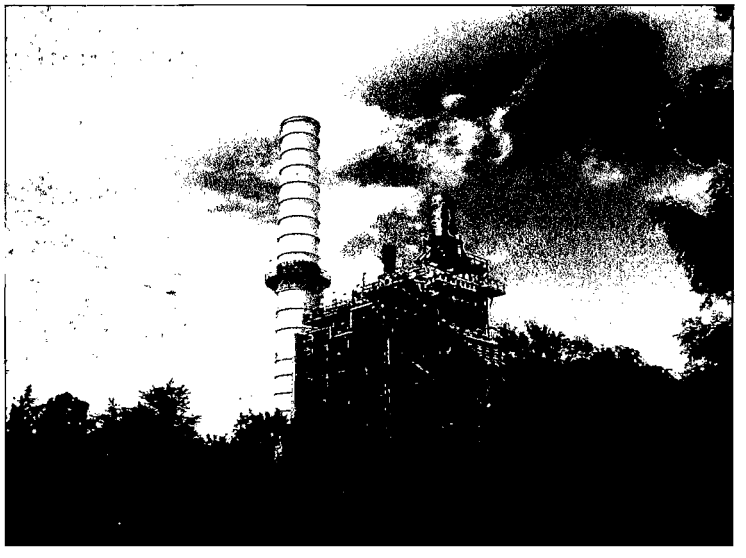
Application for Air Permit

Title V Source

Sam O. Purdom
Electric Generating Station



July 2007

City of Tallahassee
Your Own Utilities℠

Plan Prepared By:

City of Tallahassee
Environmental Resources
Updated March/ April 2007

City of Tallahassee
Your Own Utilities™

talgov.com

Utility Business & Customer Services 300 S. Adams Street, A-36 Tallahassee, FL 32301 850-891-4YOU (4968)

May 21, 2007

HAND DELIVERED

Jeff Koerner
Professional Engineer Administrator
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Re: Title V Operation Permit Application – *Five-Year Title V Renewal*
Sam O. Purdom Generating Station (Facility ID 1290001)

Dear Mr. Koerner:

Please find enclosed four (4) copies of an *Application for Air Permit – Title V Source* for the City of Tallahassee Sam O. Purdom Generating Station. The renewal application is submitted more than 180 days in advance of the expiration of current Operating Permit No. 1290001-007-AV, as required by Rule 62-4.090, Florida Administrative Code (F.A.C.).

The City of Tallahassee is hereby requesting the following revision to be incorporated into the Title V Operating Permit; no additional changes are requested at this time.

- Combined Combustion Turbine Unit Number 8, Specific Condition F.25: the addition of an ASTM fuel analysis standard for sulfur.

The renewal application was completed on the form provided by the Florida Department of Environmental Protection and adopted in Rule 62-210.900(1), F.A.C. The renewal application is signed and sealed by myself, a Licensed Professional Engineer and contains the original signature of Rob McGarrah as the Primary Responsible Official.

If you have any questions regarding the attached application, please do not hesitate to contact either myself at (850) 891-8851, Monique Bribasi, Environmental Specialist at (850) 891-8563 or Rob McGarrah, Manager of Power Production at (850) 891-5534.

Sincerely,

John K. Powell
Interim Manager of Environmental and Safety Division

Enclosures

cc: Rob McGarrah, COT
Triveni Singh, COT
Cynthia Barber, COT
Phil Bucci, COT
Monique Brijbasi, COT

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **City of Tallahassee**	
2. Site Name: **Sam O. Purdom Generating Station**	
3. Facility Identification Number: **1290001**	
4. Facility Location... Street Address or Other Locator: **667 Port Leon Drive** City: **St. Marks** County: **Wakulla** Zip Code: **32355**	
5. Relocatable Facility? ☐ Yes ☑ No	6. Existing Title V Permitted Facility? ☑ Yes ☐ No

Application Contact

1. Application Contact Name: **John K. Powell, PE** **Interim Environmental & Safety Manager**
2. Application Contact Mailing Address... Organization/Firm: **City of Tallahassee, Environmental Resources** Street Address: **300 South Adams Street** City: **Tallahassee** State: **Florida** Zip Code: **32301**
3. Application Contact Telephone Numbers... Telephone: **(850) 891 - 8851** ext. Fax: **(850) 891 - 8277**
4. Application Contact Email Address: **powellj@talgov.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 5/21/07	3. PSD Number (if applicable):
2. Project Number(s): 1290001-009-AV	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

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

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

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☑ Title V air operation permit renewal.

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

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

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

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

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

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

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

Application Comment

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
EU007	**Boiler Number 7**		**No**
EU008	**Combustion Turbine Number 1**		**No**
EU009	**Combustion Turbine Number 2**		**No**
EU010	**Fugitive VOC Sources**		**No**
EU011	**Auxiliary Boiler**		**No**
EU012	**General Purpose Engines**		**No**
EU013	**Emergency Generators**		**No**
EU014	**Combustion Turbine Number 8**		**No**
EU015	**Cooling Tower**		**No**

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name :
   Robert E. McGarrah, Manager of Power Production

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **City of Tallahassee**
   Street Address: **2602 Jackson Bluff Road**
   City: **Tallahassee** State: **Florida** Zip Code: **32304**

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(850) 891 - 5534** ext. Fax: **(850) 891 - 5162**

4. Owner/Authorized Representative Email Address: **mcgarrar@talgov.com**

5. Owner/Authorized Representative Statement:

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

   _____ _____
   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   Robert E. McGarrah, Manager of Power Production

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☐ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☑ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **City of Tallahassee**
   Street Address: **2602 Jackson Bluff Road**
   City: **Tallahassee** State: **Florida** Zip Code: **32304**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(850) 891 - 5534** ext. Fax: **(850) 891 - 5162**

5. Application Responsible Official Email Address: **mcgarrar@talgov.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

