack test *(see Specific Condition No. A16.)* shall be conducted at 90-100% of peak load *(see Specific Condition No. A26.)*, except for the annual test conducted during the 12 month period prior to renewal of this permit *(see c. below)*. Testing shall be done with the duct burner on. Required NOx CEMS RATA testing may be used in lieu of the required annual testing.

c. ~~Once every five (5) years prior to renewal of this permit, the annual NOx test shall be conducted at each of four load conditions, i.e., 30, 50, 75, and 100 percent of peak load (or at four points in the normal operating range of the gas turbine including the minimum point in the range and peak load)~~
~~**. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. Tests at 100% (peak) load shall be conducted with the duct burner on . Testing at lower load levels may be done with the duct burn off . Each test shall consist of three 20 minutes runs at that load.~~
~~*(See also Specific Condition No. A20. for additional requirements during this NOx emission test)*~~

*(** CO/NOx Testing Note: Due to the inverse effect of operating conditions on CO and NOx emissions (requiring balanced operating conditions to keep both below the allowable emission limits simultaneously), the once-every 5-years CO test shall be conducted simultaneously with this NOx testing - see Specific Condition No. A17.)*

[Rules 62-204.800(8), and 297.310((2), F.A.C.; 40 CFR 60.4400; Construction Permits AC51-196460 and 1010071-002-AC; and testing protocol established with permittee] *{Effective Date 09/14/07}*

~~**A20.** Establishment of NOx Control Water-to-Fuel Curve - For purposes of demonstrating ongoing compliance with the NOx standard, the monitoring devices of 40 CFR 60.4335(a) *(see Appendix 40 CFR 60 Subpart KKKK)* shall be used to determine the fuel consumption, and the water injection rate necessary to comply with the permitted NOx standard at 30, 50, 75 and 100 % of peak load (or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load) as established during the initial performance stack testing of this unit and subsequent stack testing performed for this purpose. This four point load testing will be used to verify or re-establish the water-to-fuel curve to be used as the basis for determining and controlling (via the turbine control system) the required water injection rate necessary for compliance with the NOx standard at each fuel firing rate/load level. This water-to-fuel curve shall be re-established by stack testing at the four loads points once every 5 years prior to permit renewal *(see Specific Condition No. A19.c.above)*, or more frequently should NOx emission limit exceedances make re-establishment of the curve necessary. If the water-to-fuel curve has changed, the turbine control system shall be reprogrammed to reflect the changes and insure that the necessary water injection rates are achieved. The compliance test report for this testing shall include an updated water-tofuel curve and a detailed discussion of any resulting changes made to the turbine control system (or an explanation of why no changes were required).
[Rules 62-4.070(3), 62-204.800(8), and 213.440(1)(b), F.A.C.; 40 CFR 60.4335 and 60.4355(a)]*{Effective Date 09/14/07}*~~

A21. Carbon monoxide (CO) Compliance Test Method - Compliance with the CO standard shall be demonstrated using EPA Method 10 pursuant to Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A. [Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and Construction Permit AC51-196460]

A22. Sulfur Dioxide and Sulfuric Acid Mist Compliance Determinations - Compliance with the sulfur dioxide and sulfuric acid mist emission limits (pounds/hour and/or tons/year) for distillate fuel oil firing shall be determined by calculations based on fuel analysis using the methods in Specific Condition No. A.27. [Rule 62-4.070(3), F.A.C.]

A23. Particulate Matter (PM) Test Method and Testing Waiver - The test methods for particulate matter emissions shall be EPA Method 5 or 17, incorporated by reference in Chapter 62-297, F.A.C. However, if a visible emission test using EPA Method 9 shows that opacity is less than 10%, then annual stack testing for PM is waived for that federal fiscal year.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; Construction Permit AC51-196460]

A24. Volatile organic compound (VOC) -When required, compliance with the VOC standard shall be demonstrated by stack testing in accordance EPA Method 25A pursuant to Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A, if required to be documented by testing. EPA Method 3 may be used to determine oxygen concentrations. Compliance with the VOC limitations shall be assumed provided the carbon monoxide (CO) allowable emission rate is achieved. VOC testing shall not be required provided that the CO compliance test demonstrates emissions below the CO limits specified in this permit.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; Construction Permit AC51-196460]

A25. *[NSPS Subpart A]* Compliance Testing Conditions - Compliance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [Rule 62-204.800(8), F.A.C.; 40 CFR 60.8(c)]

A26. Operating Rate During Testing.- Testing of emissions shall be conducted with the emission unit operating at permitted capacity ~~*(except for NOx testing once every 5 years which will be conducted at 4 load levels - see Specific Condition No. A19.c.).*~~ Capacity is defined as 90-100 percent of the turbine's rated (based on manufacturer's curves or tables) heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Once the unit is so limited, then operation at higher capacities is allowed for no more than ~~30~~ 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. In no case shall the process or production rate exceed the maximum permitted heat input rate. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. The actual heat input rate during the test shall be included in each test report. Failure to include the actual process or production rate in the results may invalidate the test.
[Rules 62-4.070(3), and 297.310(2)(a), F.A.C.]

Excess Emissions Reporting

A35. *{NSPS Subpart A}* Excess Emission Reporting - The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts *(see condition below)*) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. Written reports of excess emissions shall include the following information:

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

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.7(c)(1), (2), (3) and (4), and 40 CFR 60.4395]
{Effective Date 09/14/07}

A36. *{NSPS Subpart KKKK}* Definition of Excess Emissions - For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

a. Nitrogen oxides - For turbines using water or steam to fuel ratio monitoring:

(1) An excess emission is any unit operating hour for which the 4-hour rolling average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.4320, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine when a fuel is being burned that requires water or steam injection for NOX control will also be considered an excess emission.

(2) A period of monitor downtime is any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

(3) Each report must include the average steam or water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4380]

As an alternative to operating the CMS program described above, the owner or operator may install, certify, maintain, operate and quality assure a continuous emissions monitoring system (CEMS) consisting of NOx and oxygen (O_2) monitors. Using this method of compliance NOx emissions will be determined on a 30 day rolling average basis for comparison to required standards. Required NOx RATA tests will be conducted in lieu of required annual NOx testing.

ATTACHMENT PC-EU1-I1

COMPLIANCE DEMONSTRATION REPORTS/RECORDS

SOURCE TEST REPORT
FOR
COMBINED CYCLE COMBUSTION TURBINES
WITH AUXILIARY DUCT BURNERS

INTEGRATED FACILITY UNITS 1 AND 2
COMPLIANCE EVALUATION
FOR
NATURAL GAS FIRING
OXIDES OF NITROGEN,
SULFUR DIOXIDE AND VISIBLE EMISSIONS

FDEP PERMIT NUMBER 1010071-003-AV

PASCO COGENERATION LIMITED
DADE CITY, FLORIDA

MAY 31 & JUNE 1, 2007

PREPARED FOR:

CAITHNESS ENERGY, L.L.C.
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PREPARED BY:

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(352) 335-1889

424-07-03

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EXECUTIVE SUMMARY

The annual compliance test results for the Unit 1 (EU001) and the Unit 2 (EU002) Combustion Turbines meet all emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 1010071-003-AV. All tests were conducted on natural gas firing only. The allowable lower heating value (LHV) heat input to each unit is 424 MMBTUH. Testing was conducted at 430 and 427 MMBTUH, respectively.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions
UNIT 1			
NO_x	CT	42.5 lbs/hr, 24.3 ppm_vd @ 15% O_2	85.5 lbs/hr CT1 & CT2 combined 25ppm_vd @ 15% O_2
	DB	-2.1 lbs/hr, -0.064 lbs/MMBTU	18.0 lbs/hr DB1 & DB2 combined 0.1 lbs/MMBTU
	CT & DB	40.37 lbs/hr	103.5 lbs/hr Total
UNIT 2			
NO_x	CT	42.72 lbs/hr, 24.7 ppm_vd @ 15% O_2	85.5 lbs/hr CT1 & CT2 combined 25ppm_vd @ 15% O_2
	DB	-2.9 lbs/hr, -0.074 lbs/MMBTU	18.0 lbs/hr DB1 & DB2 combined 0.1 lbs/MMBTU
	CT & DB	39.8 lbs/hr	103.5 lbs/hr Total

Mass emission limitations are total for both units combined.

Emission results at full load are provided in Tables 1 (Unit 1) and 2 (Unit 2), which include demonstration of compliance at ISO ambient corrected NO_x emission concentrations to ensure that CFR 40 Part 60 Subpart GG emission limits are also met. ISO corrected NO_x allowable is approximately 113 ppm.

No visible emissions were detected from full gas turbine or full gas turbine plus full duct burner operations from both units.

1.0 INTRODUCTION

On May 31 and June 1, 2007 Air Consulting and Engineering, Inc. (ACE) performed annual compliance testing for Oxides of Nitrogen (NO_x) and Opacity on the exhaust stacks of the Combustion Turbines, Units 1 and 2, at Pasco Cogeneration Limited in Dade City, Florida.

The Units were tested at base load to satisfy conditions of the current Florida Department of Environmental Protection (FDEP) Title V Permit 1010071-003-AV (see Appendix A).

United States Environmental Protection Agency (EPA) Method 7E (NO_x), EPA Method 3A (O_2) and Method 9 (VE) were used to determine turbine emissions with and without duct burner operation. Sulfur Dioxide (SO_2) emissions are usually calculated from the fuel analysis, but Florida Gas Transmission has removed this section from their daily analysis.

Mr. Warren Park of Pasco Cogeneration, Ltd. coordinated testing and provided plant production data. Mr. Tom Grace of Caithness Energy, L.L.C. served as Project Director.

2.0 SUMMARY AND DISCUSSION OF RESULTS

The facility demonstrated compliance with permit conditions. Results of the emission tests are summarized in Tables 1 and 2. The Units were fired on natural gas.

The contribution of NO_x emissions of the gas fired duct burners was determined by performing a test series with and without duct burner firing. The difference in emission rates was attributed to the duct burners.

Duct burner NO_x contributions averaged -0.064 pounds per Million BTUs (lbs/MMBTU) for Unit 1 and -0.074 lbs/MMBTU for Unit 2. Allowable emissions are 0.1 lbs/MMBTU NO_x.

The apparent negative emission rate was possibly caused by a slight difference in the water injection rate and in CT heat input. There are also some differences in the inlet air temperature during the DB test. DB contribution for NO_x and CO are difficult to accurately demonstrate due to the relative low (<10%) DB contribution to the total heat input. A broader discussion on the duct burner contribution is provided in Section 3.0 of this report.