MAY 9, 2007
Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **John K. Powell, PE**
   Registration Number: **58737**
2. Professional Engineer Mailing Address...
   Organization/Firm: **City of Tallahassee, Environmental Resources**
   Street Address: **300 South Adams Street**
   City: **Tallahassee** State: **Florida** Zip Code: **32301**
3. Professional Engineer Telephone Numbers...
   Telephone: **(850) 891 - 8851** ext. Fax: **(850) 891 - 8277**
4. Professional Engineer Email Address: **powellj@talgov.com**
5. Professional Engineer Statement:

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

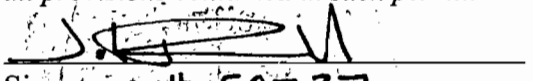
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions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

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

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

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

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



Signature # 58737

5/11/2007
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **16** East (km) **769.50** North (km) **3339.97**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **30/09/47** Longitude (DD/MM/SS) **84/12/10**	
3. Governmental Facility Code: **4**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **John K. Powell, PE - Interim Environmental & Safety Manager**
2. Facility Contact Mailing Address... Organization/Firm: **City of Tallahassee, Environmental Resources** Street Address: **300 South Adams Street** City: **Tallahassee** State: **Florida** Zip Code: **32301**
3. Facility Contact Telephone Numbers: Telephone: **(850) 891 - 8851** ext. Fax: **(850) 891 - 8277**
4. Facility Contact Email Address: **powellj@talgov.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: **Robert E. McGarrah - Manager of Power Production**
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: **City of Tallahassee** Street Address: **2602 Jackson Bluff Road** City: **Tallahassee** State: **Florida** Zip Code: **32304**
3. Facility Primary Responsible Official Telephone Numbers... Telephone: **(850) 891 - 5534** ext. Fax: **(850) 891 - 5162**
4. Facility Primary Responsible Official Email Address: **mcgarrar@talgov.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. ☐ Title V Source	
4. ☑ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☑ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☑ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
SO_2	**SM**	**Y**
NO_X	**A**	**Y**
PM_{10}	**SM**	**N**
CO	**A**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
SO_2	**Y**	**EU007, EU008, EU009, EU011 & EU014**		**80**	**ESCPSD***
NO_X	**Y**	**EU007, EU008, EU009, EU011 & EU014**		**467**	**ESCPSD***
CO	**N**				
PM_{10}	**N**				

7. Facility-Wide or Multi-Unit Emissions Cap Comment:
***Compliance with the annual facility-wide SO_2 and NO_X caps are determined by adding the annual SO_2 and NO_X emissions (in tons per year) determined by the methods/ CEMS required by 40 CFR 75.**

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: **PGS-01** ☐ Previously Submitted, Date:_____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☑ Attached, Document ID: **PGS-02** ☐ Previously Submitted, Date:_____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☑ Attached, Document ID: **PGS-03** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

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

FACILITY INFORMATION

Additional Requirements for FESOP Applications

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

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☑ Attached, Document ID: **PGS-04** ☐ 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: **PGS-05**
   ☐ 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: **PGS-06**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

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

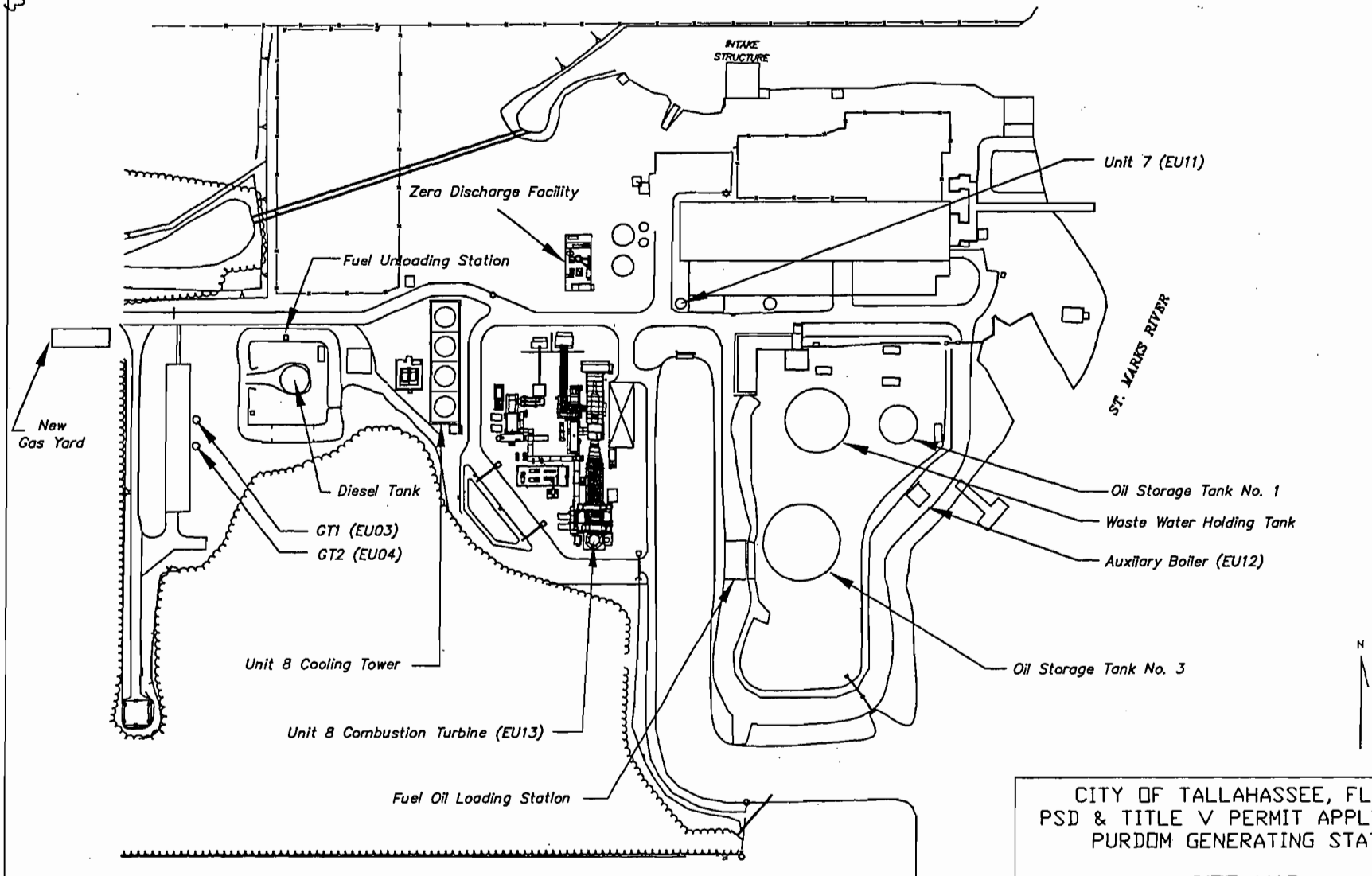
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☑ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☑ Attached, Document ID: **See Below Comment** ☐ Not Applicable

Additional Requirements Comment

Attached documentation in section EU014-06, Page 28. Request for an additional ASTM for the sulfur content of liquid fuels.