Units 1 and 2 without duct burners averaged 24.3 and 24.7 parts per million (ppm) NO_x at 15% O_2, respectively, which is within the permitted standard of 25 ppm at 15% O_2.

To also demonstrate compliance with Federal New Source Performance Standards (NSPS) by 40CFR 60 Subpart GG, observed NO_x concentrations were first adjusted to 15% O_2 and than finally to ISO standard ambient conditions using the following equation:

$$\text{ISO } NO_x \text{ Emissions} = (NO_{xobs}\text{ppm})\left(P_{ref}/P_{obs}\right)^{0.5} e^{19(Hobs-0.00633)} (288°K/T_{amb})^{1.53}$$

Where:
NO_{xobs} = measured NO_x ppm at 15% O_2
P_{ref} = reference combustor inlet absolute pressure at 101.3 kilopascal ambient pressure (29.92 in. Hg)
P_{obs} = measured combustor inlet absolute pressure at test ambient pressure (actual barometric pressure in in. Hg)
H_{obs} = specific humidity at ambient air at test (g H_2O/g air)
T_{amb} = temperature of ambient air at test
e = 2.718 - transcendental constant

Allowable NO_x emissions for NSPS are approximately 113 ppm @ ISO ambient conditions. Both units were in compliance with this standard.

Actual combined mass emissions for both turbines are 85.3 lbs/hr NO_X at a total heat input of 854.6 MMBTUH (LHV). Combined mass emissions with duct burners are 80.2lbs/hr NO_x at a total heat input of 853.1 MMBTUH (LHV).

Mass emissions for in pounds per hour were calculated using the actual heat input and the pollutant concentration.

Visible emission tests were conducted on both units during turbine operation only and combined turbine and duct burner operation. Visible emissions on both turbine exhaust stacks at both conditions averaged 0.0 percent opacity for the highest six minute period of each test (see Appendix D for VE data). Permitted emissions are 10 percent opacity.

Gaseous emission data with data logger results and strip chart copies are provided in Appendices B and C, respectively.

ATTACHMENT PC-EU1-I2

EMISSION UNIT APPLICABLE REQUIREMENTS

Pasco Cogeneration Limited
Pasco Cogeneration Facility

Facility ID No.: 1010071
Pasco County

FINAL Permit No.: 1010071-004-AV
Title V Air Operation Permit Revision
(Revision to Title V Permit Renewal 1010071-003-AV)

Permitting Authority:
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL, 33637-0926
Telephone: 813/632-7600
Fax 813/632-7668

Title V Air Operation Permit Revision
FINAL Permit No.: 1010071-004-AV
Pasco Cogeneration Limited
Pasco Cogeneration Facility

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Permittee
Pasco Cogeneration Limited
14850 Old State Road 23
Dade City, Florida 33525

FINAL Permit No.: 1010071-004-AV
Facility ID No.: 1010071
SIC Nos.: 49, 4931
Project: Title V Air Operation Permit Revision

This permit revision for the Pasco Cogeneration Ltd. facility is being issued for the purpose of incorporating the terms and conditions of the air Construction Permit No. 1010071-002-AC, for the addition of "SPRINT" spray inter-cooling technology to the existing Unit 1 and Unit 2 combined cycle gas turbines (EU Nos. 001 and 002); and to incorporate the requirements of New Source Performance Standard 40 CFR 60 Subpart KKKK. This facility is located at 14850 Old State Road 23, Dade City, Pasco County; UTM Coordinates: Zone 17, 383.5 km East and 3139.0 km North; Latitude: 28° 22' 28" North and Longitude: 82° 11' 21" West.

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

Referenced attachments made a part of this permit:

Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-6, Title V Conditions (version dated 06/23/06)
Appendix 40 CFR 60 Subpart KKKK *(Standards of Performance for Stationary combustion Turbines)*
Appendix 40 CFR 60 Subpart A *(General provision for 40 CFR 60)*
Appendix CAM *(Compliance Assurance Monitoring)*
APPENDIX SS-1, STACK SAMPLING FACILITIES(version dated 10/7/96)
TABLE 297.310-1, CALIBRATION SCHEDULE(version dated 10/7/96)
FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT(version dated 7/96)

Effective Date:	07/03/2005
Revision Effective Date:	09/14/2007
Renewal Application Due Date:	01/04/2010
Expiration Date:	07/03/2010

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Mara Grace Nasca
District Air Program Administrator

MGN/DRZ/pp

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two combustion turbines (CT), each with a chiller system (to maintain inlet combustion air at 51 °F and 100% relative humidity), duct burners (DB) and heat recovery steam generators (HRSG). Each of the combustion turbines is connected to an electric generator rated at 42 MW, while the two heat recovery steam generators furnish steam to a citrus processing facility and service a common steam turbine which is connected to a electric generator rated at 26.5 MW. The gas turbines are fired with natural gas with No. 2 fuel oil as a backup fuel, and the duct burners are fired with natural gas only. Nitrogen oxides (NOx) emissions from the CTs are controlled by water injection.

Compliance Assurance Monitoring (CAM) is applicable to the two combustion turbines for the water injection NOx control systems.

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

Based on the Title V permit renewal application received July 29, 2004, this facility is not a major source of hazardous air pollutants (HAPs). It is a major source of nitrogen oxides (NOx) and carbon monoxide (CO).

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

E.U.ID No.	Brief Description
001	Unit No. 1 - Combustion Turbine with chiller system, DB, and HRSG
002	Unit No. 2 - Combustion Turbine with chiller system, DB, and HRSG

Unregulated Emission Units and/or Activities

003	Fuel Oil Storage Tank (170,000 gal.)
004	Diesel Fuel Fired Emergency Generators (2 @ 1,275 kW)
005	Facility-Wide Fugitive and Vent Emissions

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

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History
Statement of Basis

These documents are on file with permitting authority:
Title V permit renewal application received July 29, 2004
Additional information submitted December 14, 2004
Title V revision application dated October 12, 2006

Section II. Facility-wide Conditions.

*(**Effective Date Note**: Unless otherwise noted, the effective date of the specific conditions in this section is 07/03/05, which was the effective date for Title V renewal operation permit 1010071-003-AV.)*

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit. *{Effective Date 09/14/07}* *(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.)*

2. General Pollutant Emission Limiting Standards: Objectionable Odor Prohibited - No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
[Rule 62-296.320(2), F.A.C.]

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

4. Prevention of Accidental Releases (Section 112(r) of CAA) -

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

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

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

5. Unregulated Emissions Units and/or Activities - Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

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

7. General Pollutant Emission Limiting Standards: Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions - The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department as follows:

The following requirements are "not federally enforceable"

a. All equipment, pipes, hoses, lids, fittings, etc., shall be operated/maintained in such a manner as to minimize leaks, fugitive emissions and spills of solvent materials.
b. All VOC/OS from washings (equipment clean-up) shall be directed into containers that prevent evaporation into the atmosphere.
c. Tightly cover or close all VOC containers when they are not in use.
d. Prevent excessive air turbulence across exposed VOCs.
e. Immediately confine and clean up VOC spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

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

8. General Particulate Emission Limiting Standards: Unconfined Particulate Matter –
All reasonable precautions shall be taken to prevent and control generation of unconfined (fugitive) emissions of particulate matter in accordance with the provisions in Rule 62-296.320(4)(c)3., F.A.C. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements. *(See also Condition 57. of Appendix TV-6, Title V Conditions.)*

The following requirements are "not federally enforceable":

a. maintenance of paved areas as needed;
b. limiting access to plant property by unnecessary vehicles;
c. limiting use of bagged chemical products to enclosed or semi-enclosed areas;
d. storage of ZLD (zero liquid discharge) byproduct in covered enclosed containers.

[Rule 62-296.320(4)(c), F.A.C.; as proposed by the applicant in the Title V renewal application received 07/29/04]

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

10. Annual Statement of Compliance - The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

(Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of Appendix TV-6, Title V Conditions).)

11. State Notifications/Reports - The permittee shall submit all compliance related notifications and reports required of this permit to the to the Air Compliance Section of the SW District office of the Department at the addresses shown below:

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600
Fax: 813/632-7668

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

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

13. Certification by Responsible Official (RO) - In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

14. Operating Hours - This facility is permitted for continuous operation (i.e. 8,760 hours/year) for the activities described by this permit.
[Rule 62-210.200(PTE), F.A.C.]

Additional Recordkeeping and Reporting Requirements

15. Annual Operating Report (AOR) - The Annual Operating Report shall be submitted to the Air Program of the Department's Southwest District office. *(See Appendix TV-6, Condition 24.)*
[Rule 62-210.370(3), F.A.C.]

16. Record Retention - All of the records required by this facility shall be kept for the most recent 5-year period and made available to the Department upon request.
[Rule 62-213.440(1)(b)2.b, F.A.C.]

17. Record Maintenance - At a minimum, all records and logs required by this permit shall be updated monthly. [Rule 62-4.070(3), F.A.C.]

*(**Note to Permittee**: Also reference Appendix TV-6, items 12.(14)(b) and (c) and 43. for additional recordkeeping requirements.)*

Excess Emissions

18. Startup, Shutdown, Malfunction - Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

(Permitting Note: This rule is not applicable to sources subject to PSD, NSPS, or NESHAP regulations.)

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

20. Sudden and Unforeseeable Events - A statement that 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).
[Rule 62-213.440(1)(d)5, F.A.C.]

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

Testing Requirements

22. Stack Sampling Facilities - The requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., Stationary Sources - Emission Monitoring, and 40 CFR 60, Appendix A. (See attached Appendix SS-1 - Stack Sampling Facilities.)
[Rule 62-297.401, F.A.C.]

23. Department Requested Compliance Tests - If the Department of Environmental Protection has reason to believe that any applicable emission standard is being violated, then the Department of Environmental Protection may require the permittee to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of the tests.
[Rule 62-297.310(7)(b), F.A.C.]

24. Compliance Test Notification - The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted.
[Rule 62-297.310(7)(a)9, F.A.C.]

NOTES TO PERMITTEE:

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

Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

IMPORTANT: Please note the following Title V submittal requirements contained in Appendix TV-6 (TITLE V CONDITIONS):

→ Annual Operating Report (AOR) - see Appendix TV-6, item 24(3)
→ Annual Statement of Compliance - see Appendix TV-6, item 51
→ Permit Renewal Application - see Appendix TV-6, item 5

Section III. Emissions Unit(s) and Conditions.