ATTACHMENT PGS-01
FACILITY PLOT PLAN



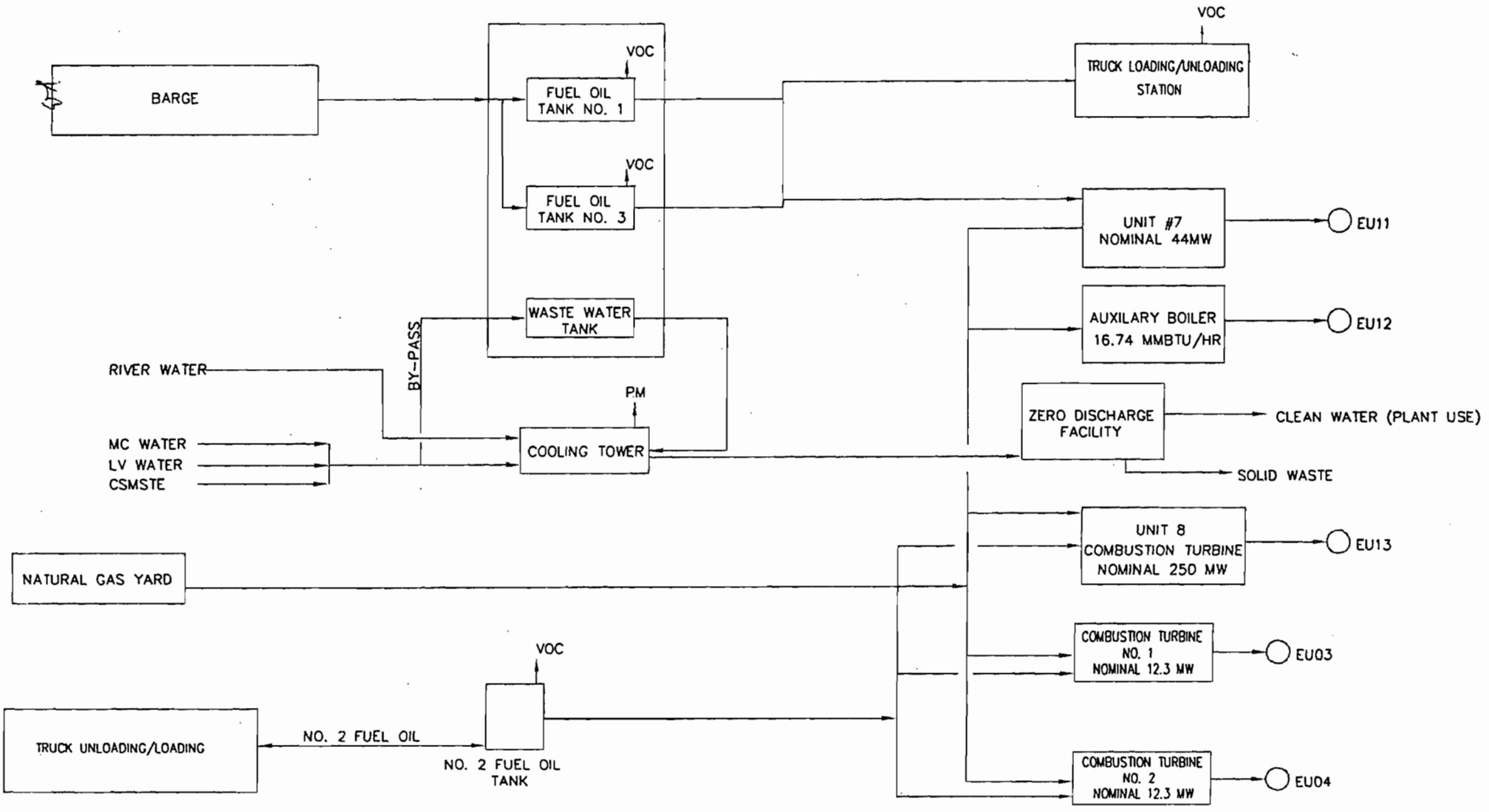
CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SITE MAP

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: 1" = 225' DATE: 2/26/97	BY: DJG CKD' BY: DF REV. BY: DJG	FILE NO: SITEPLAN.DWG FIGURE NO. PGS-02

ATTACHMENT PGS-02
PROCESS FLOW DIAGRAM



LV WATER – LOW VOLUME DISCHARGE WATER

MC WATER – METAL CLEANING DISCHARGE WATER

CSMSTE – CITY OF ST. MARKS SEWAGE TREATMENT EFFLUENT

CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
PURDOM GENERATING STATION

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 2/27/97	BY: DJG CKD BY: DF	CAD FILE NO. PPFD.DWG
		FIGURE NO.

ATTACHMENT PGS-03
PRECAUTIONS TO PREVENT EMISSIONS
OF UNCONFINED PARTICULATE MATTER

Precautions to Prevent Emissions of Unconfined Particulate Matter

As part of the Title V application development, the City of Tallahassee reviewed the potential sources of unconfined particulate emissions at its Purdom Generating Station. The intent of the review was to ensure that reasonable precautions were in place to prevent and/or control these potential particulate emissions. The potential sources which were identified included the following:

1. Concrete mixing;
2. Abrasive blasting
3. Aggregate handling and storage;
4. Heavy construction activities;
5. Driving on paved/unpaved roads; and
6. Spray application of surface coatings.