(Effective Date Note: Unless otherwise noted, the effective date of the specific conditions in this section is 07/03/05, which was the effective date for Title V renewal operation permit 1010071-003-AV.)

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001	Unit No. 1 - Combustion Turbine (CT) with chiller system, SPRINT spray inter-cooling, duct burner (DB), and heat recovery steam generator (HRSG).
002	Unit No. 2 - Combustion Turbine (CT) with chiller system, SPRINT spray inter-cooling, duct burner (DB), and heat recovery steam generator (HRSG).

This nominal 109 MW cogeneration facility consists of two identical GE LM-6000 combustion turbines (CTs), each with a chiller system (to maintain inlet combustion air at 51 °F and 100% relative humidity), SPRINT spray inter-cooling, a duct burner (DB), and a Zurn heat recovery steam generator (HRSG). Each of the combustion turbines is connected to an electric generator rated at 42 MW without SPRINT and approximately 52 MW with SPRINT, while the two heat recovery steam generators furnish steam to a citrus processing facility and service a common steam turbine which is connected to a electric generator rated at 26.5 MW. The gas turbines are fired with natural gas, with low sulfur No. 2 fuel oil as a backup fuel, at a maximum permitted heat input rate of 424 MMBtu/hour without SPRINT and approximately 427 MMBtu/hour with SPRINT. The duct burners are each fired with natural gas at a maximum permitted heat input rate of 90 MMBtu/hour. Water injection is used to reduce NOx emissions from the combustion turbines when firing natural gas and low sulfur distillate oil. Continuous Assurance Monitoring (CAM) applies for NOx. General Electric's "SPRINT" spray inter-cooling technology consists of a system that will automatically meter approximately 9 to 12 gpm of de-mineralized water to a series of 24 spray nozzles and injected between the high pressure and low pressure compressors. This significantly reduces the temperature which increases the mass flow rate resulting in higher output and increased efficiency.

Permitting note: ***(IMPORTANT REGULATORY CLASSIFICATIONS*** - These emission units are regulated under NSPS - 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, and NSPS - 40 CFR 60, Subpart A, all adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration; Construction Permit PSD-FL-177, and the Best Available Control Technology (BACT) Determination, dated November 20, 1991. These units are not affected by the Acid Rain Program since they meet the requirements of 40 CFR 72.6(b)(4).

The following conditions apply to the emissions units listed above:

Permitting Notes:

- *All references to Construction Permit AC51-196460 refer to permit AC51-196460 (PSD-FL-177) as amended on March 14, 1994 and April 25, 1994.*
- *All references to tons per year are defined as tons per any 12 consecutive month period.*
- *All temperatures cited in this Subsection refer to turbine inlet air temperatures.*

Essential Potential to Emit (PTE) Parameters

A1. Methods of Operation - Fuels

a. Combustion Turbines (CT): Only natural gas as the primary fuel, with an emergency backup fuel of distillate (No. 2) fuel oil having a maximum sulfur content of 0.1 percent by weight, shall be fired in the combustion turbines. *(Note : See also Cond. No. A10.a.2.for a more stringent NSPS sulfur limit.)*

b. Duct Burners (DB): Only natural gas shall be fired in the duct burners.

[Rules 62-4.160(2), 62-213.410(1), and 62-212.400, (BACT) F.A.C.; and Construction Permit AC51-196460]

A2. Permitted Capacity - Maximum Heat Input Rate

a. Combustion Turbines (CTs) (when not utilizing SPRINT system):

When not utilizing SPRINT system:

1. Natural Gas: The maximum heat input to each of the combustion turbines (CT), as determined using a lower heating value (LHV), shall not exceed 423 MMBtu/hr per CT at 51°F, nor 403 MMBtu/hr per CT at International Standards Organization (ISO) conditions *(Note: ISO standard day conditions are 288°K, 60% humidity and 101 kilopascals pressure)*, while firing natural gas.

2. Fuel Oil: The maximum heat input to each of the combustion turbines (CT), as determined using a lower heating value (LHV), shall not exceed 424 MMBtu/hr per CT at 51°F, nor 406 MMBtu/hr per CT at International Standards Organization (ISO) conditions, while firing No. 2 (distillate) fuel oil.

When utilizing SPRINT system:

3. At a turbine inlet temperature of 51° F, the maximum heat input rate from firing natural gas (LHV) when utilizing the SPRINT system is 427 MMBtu per hour, which produces approximately 52 MW of direct power. [Construction Permit 1010071-002-AC] *{Effective Date xx/xx/xx}*

b. Duct Burners (DB): The maximum heat input to each of the duct burners (DB), as determined using the higher heating value (HHV) *(approximately 1054.5 Btu/ft^3 for natural gas)*, shall not exceed 90 MMBtu/hr.

Note: *For Emissions Unit Operating Rate Limitation After Testing see Condition No. A26.*

[Rules 62-4.160(2), and 62-213.410(1), F.A.C.; Construction Permits AC51-196460 and 1010071-002-AC] *{Effective Date 09/14/07}*

A3. Permitted Capacity - Maximum Fuel Usage

a. Combustion Turbines (CT): Maximum fuel oil utilization shall not exceed 2,921 gallons/hour per CT, nor 701,050 gallons/any 12 consecutive month period per CT *(equivalent to 10 days (240 hours) per year at full load).*

b. Duct Burners (DB): Duct burner utilization shall be limited to the firing of a maximum of 525,000 MMBtu of natural gas/any 12 consecutive month period per DB.

[Rules 62-4.160(2), and 62-213.410(1), F.A.C.; Construction Permit AC51-196460]

A4. Hours of Operation - These emission units are allowed to operate continuously (i.e., 8,760 hours/year). [Rule 62-4.160(2), and Rule 62-210.200 (Definitions – Potential to Emit), F.A.C.; and Construction Permit AC51-196460]

Emission Limitations and Standards

(Permitting Note: The maximum annual "CT + DB" tons per year emission limitations below are based on a worst case scenario, and are the sum of the CT emissions while firing natural gas for 355 days, the CT emissions while firing fuel oil for 10 days, and the DB emissions at the maximum heat input for the above combinations of CT firing (the DB will only fire natural gas and only operate when the CTs are firing natural gas).)

A5. Federal New Source Performance Standard (NSPS) Requirements – The combustion turbines (CT) and duct burners (DB) are subject to and shall comply with the requirements of Federal New Source Performance Standards (NSPS) 40 CFR 60 KKKK (Standards of Performance for Stationary Combustion Turbines), and 40 CFR 60 Subpart A (General Provisions for 40 CFR 60) as adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C., and referenced below*. The complete NSPS standards are in the following attached appendices which are made a part of this permit.

- Appendix 40 CFR 60 Subpart A (General Provisions for 40 CFR 60)

- Appendix 40 CFR 60 Subpart KKKK* (Standards of Performance for Stationary Combustion Turbines)

*(**NSPS Applicability Note**: Subpart KKKK applies to these combustion turbines (and the duct burners) because the installation of the SPRINT technology means that the turbines were modified after February 18, 2005 thereby making Subpart KKKK applicable in accordance with 40 CFR 60.4305(a). In accordance with 40 CFR 60.4305(b), combustion turbines subject to Subpart KKKK are exempt from the requirements of Subpart GG and duct burners regulated under Subpart KKKK are exempt from the requirements of Subpart Dc.*

(NSPS Permitting Note: Some of the key requirements contained in the above NSPS Appendices have also been repeated in the conditions below. The specific conditions that are taken in part or in their entirety from the above New Source Performance Standards are indicated with the notation {NSPS Subpart KKKK (or A)} inserted after the specific condition number and before the underlined condition subject caption. The portions included as part of the specific conditions are not intended as, (continued)

A5. *(continued)*

nor should they be considered as, a complete rendering or inclusion of all of the NSPS requirements. See the above appendices for the complete version and context of these and other NSPS requirements. In all cases where the permit conditions and the NSPS Subpart are in conflict the NSPS provisions shall take precedence)

40 CFR 60 Subpart A Applicable Provision References *

Section	Title
60.1	Applicability. *(entire section)*
60.5	Determination of construction or modification. *(entire section)*
60.6	Review of plans. *(entire section)*
60.7	Notification and recordkeeping. 60.7((a)4 60.7(b) through (g)
60.8	Performance tests. 60.8(b) & (c) 60.8(e) & (f)
60.9	Availability of information *(entire section)*
60.10	State authority. *(entire section)*
60.11	Compliance with standards and maintenance requirements. 60.11(a) through (d) 60.11(f)
60.12	Circumvention. *(entire section)*
60.13	Monitoring requirements. 60.13(a) & (b) 60.13(e) & (f) 60.13(h) & (i)
60.14	Modification. 60.14(a) through (c) 60.14(e) through (h)
60.15	Reconstruction. *(entire section)*
60.19	General notification and reporting requirements. *(entire section)*

(continued)

A5. *(continued)*

40 CFR 60 Subpart KKKK Applicable Provision References *

Section Title

Introduction

60.4300 What is the purpose of this subpart?
(entire section)

Applicability

60.4305 Does this subpart apply to my stationary combustion turbine?
(entire section)

Emission Limits

60.4315 What pollutants are regulated by this subpart?
(entire section)

60.4320 What emission limits must I meet for nitrogen oxides (NOx)?
(entire section)

60.4325 What emission limits must I meet for NOx if my turbine burns both natural gas and distillate oil (or some other combination of fuels)?
(entire section)

60.4330 What emission limits must I meet for sulfur dioxide (SO2)?
60.4330(a)

General Compliance Requirements

60.4333 What are my general requirements for complying with this subpart?
60.4333(a)

Monitoring

60.4335 How do I demonstrate compliance for NOx if I use water or steam injection?
60.4335(a)

60.4355 How do I establish and document a proper parameter monitoring plan?
(entire section)

60.4360 How do I determine the total sulfur content of the turbine's combustion fuel?
(entire section)

60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?
(entire section)

60.4370 How often must I determine the sulfur content of the fuel?
(entire section)

Reporting

60.4375 What reports must I submit?
(entire section)

60.4380 How are excess emissions and monitor downtime defined for NOx?
60.4380(a)

60.4385 How are excess emissions and monitoring downtime defined for SO2?
(entire section)

60.4395 When must I submit my reports?
(entire section)

(continued)

A5. *(continued)*

Performance Tests
60.4400 How do I conduct the initial and subsequent performance tests, regarding NOx?
(entire section)
60.4415 How do I conduct the initial and subsequent performance tests for sulfur?
60.4415(a)
Definitions
60.4420 What Definitions apply to this subpart?
(entire section)

Table 1. to Subpart KKKK of Part 60 – Nitrogen Oxides Emission Limits
(entire table)

(Permitting Note: These applicability references are based upon current operations as reflected in the Title V permit revision application dated 10/12/06. Any change in operations may change the applicable provisions.)*

[Rule 62-204.800(8)(B), F.A.C.; 40 CFR 60 Subparts A and KKKK]
{Effective Date 09/14/07}

A6. Visible Emissions Limitation - Visible emissions (VE) from the combustion turbine/HRSG exhaust stacks shall not exceed 10% opacity.
[Construction Permit AC51-196460]

A7. Nitrogen Oxides (NOx) Emission Limitations - Nitrogen oxides emissions shall not exceed the following:

a. Combustion Turbines (CTs) (mass (pounds per hour) limitations are total for both CTs combined):
   1. while firing natural gas:
      (a) 25 ppmvd at 15% oxygen (BACT limitation); nor
      (b) 82.7 pounds per hour at 59°F and 60% relative humidity (ISO conditions); nor
      (c) 85.5 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)
      (d) shall not exceed 86.0 pounds per hour when utilizing SPRINT based on a turbine inlet temperature of 51° F. [Construction Permit 1010071-002-AC] *{Effective Date xx/xx/xx}*

   2. while firing No. 2 (distillate) fuel oil:
      (a) 42 ppmvd at 15% oxygen (BACT limitation); nor
      (b) 143.9 pounds per hour at 59°F and 60% relative humidity (ISO conditions); nor
      (c) 148.3 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

   3. *{NSPS Subpart KKKK}* Pursuant to NSPS Subpart KKKK 40 CFR 60.4320, 60.4325 and Table 1 to Subpart KKK, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine and associated duct
(continued)

A7.a.3 *(continued)*

burner, any gases which contain nitrogen oxides in excess of 42 ppm by volume at 15 percent oxygen, dry basis, when firing natural gas; nor 96 ppm by volume at 15 percent oxygen, dry basis, when total heat input is greater than 50% fuels other than natural gas.
[Rule 62-210.800(8), F.A.C.; 40 CFR 60.4320 and 60.4325]
{Effective Date 09/14/07}

(NSPS 40 CFR 60 Subpart KKKK Note: The BACT limitations contained in items 1. and 2. above are more stringent than the above NSPS Subpart KKKK limitations and demonstration of compliance with these BACT limitations will also document compliance with the NSPS requirements.)

b. Duct Burners (mass (pounds per hour) limitations are total for both DBs combined)

1. while firing natural gas:
   (a) 0.1 lb/MMBtu (BACT limitation); nor
   (b) 18.0 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

c. Combustion Turbines and Duct Burners (mass limitations are total for all CTs and DBs combined)

1. while firing natural gas *(Note: This is the only possible CT+DB scenario since if CTs are firing on fuel oil (emergency fuel) then that means that natural gas supply is curtailed and DBs cannot be operating.)*
   (a) 100.7 pounds per hour at 59°F and 60% relative humidity (ISO conditions); nor
   (b) 103.5 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. Maximum annual emissions:
   (a) 393.6 tons per year, at 59°F and 60% relative humidity (ISO conditions); nor
   (b) 404.7 tons per year, at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

[Rules 62-204.800(8), and 62-212.400(BACT), F.A.C.; and Construction Permits AC51-196460 and 1010071-002-AC]

A8. Carbon Monoxide (CO) Emission Limitations - Carbon Monoxide emissions shall not exceed the following:

a. Combustion Turbines (mass (pounds per hour) limitations are total for both CTs combined):

1. while firing natural gas:
   (a) 28 ppmvd (BACT limitation); nor
   (b) 54.6 pounds per hour per year at 59°F; nor
   (c) 56.0 pounds per hour per year at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. while firing No. 2 (distillate) fuel oil:
   (a) 18 ppmvd (BACT limitation); nor
   (b) 33.0 pounds per hour at 59°F; nor
   (c) 34.5 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

b. Duct Burners (mass (pounds per hour) limitations are total for both DBs combined)
1. while firing natural gas:
   (a) 0.2 lb/MMBtu (BACT limitation); nor
   (b) 36.0 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

c. Combustion Turbines and Duct Burners (mass limitations are totals for all CTs and DBs combined)
1. while firing natural gas *(Note: This is the only possible CT+DB scenario since if CTs are firing on fuel oil (emergency fuel) then that means that natural gas supply is curtailed and DBs cannot be operating.)*
   (a) 90.6 pounds per hour at 59°F; nor
   (b) 92.0 pounds per hour at 51°F
   (c) shall not exceed 92.5 pounds per hour when utilizing SPRINT based on a turbine inlet temperature of 51° F. [Construction Permit 1010071-002-AC] *{Effective Date 09/14/07}*

   (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. Maximum annual emissions:
   (a) 350.3 tons per year (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

[Rule 62-212.400 (BACT), F.A.C.; and Construction Permits AC51-196460 and 1010071-002-AC]

A9. Particulate Matter (PM)/PM10) Emission Limitations - Particulate Matter emissions shall not exceed the following:

a. Combustion Turbines (mass (lbs/hr) limitations are total for both CTs combined):

1. while firing natural gas:
   (a) 0.0065 lb/MMBtu (BACT limitation); nor
   (b) 5.0 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. while firing No. 2 (distillate) fuel oil:
   (a) 0.026 lb/MMBtu (BACT limitation); nor
   (b) 20.0 pounds per hour. (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

b. Duct Burners (mass limitations (pounds per hour) are total for both DBs combined)
1. while firing natural gas:
   (a) 0.006 lb/MMBtu (BACT limitation); nor
   (b) 2.6 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

c. Combustion Turbines and Duct Burners (mass limitations are total for all CTs and DBs combined)
1. while firing natural gas *(Note: This is the only possible CT+DB scenario since if CTs are firing on fuel oil (emergency fuel) then that means that natural gas supply is curtailed and DBs cannot be operating.)*
   (a) 7.6 pounds per hour. (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

2. Maximum annual emissions:
   (a) 27.0 tons per year (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature or operating configuration.)

[Rule 62-212.400 (BACT), F.A.C.; Construction Permit AC51-196460]

A10. Sulfur Dioxide (SO_2) Emission Limitations - Sulfur dioxide emissions shall not exceed the following:

a. Combustion Turbines (mass limitations are total for both CTs combined):

1. while firing No. 2 (distillate) fuel oil:
   (a) 80.0 pounds per hour at 59°F; nor
   (b) 87.6 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)
   (c) 21.0 tons per year F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

(continued)

A10.a. *(continued)*

2. *{NSPS Subpart KKKK}* while firing any fuel, in accordance with 40 CFR 60.4330(a), the permittee shall comply with either option (a) or (b) below:

(a) sulfur dioxide emissions shall not exceed 0.90 pounds per megawatt-hour (lb/MWh) gross output, or

(b) the combustion turbines shall not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO2/MMBtu heat input. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4330(a)]
{Effective Date 09/14/07}

[Construction Permit AC51-196460 (limits established by applicant); Rule 62-204.800(8), F.A.C.; 40 CFR 60.4330]

A11. Volatile Organic Compounds (VOC) Emission Limitations - Volatile organic compound emissions shall not exceed:

a. Combustion Turbines (mass limitations are total for CTs both):
   1. while firing natural gas:
      (a) 3.3 pounds per hour at 59°F; nor
      (b) 3.4 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

   2. while firing No. 2 (distillate) fuel oil:
      (a) 8.3 pounds per hour at 59°F; nor
      (b) 8.7 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

b. Duct Burners (mass limitations are total for both DBs combined)
   1. while firing natural gas:
      (a) 5.4 pounds per hour (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

c. Combustion Turbines and Duct Burners (mass limitations are total for all CTs and DBs combined)
   1. while firing natural gas *(Note: This is the only possible CT+DB scenario since if CTs are firing on fuel oil (emergency fuel) then that means that natural gas supply is curtailed and DBs cannot be operating.)*
      (a) 8.7 pounds per hour at 59°F; nor
      (c) 8.8 pounds per hour at 51°F (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

(continued)

A11. c. *(continued)*

2. Maximum annual emissions:
   (a) 30.8 tons per year (Note: This represents the Maximum Allowable Emission Limit and shall not be exceeded at any operating temperature and/or operating configuration.)

[Construction Permit AC51-196460 (limits established by applicant)]

A12. Sulfuric Acid Mist Emissions Limitations - Sulfuric Acid Mist emissions from both combustion turbines (CTs) combined shall not exceed a total of 0.80 tons per year.
[Construction Permit AC51-196460 (limit established by applicant)]

A13. *{NSPS Subpart A}* Circumvention of Standards - No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[Rule 62-204.800(8), F.A.C.; 40 CFR 60.12]

Emission Control Requirements

A14. NOx Emission Controls - Water injection shall be utilized for control of NOx emissions from the combustion turbines. The water to fuel ratio shall be controlled by the CT water injection control system to the level necessary to insure compliance with Specific Condition No. A7. at various loads, as established and documented by compliance stack testing. The permittee shall not circumvent any air pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly.
[Rules 62-210.650 (Circumvention), and 62-212.400 (BACT), F.A.C.; and Construction Permit AC51-194460]

A15. *{NSPS Subpart A}* Good Operating Practices to Minimize Emissions - At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[Rule 62-204.800(8), F.A.C.; 40 CFR 60.11(d)]

Compliance Testing Requirements

A16. Annual Tests Required - For these emission units, annual compliance testing shall be conducted for visible emissions (VE), and nitrogen oxides (NOx) on or during the 60 day period prior to the date of September 9 of each year*. Nitrogen oxides tests shall be no more than 14 calendar months following the previous compliance test (40 CFR 60.4400(a). Particulate/PM10 testing is only required if VE tests indicate an exceedance of the VE standard. Volatile organic compound (VOC) testing is only required if the CO test *(see specific condition below)* indicates an exceedance of the CO standard. Testing shall be conducted while firing natural gas unless fuel oil has been used in that combustion turbine for more than 400 hours in the preceding 12-month period *(unlikely based on the restriction contained in Specific Condition No. A3. which limit use of fuel oil to the equivalent of 240 hours/year at full load)*, in which case testing during oil firing shall also be conducted. A copy of the test data shall be submitted to the Air Compliance Section of the Southwest District Office within 45 days of such testing.
[Rules 62-297.310(7)(a)4. & 10(c) and 62-297.310(8), F.A.C.; permits AC51-196460 & AO51-248540; 40 CFR 60.4400] *{Effective Date 09/14/07}*