Based on the City of Tallahassee's review of these potential sources, the following reasonable precautions have been established to control unconfined emissions of particulate matter:

- The portable concrete mixer is operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever practical.

- The abrasive blasting activities are associated with normal maintenance and corrosion control activities. These activities are also enclosed wherever practical.

- The aggregate storage piles occur on a temporary basis and are associated with miscellaneous construction activities. Water is applied on an as-needed basis to control unconfined emissions from the handling and storage of aggregate materials and the related construction activities.

- Unconfined emissions associated with the limited on-site traffic are controlled through limiting vehicle speeds and unnecessary traffic within the plant grounds.

- The spray applications of surface coatings are associated with normal maintenance and corrosion activities. These activities are enclosed whenever practical.

ATTACHMENT PGS-04
LIST OF INSIGNIFICANT ACTIVITIES

List of Insignificant Activities

In developing the Title V renewal application the City of Tallahassee conducted an emissions unit inventory of the Purdom Generating Station. The attached inventory represents a comprehensive examination of the facility, its operations, and potential emissions units. The inventory identified fifteen (15) emissions unit areas. These areas include the following:

1. Combustion Turbine Operations
2. Steam Generator (Boiler) Operations
3. Emergency Generator
4. Fuel Farm (Organic Liquid Storage)
5. Fuel Dispensing Operations
6. Space Heating
7. Evaporative Loss Sources
8. Cooling Towers
9. Water Treatment
10. Laboratory
11. Central Vacuum System
12. Maintenance Activities
13. Plant Operations
14. Fugitive Dust
15. Gasoline Engines

The inventory attempted to identify every emissions unit at the facility. The attached inventory provides descriptions of each emissions unit noted at the facility and lists its regulatory classification. The regulatory classifications encompass the following four (4) general categories:

- Regulated (with or without emissions limitations)
- Unregulated
- Proposed to be insignificant under criteria listed in Rule 62-213.430(6), F.A.C
- Trivial – per FDEP guidance (all trivial emissions units and activities have been omitted from the inventory list per FDEP guidance dated March 1, 2000).

The Title V renewal application includes all regulated emissions units, and the unregulated fugitive dust and VOC sources. The regulated emissions units have specific emissions limitations. The fugitive dust and VOC sources are considered unregulated emissions units with no specific emission limited pollutants.

The list of emissions units also includes those which meet the insignificant criteria of Rule 62-213.430(6), F.A.C. The emissions units includes the following:

- Fugitive Dust – Exemption is requested for the heavy construction activities listed under this category. Emissions from these activities are of the Fugitive Areas type generated by the operation of heavy equipment on site. The request is based on the fugitive nature of the emissions and the low quantities associated with these activities.

- Evaporative Loss Sources – Exemption is requested for surface coating operations at the facility based on the fugitive nature of the emissions and low quantities of surface coating material. Surface coating activities have been included in the Title V application within EU-02.

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
1	CT #1	Combustion Turbine - 228 mmBtu/hr	Regulated - Permit # 1290001-007-AV
1a	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
1b	Fuel Oil Piping	Fuel Oil Piping	Unregulated - insignificant under criteria in Rule 62-213.430(6)
1c	Lube Oil Tank	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
2	CT #2	Combustion Turbine - 228 mmBtu/hr	Regulated - Permit # 1290001-007-AV
2a	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
2b	Fuel Oil Piping	Fuel Oil Piping	Unregulated - insignificant under criteria in Rule 62-213.430(6)
2c	Lube Oil Tank	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5	Steam Generator No. 7	Steam Generator - 621 mmBtu/hr	Regulated - Permit # 1290001-003-AV
5a	Fuel Oil Piping	Fuel Oil Piping	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5b	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5c	Deareator Tank Vents	Deareator Tank Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5d	Oil Vapor Extractors	Oil Vapor Extractors	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5e	Lube Oil Tank (storage)	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5f	Lube/Fuel Oil Drip Pans	Lube/Fuel Oil Drip Pans	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5g	Noncondensable Gas	Noncondensable Gas Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5h	Nat Bas Blowdown/Vent	Nat Gas Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5i	CO2 Vent Purge	CO2 Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
5j	On-site Boiler Cleaning Waste	Non-hazardous Boiler Cleaning Waste	Unregulated - insignificant under criteria in Rule 62-213.430(6)
6	Emergency Generator	Diesel Engine <400 hrs/yr	Unregulated - insignificant under criteria in Rule 62-213.430(6)
6a	Diesel Driven Fire Pump	Diesel Engine <400 hrs/yr	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7	Fuel Farm	Fuel Oil Tank No. 1	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7a	Fuel Farm	Fuel Oil Tank No.3	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7b	Fuel Farm	Waste Water Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7d	Fuel Farm	Waste Oil Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7e	Fuel Farm	Fuel Oil Reclaim Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7f	Fuel Farm	Distillate Oil Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7g	Fuel Farm	Gasoline Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7h	Fuel Farm	Diesel Oil Tank	Unregulated - insignificant under criteria in Rule 62-213.430(6)
7i	Fuel Farm	Diesel Oil Tank - Hydrant Main	Unregulated - insignificant under criteria in Rule 62-213.430(6)
8	No. 2 Fuel Oil Tank	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
8a	Diesel Tank (300 gallons)	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
8b	Truck Loading/Unloading	Fuel Dispensing Operation	Unregulated - insignificant under criteria in Rule 62-213.430(6)
9	Gasoline Tank	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
9a	Fuel Dispensing Operation	Fuel Dispensing Operation	Unregulated - insignificant under criteria in Rule 62-213.430(6)
10	Diesel Tank	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
10a	Fuel Dispensing Operation	Fuel Dispensing Operation	Unregulated - insignificant under criteria in Rule 62-213.430(6)
11	Barge Unloading Station	Fuel Dispensing Operation	Unregulated - insignificant under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
12	Fuel Dispensing Operation	Truck Loading/Unloading Rack 1	Unregulated - insignificant under criteria in Rule 62-213.430(6)
12a	Fuel Dispensing Operation	Truck Loading/Unloading Rack 2	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13a	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13b	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13c	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13d	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13e	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13f	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13g	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13h	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13i	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13j	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13k	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13l	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13m	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
13n	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14a	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14b	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14c	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14d	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14e	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
14f	Space Heater	Space Heater	Unregulated - insignificant under criteria in Rule 62-213.430(6)
15	Fugitive Dust	Paved Roads	Unregulated - insignificant under criteria in Rule 62-213.430(6)
15a	Fugitive Dust	Unpaved Roads	Unregulated - insignificant under criteria in Rule 62-213.430(6)
15b	Fugitive Dust	Heavy Construction Activities	Unregulated - insignificant under criteria in Rule 62-213.430(6)
15d	Fugitive Dust	Aggregate Handling & Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
17	Laboratory	Laboratory Equipment	Unregulated - insignificant under criteria in Rule 62-213.430(6)
17a	Laboratory	Chemical Usage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
17b	Laboratory	Vacuum Pumps	Unregulated - insignificant under criteria in Rule 62-213.430(6)
17c	Laboratory	Laboratory Fume Hoods	Unregulated - insignificant under criteria in Rule 62-213.430(6)
18	Central Vacuum System	Central Vacuum System	Unregulated - insignificant under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE
EMISSIONS UNIT INVENTORY
SOURCE - PURDOM GENERATING STATION

Activity No.	Emission Unit	Emission Unit Description	Regulatory [1] Classification
19	Maintenance Activities	Welding	Unregulated - insignificant under criteria in Rule 62-213.430(6)
19a	Maintenance Activities	High Temperature Metal Cutting	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20	Plant Operations	Lube Oil Storage Tanks	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20a	Plant Operations	Surface Coating Operations	Unregulated
20c	Plant Operations	Propane Storage Tanks	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20d	Plant Operations	Sulfuric Acid Tank Vent	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20e	Plant Operations	Sodium Hydroxide Tank Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20f	Plant Operations	Demineralizer Degasifier	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20g	Plant Operations	G/C Natural Gas Vent	Unregulated - insignificant under criteria in Rule 62-213.430(6)
20h	Plant Operations	Natural Gas Blowdown	Unregulated - insignificant under criteria in Rule 62-213.430(6)
21	Auxiliary Boiler	Steam Generator - 16.74 mmBtu/hr	Regulated - Permit # 1290001-007-AV
21a	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
21b	Deareator Tank Vents	Deareator Tank Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
21c	Noncondensable Gas	Noncondensable Gas Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22	Unit 8	Combustion Turbine	Regulated - Permit # 1290001-007-AV
22a	Unit 8	Oil Vapor Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22b	Unit 8	Fuel Oil Piping	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22c	Unit 8	Organic Liquid Storage	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22d	Unit 8	Heat Recovery Steam Generator	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22e	Unit 8	Hydrogen Gas Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22f	Unit 8	Deareator Tank Vents	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22g	Unit 8	Lube/Fuel Oil Drip Pans	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22h	Unit 8	Noncondensable Gas Extractor	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22i	Unit 8	Natural Gas Blowdown/Vent	Unregulated - insignificant under criteria in Rule 62-213.430(6)
22j	Unit 8	CO2 Vent Purge	Unregulated - insignificant under criteria in Rule 62-213.430(6)
23	Water Treatment	Zero Discharge Facility	Unregulated - insignificant under criteria in Rule 62-213.430(6)
23a	Water Treatment	Cooling Tower	Unregulated

[1]Note: All trivial emissions units and activities are omitted per FDEP 3/1/00 guidance memo. In addition, all mobil sources are omitted as outside the scope of Title V stationary source permitting.

ATTACHMENT PGS-05
IDENTIFICATION OF APPLICABLE REQUIREMENTS

Identification of Applicable Requirements

This Title V Air Operation Permit Application – Renewal for Sam O. Purdom Generating Station utilizes the provision outlined in Chapter 403, Florida Statues (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214.

In addition, the applicant hereby request to reference the list of department rules to which all Title V sources are likely subject, which is found on the Florida Department of Environmental Protection's website.

Title V Core List Effective: 03/01/02

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application.
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

ATTACHMENT PGS-06
COMPLIANCE REPORT AND PLAN

Compliance Report and Plan

The List of Applicable Regulations contained in the Emissions Unit Information Section of each regulated emissions unit identifies the requirements which are applicable to each of these units that comprise this Title V source. Each emissions unit is in compliance with the respective applicable requirements identified in this renewal application as of the date of application submittal and the facility-wide cap requirements contained in Permit No. 1290001-007-AV.

Proposed Schedule for the Submission of Periodic Compliance Statements Throughout the Permit Term

Periodic compliance statements are proposed to be submitted on an annual basis consistent with FDEP Rule 62-213.440(3), F.A.C., once the Title V permit is issued and effective.

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Boiler Number 7 (Phase II Acid Rain Unit)

3. Emissions Unit Identification Number: **-007**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**NA**	**≈ 1966**	**49**	☑ Yes ☐ No

9. Package Unit: **Steam Generator**
Manufacturer: **Riley Stoker Corporation** Model Number: **RX-33**

10. Generator Nameplate Rating: **44 MW**

11. Emissions Unit Comment:
The maximum input of 621 MMBtu/hour while being fueled with natural gas and/or No. 2 through No. 6 oil. The emissions unit will be subject to the facility-wide cap on SO_2 and NO_X.