(Permitting Note: Compliance test dates for emission units in this permit are for planning purposes only. Rule 62-297.310(7)(a)4, F.A.C. allows the permittee to conduct a formal compliance test any time during the federal fiscal year (October 1 - September 30).*

A17. Test required Prior to Renewal - Compliance testing for carbon monoxide (CO) shall be conducted once every 5 years during the 12-month period prior to submitting an application for renewal of this permit. Testing shall be conducted separately during operation of the combustion turbine only, and during combined operation of combustion turbine and HRSG duct burner. Testing shall be conducted while firing natural gas unless fuel oil has been used in that combustion turbine for more than 400 hours in the preceding 12-month period, in which case testing during oil firing shall also be conducted. CO testing shall be conducted simultaneously with the once-every-5-years-prior- to-renewal NOx compliance testing *(see Specific Condition Nos. A16 and A19)*. CO testing is required at full load conditions only. A copy of the test data shall be submitted to the Air Compliance Section of the Southwest District Office within 45 days of such testing or with the renewal application, whichever occurs first. *(See also Specific Condition No. A19. for special NOx test requirements prior to renewal.)*
[Rules 62-297.310(7)(a)3 & 5 and 62-297.310(8), F.A.C.; and previous operation permits]

A18. Visible Emissions (VE) Testing Requirements - The test method for VE shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty (30) minutes in duration. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur and shall be conducted simultaneously during one of the runs of the NOx test (specifically during the high load run for the four load points NOx test done prior to renewal *(see Specific Condition No. A19.))*.
[Rules 62-213.440(1)(b), 62-297.310(4)(a)2, and 62-297.401, F.A.C.; Construction Permit AC51-196460]

A19. Nitrogen Oxides (NOx) Compliance Testing Requirements - The owner or operator shall determine compliance with the nitrogen oxides standard as follows:

a. U.S. EPA. Method 7E and EPA Method 3, 3A or 3E (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen.

b. The annual NOx stack test *(see Specific Condition No. A16.)* shall be conducted at 90-100% of peak load *(see Specific Condition No. A26.)*, except for the annual test conducted during the 12 month period prior to renewal of this permit *(see c. below)*. Testing shall be done with the duct burner on.

c. Once every five (5) years prior to renewal of this permit, the annual NOx test shall be conducted at each of four load conditions, i.e., 30, 50, 75, and 100 percent of peak load (or at four points in the normal operating range of the gas turbine including the minimum point in the range and peak load) ******. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. Tests at 100% (peak) load shall be conducted with the duct burner on . Testing at lower load levels may be done with the duct burn off . Each test shall consist of three 20 minutes runs at that load.
(See also Specific Condition No. A20. for additional requirements during this NOx emission test)

*(** CO/NOx Testing Note: Due to the inverse effect of operating conditions on CO and NOx emissions (requiring balanced operating conditions to keep both below the allowable emission limits simultaneously), the once-every 5-years CO test shall be conducted simultaneously with this NOx testing - see Specific Condition No. A17.)*

[Rules 62-204.800(8), and 297.310((2), F.A.C.; 40 CFR 60.4400; Construction Permits AC51-196460 and 1010071-002-AC; and testing protocol established with permittee]
{Effective Date 09/14/07}

A20. Establishment of NOx Control Water-to-Fuel Curve - For purposes of demonstrating ongoing compliance with the NOx standard, the monitoring devices of 40 CFR 60 4335(a) *(see Appendix 40 CFR 60 Subpart KKKK)* shall be used to determine the fuel consumption, and the water injection rate necessary to comply with the permitted NOx standard at 30, 50, 75 and 100 % of peak load (or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load) as established during the initial performance stack testing of this unit and subsequent stack testing performed for this purpose. This four point load testing will be used to verify or re-establish the water-to-fuel curve to be used as the basis for determining and controlling (via the turbine control system) the required water injection rate necessary for compliance with the NOx standard at each fuel firing rate/load level. This water-to-fuel curve shall be re-established by stack testing at the four loads points once every 5 years prior to permit renewal *(see Specific Condition No. A19.c.above)*, or more frequently should NOx emission limit exceedances make re-establishment of the curve necessary. If the water-to-fuel curve has changed, the turbine control system shall be reprogrammed to reflect the changes and insure that the necessary water injection rates are achieved. The compliance test report for this testing shall include an updated water-to-fuel curve and a detailed discussion of any resulting changes made to the turbine control system (or an explanation of why no changes were required).
[Rules 62-4.070(3), 62-204.800(8), and 213.440(1)(b), F.A.C.; 40 CFR 60.4335 and 60.4355(a)]
{Effective Date 09/14/07}

A21. Carbon monoxide (CO) Compliance Test Method - Compliance with the CO standard shall be demonstrated using EPA Method 10 pursuant to Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A. [Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and Construction Permit AC51-196460]

A22. Sulfur Dioxide and Sulfuric Acid Mist Compliance Determinations - Compliance with the sulfur dioxide and sulfuric acid mist emission limits (pounds/hour and/or tons/year) for distillate fuel oil firing shall be determined by calculations based on fuel analysis using the methods in Specific Condition No. A.27. [Rule 62-4.070(3), F.A.C.]

A23. Particulate Matter (PM) Test Method and Testing Waiver - The test methods for particulate matter emissions shall be EPA Method 5 or 17, incorporated by reference in Chapter 62-297, F.A.C. However, if a visible emission test using EPA Method 9 shows that opacity is less than 10%, then annual stack testing for PM is waived for that federal fiscal year.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; Construction Permit AC51-196460]

A24. Volatile organic compound (VOC) - When required, compliance with the VOC standard shall be demonstrated by stack testing in accordance EPA Method 25A pursuant to Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A, if required to be documented by testing. EPA Method 3 may be used to determine oxygen concentrations. Compliance with the VOC limitations shall be assumed provided the carbon monoxide (CO) allowable emission rate is achieved. VOC testing shall not be required provided that the CO compliance test demonstrates emissions below the CO limits specified in this permit.
[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; Construction Permit AC51-196460]

A25. *{NSPS Subpart A}* Compliance Testing Conditions - Compliance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [Rule 62-204.800(8), F.A.C.; 40 CFR 60.8(c)]

A26. Operating Rate During Testing.- Testing of emissions shall be conducted with the emission unit operating at permitted capacity *(except for NOx testing once every 5 years which will be conducted at 4 load levels - see Specific Condition No. A19.c.)*. Capacity is defined as 90-100 percent of the turbine's rated (based on manufacturer's curves or tables) heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Once the unit is so limited, then operation at higher capacities is allowed for no more than ~~30~~ 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. In no case shall the process or production rate exceed the maximum permitted heat input rate. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. The actual heat input rate during the test shall be included in each test report. Failure to include the actual process or production rate in the results may invalidate the test.
[Rules 62-4.070(3), and 297.310(2)(a), F.A.C.]

A.27. *{40 CFR 60 Subpart KKKK}* Sulfur Dioxide Limit Compliance Demonstration – Compliance with the sulfur dioxide (SO2) limitations of Specific Condition No. A.10. shall be determined by one of the following three options in accordance with 40 CFR 60.4415(a):

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see Sec. 60.17) for natural gas or ASTM D4177 (incorporated by reference, see Sec. 60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see Sec. 60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453 (all of which are incorporated by reference, see Sec. 60.17); or

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see Sec. 60.17).

(2) Measure the SO2 concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, ``Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see Sec. 60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO2 emission rate:

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

Where:

E = SO2 emission rate, in lb/MWh
1.664×10^{-7} = conversion constant, in lb/dscf-ppm
(SO2)c = average SO2 concentration for the run, in ppm
Qstd = stack gas volumetric flow rate, in dscf/hr
P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to Sec. 60.4350(f)(2); or

(3) Measure the SO2 and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see Sec. 60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO2 emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in Sec. 60.4350(f) to calculate the SO2 emission rate in lb/MWh.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4415] *{Effective Date 09/14/07}*

Monitoring Requirements

A28. *{NSPS Subpart KKKK}* Water-to Fuel Ratio Monitors - The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart KKKK and using water or steam injection to control NOx emissions shall install and operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine when burning a fuel that requires water or steam injection for compliance.
[Rule 62-204.800(8), F.A.C.; 40 CFR 60.4335]
{Effective Date 09/14/07}

A.29 *{NSPS Subpart KKKK}* Parameter Monitoring Plan – In accordance with the requirements of 40 CFR 63.4355, the permittee shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. This plan must meet the requirements of 40 CFR 60.4355(a)(1) through (6). *(See Appendix 40 CFR 60 Subpart KKKK).*
[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4335]
{Effective Date 09/14/07}

A30. *{NSPS Subpart KKKK}* Fuel Sulfur Content Monitoring Requirements - The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart KKKK shall monitor sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

~~a.~~ Fuel oil – Except as provided for in 40 CFR 60.4365 *(see d. below)*, for fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to 40 CFR Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).

b. Gaseous fuel - For owners and operators that elect not to demonstrate sulfur content using the options in 40 CFR 60.4365 or 60.4370(c) *(see c. and d. below)*, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

c. Custom Schedule for Gaseous Fuels - Owners, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs 40 CFR 60.4370(c)(1) and (2), *(see Appendix 40 CFR 60 Subpart KKKK),* these custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the standard in 40 CFR60.4330*. The two custom sulfur monitoring schedules set forth in 40 CFR 60.4370(c)(1)(i) through (iv) and 60.4370(c)(2) *(see Appendix 40 CFR 60 Subpart KKKK)* are acceptable, without prior Administrative approval.

(The Custom Fuel Monitoring Schedule for Natural Gas that was previously included as Specific Condition No. A31. is not applicable for the purposes of showing compliance with NSPS 40 CFR 60 Subpart KKKK. If the custom schedule option of 40 CFR 60.4370(c) is chosen as the method of showing compliance with the sulfur content requirements of Subpart KKKK, then a new Custom Schedule must be established in accordance with the requirements of 40 CFR 60.4370(c))*

(continued)

A30. *(continued)*

d. Exemptions From Monitoring Total Sulfur Content of Fuels - In accordance with 40 CFR 60.4365, the owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed the potential sulfur emissions standard of 0.060 lb SO2/MMBtu (26 ng SO2/J heat input). The owner or operator shall use one of the following sources of information to make the required demonstration:

(1) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil is 0.05 weight percent (500 ppmw) or less; the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet, and has potential sulfur emissions of less than less than 0.060 lb SO2/MMBtu (26 ng SO2/J) heat input; or

(2) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60 4365 and 60.4370]
{Effective Date 09/14/07}

A31. Custom Fuel Monitoring Schedule for Natural Gas
RESERVED

A32. Determination of Process Variables.

a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Recordkeeping Requirements

A33. Fuel Use and Operating Rate Records - In order to demonstrate compliance with Specific Conditions No. A1., A2., and A3, the permittee shall maintain fuel usage and operating rate records at the facility. The log/records at a minimum shall contain the following for each CT and DB:

CT

No. 2 Fuel Oil Firing

a. All CT operating periods during which No. 2 fuel oil was fired. These records shall include date, CT unit ID, start time, and end time.

b. On a calendar month basis for each CT, the total hours operated firing fuel oil (hours/month) , the quantity of fuel burned for the month (gallons/month), and a total for the most recent 12 consecutive month period (gallons/12 consecutive month period).