EMISSIONS UNIT INFORMATION
Section [1] of [7]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **NA**
2. Control Device or Method Code(s): **NA**

EMISSIONS UNIT INFORMATION
Section [1] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**	
2. Maximum Production Rate: **NA**	
3. Maximum Heat Input Rate: **621 million Btu/hr**	
4. Maximum Incineration Rate: pounds/hr **NA** 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: **The facility-wide emissions cap limits the annual operation on SO_2 and NO_X.**	

EMISSIONS UNIT INFORMATION
Section [1] of [7]

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: **EU007**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **This emissions point represents the exhaust for Boiler Number 7.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **180 feet**	7. Exit Diameter: **9.0 feet**

8. Exit Temperature: **300 °F**	9. Actual Volumetric Flow Rate: **180,798 acfm**	10. Water Vapor: **NA %**
11. Maximum Dry Standard Flow Rate: **NA**	12. Nonstack Emission Point Height: **NA**	
13. Emission Point UTM Coordinates... Zone: **16** East (km): **769.653** North (km): **3,339.883**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**	
15. Emission Point Comment: **Values in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

EMISSIONS UNIT INFORMATION
Section [1] of [7]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type): **Natural Gas used in Boiler**		
2. Source Classification Code (SCC): **10100601**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.597**	5. Maximum Annual Rate: **See Field 10**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: *****	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1040 (gross calorific value)**
10. Segment Comment: ***Clean pipeline quality natural gas with Sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.** **Maximum Annual Rates can vary based on facility-wide SO_2 and NO_X caps and actual emissions.**		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type): **No. 2 through No. 6 Oils used in Boiler**		
2. Source Classification Code (SCC): **10100401, 10100405, 10100501, 10100504**	3. SCC Units: **1000 gallons**	
4. Maximum Hourly Rate: **4140**	5. Maximum Annual Rate: **See Field 10**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **1.70 ***	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **150 (gross calorific value)**

10. Segment Comment: **Maximum Annual rates can vary based on facility-wide SO_2 and NO_X caps and actual emissions.** **Sulfur density content based on fuels higher heating value and density.** **Fuel additives typically of a magnesium oxide, hydroxide, sulfonate or calcium nitrate origin may be used.**

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type): **On-Specification Used Oil**		
2. Source Classification Code (SCC): **10101302**	3. SCC Units: **1000 gallons**	
4. Maximum Hourly Rate: **4140**	5. Maximum Annual Rate: **See Field 10**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **1.70 ***	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **150 (gross calorific value)**
10. Segment Comment: **Maximum Annual rates can vary based on facility-wide SO_2 and NO_X caps and actual emissions.** ***Maximum Sulfur density content based on fuels higher heating value and density.**		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type): **Any mixture of Natural Gas, Fuel Oils No. 2 through No. 6, or On-Specification Used Oil**		
2. Source Classification Code (SCC): **See Field 10**	3. SCC Units: **Kgallons / mmSF (See Field 10)**	
4. Maximum Hourly Rate: **4140 / 0.597 (See Field 10)**	5. Maximum Annual Rate: **See Field 10**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **1.70 / * (See Field 10)**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **0.150/1040 (HHV)** **(See Field 10)**

10. Segment Comment:

See information previously provided in this application for each individual segment.
***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.**

The values in Field 9 are estimates subject to fluctuation.

Maximum Annual Rates can vary based facility-wide caps and actual emissions. The purpose of this segment is to indicate the potential to co-fire of a liquid and gaseous fuel, the maximum of each fuel is provided.

Maximum sulfur content will vary based on the fuel's higher heating value and density.

Fuel additives typically of magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

EMISSIONS UNIT INFORMATION
Section [1] of [7]

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
CO			**NS**
NO_X			**EL**
PM			**EL**
PM_{10}			**NS**
SO_2			**EL**
HAPS			**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **1.2 x 10^3 lb/hour** **80 (cap) tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1.87 lb/mmBTU** Reference: **62-296.405(1)(c)F.A.C.**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: From: **NA** To: **NA**
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Allowable Emission Rate: 1.87 lb/mmBTU

Maximum Heat Input Rate: 621 mmBTU/hr

lb/hr = (1.87 lb/mmBTU)(621 mmBTU/hr)
= 1.2 x 10^3 lb/hour

11. Potential, Fugitive, and Actual Emissions Comment:

The current maximum allowable emission rate is 1.87 lb/mmBTU and the maximum heat input rate is 621 mmBTU/hr. Current allowable SO_2 emissions are subject to an annual emission cap of 80 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1.87 lb/mmBTU**	4. Equivalent Allowable Emissions: **1.2 x 10^3 lb/hour 80(cap) tons/year**
5. Method of Compliance: **Compliance will be based on unit specific fuel usage logs and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions limitations entered in Field 3 reflects the maximum allowable emission rate per the SIP regulations (62.296.405(1)(c)1,h F.A.C.).**	

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

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **80 TPY**	4. Equivalent Allowable Emissions: **NA lb/hour NA tons/year**
5. Method of Compliance: **40 CFR Part 75, Appendix D**	
6. Allowable Emissions Comment (Description of Operating Method): **The annual facility-wide cap for SO_2 emissions will limit annual emissions.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **77.6 lb/hour Related to SO_2 and NO_X Caps tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA**	
6. Emission Factor: **0.1 lb/mmBTU (0.3 lb/mmBTU during boiler cleaning and load change)** Reference: **62-296.405(1)(b) and 62-210.700 F.A.C.**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **NA**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Allowable Emission Rate: 0.1 lb/mmBTU and 0.3 lb/mmBTU
Maximum Heat Input Rate: 621mmBTU/hr

A PM emission rate of 0.3 lb/mmBTU is allowed for 3 hrs in a 24 hrs period, or 12.5% of the time.

lb/hr = (1 – 0.125)(621 mmBTU/hr x 0.1 lb/mmBTU) + 0.125 x (621mmBTU/hr)(0.3 lb/mmBTU)
= 77.6 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

The maximum allowable emission rate is 0.1 lb/mmBTU and 0.3 lb/mmBTU during excess emissions for load changes and boiler cleaning.