Natural gas Firing

c. Total operating hours for each CT while firing natural gas for the month (hrs/month).

d. On a calendar month basis, the quantity of natural gas burned in each CTs for the month of record (Mcf/month).

DB *(permitted for natural gas only)*

e. Operating hours for each DB (hours/month).

f. On a calendar month basis, the quantity of natural gas burned in each DBs for the month of record. (Mcf/month).

g. On a calendar month basis, based on f. above and the higher heating value (HHV) of the natural gas (approximately 1054.5 Btu/ft^3), a calculation of the total BTU's fired in each DB for the month (MMBtu/month), and for the most recent 12 consecutive month period (MMBtu/12 consecutive month period).

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

A34. *{NSPS Subpart A}* Retention of Records Related to Monitoring and Compliance Testing - The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.
[Rules 62-204.800(8), and 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 60.7(f)]

Excess Emissions Reporting

A35. *{NSPS Subpart A}* Excess Emission Reporting - The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts *(see condition below)*) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. Written reports of excess emissions shall include the following information:

a The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.7(c)(1), (2), (3) and (4), and 40 CFR 60.4395]
{Effective Date 09/14/07}

A36. *{NSPS Subpart KKKK}* Definition of Excess Emissions - For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

a. Nitrogen oxides - For turbines using water or steam to fuel ratio monitoring:

(1) An excess emission is any unit operating hour for which the 4-hour rolling average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.4320, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine when a fuel is being burned that requires water or steam injection for NOX control will also be considered an excess emission.
(2) A period of monitor downtime is any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
(3) Each report must include the average steam or water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4380]

A36. *(continued)*

b. Sulfur Dioxide - If the permittee chooses the sulfur dioxide compliance demonstration option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

(1) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(2) If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to paragraph (a) of this section. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option.

(3) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4385]

[Rule 62-296.800, F.A.C.; 40 CFR 60.4380 and 60.4385]
{Effective Date 09/14/07}

A37. Excess Emissions Report Requirements - The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator.

One summary report form shall be submitted for each pollutant monitored at each affected facility.

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

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

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.7(d)(1) and (2)]

Miscellaneous

A38. *{NSPS Subpart A}* Definition of Administrator - For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[Rule 62-204.800(8), F.A.C.; 40 CFR 60.2]

Additional Reporting Requirements

A39. PSD Applicability Report: Before March 1st of each year, the permittee shall submit a report to the Bureau of Air Regulation and the Compliance Authority summarizing actual annual emissions for the previous calendar year. The reports shall be submitted for five separate years that are representative of normal post-change operations after completing construction of the SPRINT project. The reports shall begin during the first full year that the SPRINT technology is in use and continue for five years. Reports are subject to the following conditions.

a. Actual emissions for a given year shall be determined by the tested emission rates for that year and the actual hours of operation during the calendar year.

b. The total "past actual emissions" for Units 1 and 2 (2-year average) are 238 tons per year of carbon monoxide and 328 tons per year of nitrogen oxides.

c. In accordance with 40 CFR 52.21(b)(33)(ii), the permittee shall, "Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole." The permittee shall quantify any excluded emissions and provide a rationale.*)*

d. The annual report shall compare actual emissions calculated for a given year with the past actual emissions identified above. If the comparison shows an increase in actual emissions greater than the PSD significant emission rates defined in Table 212.400-2, F.A.C., then Units 1 and 2 shall be subject to PSD preconstruction review at that time. The review shall include a determination of the Best Available Control Technology (BACT) for each PSD-significant pollutant.

[Rules 62-204.800, 62-210.200(11) and 62-212.400, F.A.C.; 40 CFR 52.21(b)(33)(ii); Construction Permit 1010071-002-AC]
{Effective Date 09/14/07}

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

September 15, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Christmas, Plant Manager
Pasco Cogeneration, Ltd.
14850 Old State Road 23
Dade City, Florida 33525

Re: Air Permit No. 1010071-002-AC
Pasco Cogeneration Plant
SPRINT Project for Combined Cycle Units 1 and 2
Extension of Air Construction Permit Expiration Date

Dear Mr. Christmas:

On August 25, 2006, the Department received your request for an extension of air construction Permit No. 1010071-002-AC for the Pasco Cogeneration Plant located in Pasco County at 14850 Old State Road 23, Dade City, Florida 33525. This permit authorized the installation of spray inter-cooling technology (SPRINT) for the pair of existing LM-6000 gas turbines (Units 1 and 2). In June of 2006, Pasco Cogeneration successfully completed all work related to the SPRINT project for Unit 2, which is now fully operational and satisfactorily performance tested. However, only the initial engineering design and drawings have been completed for Unit 1. Pasco Cogeneration expects to approve expenditures for the Unit 1 SPRINT project by the end of 2006. This work is planned for April/May of 2007, which is the next available major outage scheduled for this unit. Therefore, Pasco Cogeneration, Ltd. requests a 1-year extension of the air permit to allow completion of the SPRINT project for Unit 1 in 2007.

Determination: The SPRINT project will allow an increase in the maximum power production for Units 1 and 2 from approximately 42.5 to 50.2 MW through the use of spray inter-cooling technology (SPRINT). The Department originally concluded that SPRINT would have a minimal impact on emissions. The air construction permit requires the plant to report emissions for 5 years after installing SPRINT to ensure that the project did not result in a PSD significant net emissions increase. This conclusion remains valid for the permit extension and the Department approves the request. The expiration date is hereby extended from December 1, 2006 to December 1, 2007. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice

under Section 120.60(3), F.S., must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

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

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

Mediation: Mediation is not available in this proceeding.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Department.

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

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/15/06 to the persons listed:

Mr. Richard Christmas, Pasco*
Mr. Tom Grace, Pasco c/o Aquila
Ms. Mara Nasca, SWD Office
Mr. Gregg Worley, EPA Region 4 Office

Clerk Stamp

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

(Clerk) 9/15/06 (Date)

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Richard Christmas, Plant Manager
Pasco Cogeneration, Ltd.
14850 Old State Road 23
Dade City, Florida 33525

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Richard Christmas | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7000 1670 0013 3110 1236

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	

Postmark Here

7000 1670 0013 3110 1236

Mr. Richard Christmas, Plant Manager
Pasco Cogeneration, Ltd.
14850 Old State Road 23
Dade City, Florida 33525

PS Form 3800, May 2000 See Reverse for Instructions

Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Bureau of Air Regulation

FROM: Jeff Koerner, Air Permitting North

DATE: September 8, 2006

SUBJECT: Air Permit No. 1010071-002-AC
Pasco Cogeneration, Limited – LM-6000 SPRINT Project
Second Extension of Air Construction Permit Expiration Date

Attached for your approval and signature is a permit modification to extend the expiration date for the above referenced permit. In October of 2004, the original project to install SPRINT technology on the pair of existing LM6000 gas turbines was extended from December 1, 2004 to December 1, 2006. In June of 2006, Pasco Cogeneration successfully completed all work related to the SPRINT project for Unit 2, which is now fully operational and satisfactorily performance tested. However, only the initial engineering design and drawings have been completed for Unit 1. Pasco Cogeneration expects to approve expenditures for the Unit 1 SPRINT project by the end of 2006. This work is scheduled for April/May of 2007, which is the next available major outage scheduled for this unit. The installation of SPRINT is expected to result in minimal emissions impacts and the change in plans does not affect the Department's original determination. I recommend your approval and signature.

Attachments

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

14850 Old State Road 23 • Dade City, FL 33523
Tel (352) 523-0062 • Fax (352) 523-0572

August 23, 2006

Mr. Jeffery F. Koerner, 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: Pasco Cogeneration LP; Facility ID 1010071; Pasco County, Florida;
Request for One Year Extension to Construction Permit 1010071-002-AC

Dear Mr. Koerner:

The purpose of this letter is to follow-up with the conversation we had last Friday, August 18, 2006, concerning the ongoing SPRINT modification project at the Pasco Cogeneration facility and the need to secure an additional extension to the current construction permit.

The Pasco Cogeneration facility, located in Dade City, Pasco County, Florida, has a construction permit to install SPRINT units on its two LM-6000 Combustion Turbine units that is scheduled to expire on December 1, 2006. Progress on having both Combustion Turbines modified with the SPRINT technology is being made, but will not be fully completed by the current December 1, 2006 permit deadline. To successfully complete this effort, Pasco Cogeneration is requesting an additional one year extension to the construction permit. As explained below, progress is being made, but at a pace somewhat slower than originally anticipated by the project.

To date the following work evolutions have occurred or are about to occur with regard to the installation of SPRINT technology in the two Combustion Units at Pasco Cogeneration.

- As of June 6, 2006, all work on the Combustion Turbine Unit 2 SPRINT modification has been completed with the unit having been successfully tested and now fully functional.
- The drawings for the Unit 1 SPRINT modification and initial engineering for design application have been completed.
- Prior to December 1, 2006, Pasco Cogeneration and GE will complete negotiations for the second unit installation and will have secured Partnership Approvals for expenditures.
- To accept beneficial pricing from GE, the PO for purchase of the modification equipment and initial shipment of hardware must be done prior to the end of the first quarter of 2007.

- A major plant outage is scheduled for sometime in either April or May of 2007, at which time the facility will be out of service and available to have the modification components installed and the system testing completed.

Based on the time line provided above, a one year additional extension to the construction permit is anticipated to meet the project needs.

If you have any questions or concerns with regard to this request for an additional time extension to the SPRINT modification construction permit, please feel to call either Richard Christmas, Pasco Cogeneration Plant Manager, at 352-523-0062, or myself, at 775-850-2248. We look forward to hearing back from you at your earliest convenience.