The maximum heat input rate is 621 mmBTU/hr. Potential PM emissions are estimated utilizing these allowable rates. The facility-wide emissions caps on SO_2 and NO_X limit the annual emissions indirectly.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.1 lb/mmBTU and 0.3 lb/mmBTU during excess emissions when firing fuel oil**	4. Equivalent Allowable Emissions: **77.6 lb/hour Related to SO_2 and NO_X caps tons/year**
5. Method of Compliance: **EPA Methods 1, 2, 3, 5, or 17 in any fiscal year in which the fossil fuel system generator burns more than 400 hours of fuel oil other than startup.**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions limitations entered in Field 3 reflects the maximum allowable emission rate per the SIP regulations (62-296.405(1)(b) and 62-210.700(3) F.A.C)**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **204.93 lb/hour NO_x Cap tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA**	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions: **Maximum Firing Rate: 621 mmBTU/hr** **Emissions Factor: 0.33 lb/mmBTU (CEMS Data)** **lb/hr = (621 mmBTU/hr) x (0.33 lb-NO_x/mmBTU) = 204.93 lb/hr**
11. Potential, Fugitive, and Actual Emissions Comment: **Potential Emission is capped by the requested facility-wide emissions limitation.**

EMISSIONS UNIT INFORMATION
Section [1] of [7]

POLLUTANT DETAIL INFORMATION
Page [3] of [3]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **467 TPY**	4. Equivalent Allowable Emissions: **204.93 lb/hour NO_x Cap tons/year**
5. Method of Compliance: **40 CFR Part 75**	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION
Section [1] of [7]

G. VISIBLE EMISSIONS INFORMATION

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

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: **27 %** Maximum Period of Excess Opacity Allowed: **6 min/hour**	
4. Method of Compliance: **Annual VE in accordance with EPA Method 9 using the maximum fuel oil to gas ratio used during the fiscal year.**	

5. Visible Emissions Comment:

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

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **60 %** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: **See Field 5**	
4. Method of Compliance: **NA**	
5. Visible Emissions Comment: **In accordance with 62-210.700(1),(2),&(3) F.A.C., excess emissions are allowed at the following opacities for the associated time periods:** **60 % - 3 hrs / 24 hrs for boiler cleaning and load change** **100 % - 2 hrs / 24 hrs for malfunction** **100 % - unlimited for start-up and shutdown**	

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor **1** of **4**

1. Parameter Code: **Flow**	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Superior** Model Number: **GHFA 8' 600 RF**	Serial Number: **94128**
5. Installation Date: **December 31, 1994**	6. Performance Specification Test Date: **December 31, 1994**
7. Continuous Monitor Comment: **Orifice Meter: Installed in accordance with Rule 62-214.320 and Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1**	

Continuous Monitoring System: Continuous Monitor **2** of **4**

1. Parameter Code: **Flow**	2. Pollutant(s): **Oil Fuel Flow Monitor (2)**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Micro Motion & EXAC** Model Number: **CMF200M342NU & EX1200A (respectively)** Serial Number: **319657 & 9210S0005062 (respectively)**	
5. Installation Date: **December 16 & 21, 1994**	6. Performance Specification Test Date: **December 16 & 21, 1994**
7. Continuous Monitor Comment: **Coriolis Type Meter: Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1** **Note: The serial number reflects the primary unit.**	

Continuous Monitoring System: Continuous Monitor **3** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_x**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Teco** Model Number: **42C**	Serial Number: **42C-69073-362**
5. Installation Date: **August 7, 2001**	6. Performance Specification Test Date: **August 22, 2001 (certification date)**
7. Continuous Monitor Comment: **Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C., and 40 CFR Part 75**	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: **CO_2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Teco** Model Number: **41C**	Serial Number: **41CHL-68207-359**
5. Installation Date: **August 7, 2001**	6. Performance Specification Test Date: **August 22, 2001 (certification date)**
7. Continuous Monitor Comment: **Installed in accordance with Rule 62-214.320 and 62-214.330, F.A.C., and 40 CFR Part 75** **Note: The serial number reflects the primary unit.**	

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: **EU007-01** ☐ 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: **EU007-02** ☐ 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: **EU007-03** ☐ 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: **EU007-04** ☐ 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: **EU007-05** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☑ Previously Submitted, Date: **November 9, 2000**
   Test Date(s)/Pollutant(s) Tested: **No additional testing required as per Title V permit since unit operated less than 400 hours per year.**
   ☐ 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

Additional Requirements for Air Construction Permit Applications

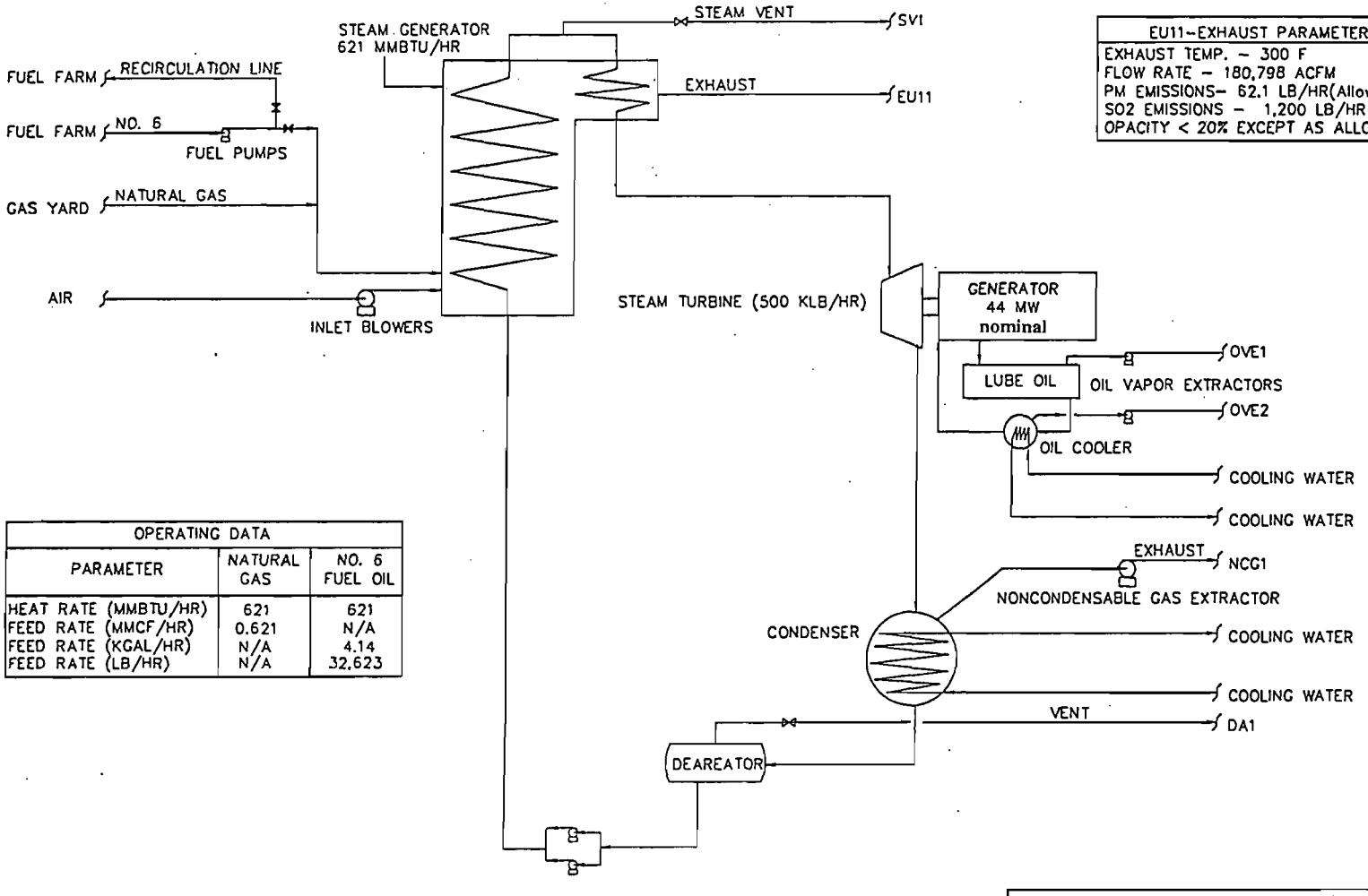
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☑ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document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