For Pasco Cogeneration
Sincerely,

Thomas A. Grace, CHMM
Manager, Environmental Services

Cc: R. Christmas
J. Delgado
T. DeRocher

Koerner, Jeff

From: Thomas Grace [tgrace@caithnessenergy.com]
Sent: Wednesday, September 06, 2006 4:21 PM
To: Koerner, Jeff
Subject: FW: Scanned from TOSHIBA 09/06/2006 13:01

Attachments: DOC090606.pdf

DOC090606.pdf
(474 KB)

Jeff,

Per our earlier conversation, here are attached the scanned pages from the recent source test. Normally Pasco is not required to do CO testing annually, only every five years prior to Title V permit renewal submittal, but we had it done as a separate test on Unit 2 this time due to the SPRINT addition (see table on last page of scan). The original of this source test was submitted last month to Southwest District.

I hope this addresses your needs for the extension approval for Unit 1. If you need any further info let me know.

Thanks once again for your help.

Tom Grace
775-850-2248

-----Original Message-----
From: Caithness Energy [mailto:gpotts@cenyc.com]
Sent: Wednesday, September 06, 2006 1:01 PM
To: Thomas Grace
Subject: Scanned from TOSHIBA 09/06/2006 13:01

Scanned from TOSHIBA.
Date: 09/06/2006 13:01
Pages:10
Resolution:200x200 DPI

AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67th Place, Suite 4, Gainesville, Florida 32653

BIAS CORRECTION AND EMISSION RESULTS
PASCO COGEN
CT-2 OUTLET
DADE CITY,FLORIDA
JULY 13, 2006 **CT BASE LOAD**

F-FACTOR 8710

1306-1413		Cal Gas	Pre Run		Post Run		Average		Run	Corrected			
CT ONLY		Value	Bias	Zero	Bias	Zero	Bias	Zero	Average	Value	NOx @ 15%	LB/MMBTU	LB/HR
RUN 1	NOx	24.78	24.71	0.07	24.84	0.25	24.77	0.16	26.92	26.95	24.44	0.0900	40.31
	CO	27.75	27.72	-0.04	27.84	0.01	27.78	-0.02	27.50	27.47		0.0559	25.00
	O2	13.93	13.92	-0.01	13.94	0.01	13.93	0.00	14.39	14.39			
GAS FLOW (SCFM)		7237											
HEATING VALUE:		1031	BTU/SCF										

1435-1535		Cal Gas	Pre Run		Post Run		Average		Run	Corrected			
CT ONLY		Value	Bias	Zero	Bias	Zero	Bias	Zero	Average	Value	NOx @ 15%	LB/MMBTU	LB/HR
RUN 2	NOx	24.78	24.84	0.25	24.77	0.26	24.80	0.26	27.20	27.20	24.68	0.0909	40.71
	CO	27.75	27.84	0.01	27.82	0.01	27.83	0.01	27.10	27.02		0.0550	24.61
	O2	13.93	13.94	0.01	13.90	0.01	13.92	0.01	14.39	14.40			
GAS FLOW (SCFM)		7237											
HEATING VALUE:		1031	BTU/SCF										

1552-1652		Cal Gas	Pre Run		Post Run		Average		Run	Corrected			
CT ONLY		Value	Bias	Zero	Bias	Zero	Bias	Zero	Average	Value	NOx @ 15%	LB/MMBTU	LB/HR
RUN 3	NOx	24.78	24.77	0.26	24.47	0.03	24.62	0.15	27.08	27.28	24.80	0.0914	40.9
	CO	27.75	27.82	0.01	27.82	-0.03	27.82	-0.01	27.16	27.10		0.0552	24.7
	O2	13.93	13.90	0.01	13.90	0.02	13.90	0.02	14.38	14.41			
GAS FLOW (SCFM)		7232											
HEATING VALUE:		1031	BTU/SCF										

SOURCE TEST REPORT
FOR
COMBINED CYCLE COMBUSTION TURBINES
WITH AUXILIARY DUCT BURNERS

INTEGRATED FACILITY UNITS 1 AND 2
COMPLIANCE EVALUATION
FOR
NATURAL GAS FIRING
OXIDES OF NITROGEN,
SULFUR DIOXIDE AND VISIBLE EMISSIONS

FDEP PERMIT NUMBER 1010071-003-AV

PASCO COGENERATION LIMITED
DADE CITY, FLORIDA

JULY 13-14, 2006

PREPARED FOR:

CAITHNESS ENERGY, L.L.C.
9790 GATEWAY DRIVE, STE. 220
RENO, NEVADA 89521

PREPARED BY:

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

424-06-04

ACE
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

8/14/2006

Date

EXECUTIVE SUMMARY

The annual compliance test results for the Unit 1 (EU001) and the Unit 2 (EU002) Combustion Turbines meet all mass emission requirements listed in the Florida Department of Environmental Protection (FDEP) Permit Number 1010071-003-AV. All tests were conducted on natural gas firing only. The allowable lower heating value (LHV) heat input to each unit is 424 MMBTUH. Testing was conducted at 395.0 and 405 MMBTUH, respectively, due to restrictions imposed by G.E.

Pollutant	Source	Actual Emissions	Total Plant Allowable Emissions
UNIT 1			
NO_x	CT	38.4 lbs/hr, 24 ppm,d @ 15% O_2	85.5 lbs/hr CT1 & CT2 combined 25ppm,d @ 15% O_2
	DB	0.74 lbs/hr, 0.016 lbs/MMBTU	18.0 lbs/hr DB1 & DB2 combined 0.1 lbs/MMBTU
	CT & DB	39.1 lbs/hr	103.5 lbs/hr Total
UNIT 2			
NO_x	CT	40.6 lbs/hr, 25 ppm,d @ 15% O_2	85.5 lbs/hr CT1 & CT2 combined 25ppm,d @ 15% O_2
	DB	-2.01 lbs/hr, -0.038 lbs/MMBTU	18.0 lbs/hr DB1 & DB2 combined 0.1 lbs/MMBTU
	CT & DB	38.6 lbs/hr	103.5 lbs/hr Total

Mass emission limitations are total for both units combined.

Emission results at full load are provided in Tables 1 (Unit 1) and 2 (Unit 2), which include demonstration of compliance at ISO ambient corrected NO_x emission concentrations to ensure that CFR 40 Part 60 Subpart GG emission limits are also met. ISO corrected NO_x allowable is approximately 112.5 ppm.

No visible emissions were detected from full gas turbine or full gas turbine plus full duct burner operations from both units.

SO_2 emissions based on fuel analysis were 1.05×10^{-2} for Unit 1 at 42 MW and 1.01×10^{-2} lb/hr for Unit 2 at 47.4 MW.

1.0 INTRODUCTION

On July 13 and 14, 2006 Air Consulting and Engineering, Inc. (ACE) performed annual compliance testing for Oxides of Nitrogen (NO_x) and Opacity on the exhaust stacks of the Combustion Turbines, Units 1 and 2, at Pasco Cogeneration Limited in Dade City, Florida.

The Units were tested at full load to satisfy conditions of the current Florida Department of Environmental Protection (FDEP) Title V Permit 1010071-003-AV (see Appendix A).

United States Environmental Protection Agency (EPA) Method 20 (NO_x and O_2) and Method 9 (VE) were used to determine turbine emissions with and without duct burner operation. Sulfur Dioxide (SO_2) emissions were calculated from the fuel analysis.

Mr. Warren Park of Pasco Cogeneration, Ltd. coordinated testing and provided plant production data. Mr. Tom Grace of Caithness Energy, L.L.C. served as Project Director.

2.0 SUMMARY AND DISCUSSION OF RESULTS

The facility demonstrated compliance with permit conditions. Results of the emission tests are summarized in Tables 1 and 2. The Units were fired on natural gas.

The contribution of NO_x emissions of the gas fired duct burners was determined by performing a test series with and without duct burner firing. The difference in emission rates was attributed to the duct burners.

Duct burner NO_x contributions averaged 0.016 pounds per Million BTUs (lbs/MMBTU) for Unit 1 and -0.038 lbs/MMBTU for Unit 2. The power output of the combustion turbines 1 and 2 was 42 and 47.4 megawatts (MW) with and without duct burners. Unit 2's Inlet Air Temperature and Water Flow Rates were 60.2° F and 38.0 GPM for CT operation only and 58.4° F and 38.1 GPM for CT plus Duct Burner Operations. The NO_x water to fuel ratio averaged 1.39 for both operating conditions (see Appendix F for Plant Data). The apparent negative emission rate was possibly caused by a slight increase in the water injection rate and a slight decrease in CT heat input as well as a higher inlet air temperature during the DB test. DB contribution for NO_x are difficult to accurately demonstrate due to the relative low (10%) DB contribution to the total heat input. Allowable emissions are 0.1 lbs/MMBTU NO_x.

Units 1 and 2 without duct burners averaged 23.9 and 24.6 parts per million (ppm) NO_x at 15% O_2, respectively, which is within the permitted standard of 25 ppm at 15% O_2.

To also demonstrate compliance with Federal New Source Performance Standards (NSPS) by 40CFR 60 Subpart GG, observed NO_x concentrations were first adjusted to 15% O_2 and than finally to ISO standard ambient conditions using the following equation:

$$\text{ISO } NO_x \text{ Emissions} = (NO_{xobs}\text{ppm})\left(P_{ref}/P_{obs}\right)^{0.5} e^{19(H_{obs}-0.00633)} (288°K/T_{amb})^{1.53}$$

Where:
NO_{xobs} = measured NO_x ppm at 15% O_2
P_{ref} = reference combustor inlet absolute pressure at 101.3 kilopascal ambient pressure (29.92 in. Hg)
P_{obs} = measured combustor inlet absolute pressure at test ambient pressure (actual barometric pressure in in. Hg)
H_{obs} = specific humidity at ambient air at test (g H_2O/g air)
T_{amb} = temperature of ambient air at test
e = 2.718 - transcendental constant

Allowable NO_x emissions for NSPS are approximately 112.5 ppm @ ISO ambient conditions. Both units were in compliance with this standard.

Table 1. Emission Summary
Unit 1 Combustion Turbine - Gas Fired
Pasco Cogeneration, Ltd.
Dade City, Florida
July 14, 2006

Run Number	Time	Oxygen %	NOx Emissions ppm	ppm 15% O2	ppm @ISO	lbs/hr	lbs/MMBTU	COMBUSTION TURBINE Gas Flow scfm	CT Heat Input MMBTUH HHV	CT Heat Input MMBTUH LHV	DUCT BURNERS Gas Flow scfm	Heat Input MMBTUH HHV	CT + DB Heat Input MMBTUH HHV	NOx Contr. lbs/MMBTU
Full Load CT only at 41.9 MW														
1	1113-1222	14.28	26.79	23.87	31.60	38.45	0.0879	7076	437.3	395.5	NA	NA	NA	NA
2	1238-1338	14.28	26.58	23.68	30.60	38.08	0.0872	7064	436.6	394.8	NA	NA	NA	NA
3	1355-1455	14.28	26.96	24.01	31.30	38.60	0.0885	7059	436.2	394.6	NA	NA	NA	NA
Average	—	14.28	26.78	23.85	31.17	38.38	0.0879	7066	438.4	395.0	NA	NA	NA	NA
Full Load CT at 42.0 MW with Duct Burner														
1	1513-1613	13.40	27.74	21.82	NA	38.75	0.0804	7060	436.3	394.6	740	45.7	482.1	0.007
2	1632-1732	13.41	27.99	22.05	NA	39.30	0.0812	7081	437.6	395.8	746	46.1	483.7	0.026
3	1746-1847	13.38	28.28	22.19	NA	39.30	0.0817	7037	434.9	393.4	750	46.4	481.3	0.015
Average	—	13.40	28.00	22.02	NA	39.12	0.0811	7059	436.3	394.6	745	46.1	482.3	0.016

Natural Gas Fd-Factor = 8710 MMBTU/dscf ***MW NOx = 46 lbs/lb-mole***
lbs/hr = ppm(2.595 x 10^E-9)MW (20.9/20.9-%O2)(Fd)(Heat Input HHV)
Heat Input HHV = (gas flow)(1030 dry Btu/cf)(60 min/hr)/10E6

SO2 Emissions (Subpart GG NSPS) = 1.05E-02 lbs/hr 0.299 gr/hcf

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

Table 2. **Emission Summary**
Unit 2 Combustion Turbine - Gas Fired
Pasco Cogeneration, Ltd.
Dade City, Florida
July 13, 2006

Run Number	Time	Oxygen %	NOx Emissions ppm	ppm 15% O2	ppm @ISO	lbs/hr	lbs/MMBTU	COMBUSTION TURBINE Gas Flow scfm	CT Heat Input MMBTUH HHV	MMBTUH LHV	DUCT BURNERS Gas Flow scfm	Heat Input MMBTUH HHV	CT + DB Heat Input MMBTUH HHV	NOx Contr. lbs/MMBTU
Full Load CT only at 47.4 MW														
1	1306-1413	14.39	26.95	24.44	32.90	40.31	0.0900	7237	447.7	405.0	NA	NA	NA	NA
2	1435-1535	14.40	27.20	24.68	30.30	40.71	0.0909	7237	447.7	405.0	NA	NA	NA	NA
3	1552-1652	14.41	27.28	24.80	30.30	40.90	0.0914	7232	447.4	404.7	NA	NA	NA	NA
Average	---	14.40	27.14	24.64	31.17	40.64	0.0908	7235	447.6	404.9	NA	NA	NA	NA
Full Load CT at 47.4 MW with Duct Burner														
1	1717-1817	13.38	26.82	21.05	NA	38.72	0.0776	7231	447.3	404.6	838	51.9	499.2	-0.031
2	1830-1930	13.40	26.62	20.94	NA	38.56	0.0771	7234	447.5	404.8	849	52.5	500.0	-0.041
3	1944-2044	13.43	26.51	20.93	NA	38.60	0.0771	7235	447.6	404.8	847	52.4	499.9	-0.044
Average	---	13.40	26.65	20.97	NA	38.63	0.0773	7233	447.5	404.8	845	52.3	499.7	-0.038

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

SO2 Emissions (Subpart GG NSPS) = 1.01E-02 lbs/hr 0.279 gr/hcf

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

Actual combined mass emissions for both turbines are 79.0 lbs/hr NO_x at a total heat input of 799.9 MMBTUH (LHV). Combined mass emissions with duct burners are 77.8 lbs/hr NO_x at a total heat input of 799.4 MMBTUH (LHV).

Mass emissions for in pounds per hour were calculated using the actual heat input and the pollutant concentration.

Sulfur Dioxide (SO_2) emissions were determined by fuel analysis performed by the SGS North America, Inc.. SO_2 emissions based on 4.470 ppmv (7/13/06) and 4.788 ppmv (7/14/06) Sulfur content averaged 2.06×10^{-2} lbs/hr for both Units combined (see Appendix F for fuel analysis).

Visible emission tests were conducted on both units during turbine operation only and combined turbine and duct burner operation. Visible emissions on both turbine exhaust stacks at both conditions averaged 0.0 percent opacity for the highest six minute period of each test (see Appendix D for VE data). Permitted emissions are 10 percent opacity.

Gaseous emission data with data logger results and strip chart copies are provided in Appendices B and C, respectively.

3.0 PROCESS DESCRIPTION AND OPERATION

The Pasco Cogeneration Limited facility consists of two GE LM6000 PA combustion gas turbine generating sets with a nominal generating capacity of 42 MW each. Each turbine is exhausted through a Heat Recovery Steam Generator (HRSG) with supplemental duct burner firing. The steam produced by the HRSG is exhausted through a common steam turbine generator originally rated for 26.5 MW. The duct burners are permitted for up to 90 MMBTU heat input each. The gas turbines can be fired on either natural gas or oil. The duct burners are fired only with natural gas. The gas turbines have a chiller system, which maintains inlet combustion air at 51°F to 58°F and 100% relative humidity year round. Water is injected at the turbine combustor ring to reduce NO_x emissions.

Unit 2 is equipped with a "Sprint" system that injects atomized water in the combustor inlet. This increases power and further reduces NO_x.

During the compliance test the Units generated 42 MW (Unit 1) and 47.4 MW (Unit 2) at full load (see Appendix F for plant production data).

ESN 185-103 GAS TURBINE 2

45.00 TO 50.00 3 One Hour runs

DATE: 08/11/06

TAKE READINGS EVERY 15 MINUTES DURING THE TEST

	TIME	INLET AIR T2	GTMW	YOKAGOWA NOX WATER TOTALIZER GALLONS	YOKAGOWA NOX WATER FLOW GPM	PLANT METERS TURBINE GAS FLOW TOTALIZER SCF	PLANT METERS TURBINE GAS FLOW FLOW SCFM	PLANT METERS TURBINE GAS FLOW TOTALIZER KSCF	PLANT METERS TURBINE GAS FLOW FLOW KSCFH	NOX RAMP NETCON	WATER/FUEL RATIO PLT MTR	WATER/FUEL RATIO DCS	NOX PPH NETCAL	NOX PPH DCS	ACE CO2 PPM UNCORRECTED	ACE NOX PPM UNCORRECTED	ACE % O2	ACE CO2 PPM CORRECTED	ACE NOX PPM CORRECTED	P0 Pres	Plant Barom Pres	Airport Barom Pres	Amb Temp
	13:05	60.00	47.40	21,376,871.00	38.10	10592.70	7249.00	85559.00	434.40	1.000		1.39			N/A	26.84	14.39	27.60	24.31	14.42	14.79	14.79	91.80
	13:20	59.50	47.40	21,377,412.00	38.00	11581.10	7250.00	85634.00	434.30	1.000		1.39			N/A	26.91	14.40	27.23	24.40	14.41	14.7	14.79	92.50
	13:36	60.20	47.40	21,377,969.60	38.10	12634.00	7252.00	85742.00	434.12	1.000		1.39			N/A	26.89	14.41	27.38	24.43	14.41	14.79	14.79	92.40
	13:51	60.10	47.40	21,378,524.00	38.10	13679.00	7252.00	85845.00	434.00	1.000		1.40			N/A	27.02	14.40	27.54	24.51	14.41	14.79	14.79	91.80
RUN 1	14:00	60.00	47.40	21,379,132.00	38.20	14795.00	7252.00	85970.00	434.40	1.000		1.40			N/A	27.02	14.39	27.58	24.47	14.41	14.79	14.79	92.60
															N/A								
															N/A								
															N/A								
															N/A								
	14:35	61.30	47.40	21,380,219.00	38.00	16791.00	7260.00	86172.00	433.90	1.000		1.39			N/A	27.16	14.37	27.56	24.52	14.41	14.79	14.79	93.80
	14:51	59.20	47.40	21,380,793.00	37.90	17855.30	7258.00	86291.00	434.60	1.000		1.39			N/A	27.12	14.39	27.57	24.61	14.41	14.79	14.79	93.30
	15:08	60.80	47.40	21,381,444.00	37.90	19089.00	7259.00	86403.00	433.90	1.000		1.39			N/A	27.26	14.39	27.17	27.70	14.40	14.79	14.79	95.20
	15:20	60.10	47.40	21,381,916.00	38.10	19936.00	7260.00	86495.00	434.20	1.010		1.39			N/A	27.12	14.38	27.02	24.56	14.40	14.79	14.79	95.20
RUN 2	15:36	60.00	47.40	21,382,503.00	38.00	21025.00	7258.00	86606.00	434.60	1.010		1.39			N/A	27.45	14.38	26.82	24.84	14.40	14.79	14.79	93.30
															N/A								
															N/A								
															N/A								
															N/A								
	15:52	59.90	47.40	21,383,209.00	38.00	22351.00	7259.000	86737.00	433.80	1.010		1.39			N/A	27.16	14.37	27.18	24.55	14.40	14.77	14.77	92.40
	16:07	60.20	47.40	21,383,755.00	38.10	23340.00	7254.000	86847.00	433.50	1.010		1.39			N/A	27.13	14.38	27.02	24.53	14.40	14.77	14.77	94.10
	16:22	60.20	47.40	21,384,279.00	38.20	24327.00	7259.000	86947.00	433.70	1.010		1.39			N/A	26.97	14.38	27.50	24.45	14.40	14.77	14.77	93.50
	16:40	60.60	47.40	21,385,019.00	38.10	25690.00	7263.000	87089.00	434.50	1.010		1.39			N/A	27.21	14.38	27.25	24.58	14.40	14.76	14.76	94.10
RUN 3	16:51	60.90	47.40	21,385,387.00	38.10	26369.00	7264.00	87147.00	434.2	1.010		1.39			N/A	27.16	14.39	27.13	24.61	14.41	14.76	14.76	81.40
															N/A								
															N/A								
															N/A								
															N/A								
RUN TOTALS		53.12	41.82	8,516.00	33.58	16473.81									N/A								
															N/A								
															N/A								