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Alternative Methods of Operation
   ☑ Attached, Document ID: **EU007-06** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:
   ☑ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☑ Attached, Document ID **EU007-07** ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

Additional Requirements Comment

ATTACHMENT EU007-01
PROCESS FLOW DIAGRAM



EU11–EXHAUST PARAMETERS
EXHAUST TEMP. – 300 F
FLOW RATE – 180,798 ACFM
PM EMISSIONS– 62.1 LB/HR(Allowable)
SO2 EMISSIONS – 1,200 LB/HR
OPACITY < 20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 6 FUEL OIL
HEAT RATE (MMBTU/HR)	621	621
FEED RATE (MMCF/HR)	0.621	N/A
FEED RATE (KGAL/HR)	N/A	4.14
FEED RATE (LB/HR)	N/A	32,623

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
STEAM GENERATOR NO. 7

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 3/15/95	BY: DJG CKD' BY: DF REV. BY:	CAD FILE NO. PSG7.DWG FIGURE NO. EU11-02

ATTACHMENT EU007-02
FUEL ANALYSIS OR SPECIFICATION

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU-007, Boiler No. 7. Maximum values may be higher. The fuels represented in the analyses include natural gas, fuel oil, and on-specification used oil.

CERTIFICATE OF ANALYSIS

JOB No.	
DATE	11/29/05

VESSEL	SUBMITTED TANK TRUCK	LAB No.	HTC-10729
CARGO	LOW SULFER DIESEL		
TERMINAL / PORT	HOPKINS PLANT - MOBILE, ALABAMA		
SAMPLE FROM:	SUBMITTED TANK TRUCK		
SAMPLE SUBMITTED BY	AMERICAN GENERAL - MOBILE, ALABAMA		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 4052	API GRAVITY @ 60 °F	33.4
D 4052	SPECIFIC GRAVITY @ 60 °F	0.8574
D 445	VISCOSITY @ 100 °F, Kcst	2.767
D 2171	VISCOSITY @ 100 °F, SUS	35.2
D 93A	FLASH POINT, °F (PMCC)	153
D 97	POUR POINT, °F	< -16
D 4294	SULFUR, WT%	0.0334
D 5762	NITROGEN, PPM	142
D 95	WATER BY DISTILLATION, VOL%	0.00
D 482	SEDIMENT BY EXTRACTION, WT%	< 0.01
D 482	ASH CONTENT, WT%	0.0013
D 240	GROSS HEAT OF COMB., MMBTU / bbl	5.818
D 5291	HYDROGEN CONTENT *	13.0
D 524	CARBON RESIDUE, (100% SAMPLE)	0.10
D 524	CARBON RESIDUE, (10% RAMSBTM)	0.05
D 1401	DEMULSIFICATION *	40-40-0 (5)
D 6217	PARTICULATES CONTAMINATION, PPM	1.2
D 130	COPPER CORROSION, 3 hrs @ 122 °F	1a
IP 143	ASPHALTENES, WT%	< 0.50
IAC-044	MICROBIAL TEST, (PASS / FAIL)	NONE DETECTED
D 86	DISTILLATION, °F	PAGE 2
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPB)	< 5
ICP-MS	LEAD, PPB	< 5
ICP-MS	VANADIUM, PPB	< 5
ICP-MS	CALCIUM, PPB	< 5
IP 377	SILICON, PPB	< 50

* = OUTSIDE LAB

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36608

CERTIFICATE OF ANALYSIS

REVISED

		JOB No.	
		DATE	6/29/2005
VESSEL	MF 725	LAB No.	4527 / 2006-HTC-05897
CARGO	LOW SULFUR DIESEL		
TERMINAL / PORT	SHELL CHEMICAL - SARALAND, ALABAMA.		
SAMPLE FROM:	SHORE TANK 5 AFTER DISCHARGE		
SAMPLE SUBMITTED BY	BSI INSPECTORATE - MOBILE, AL		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - MOBILE, AL / ** PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 287	API GRAVITY @ 60 °F	40.5
D 287	SPECIFIC GRAVITY @ 60 °F	0.8227
D 445	VISCOSITY @ 100 °F, Kcst	2.636
D 2171	VISCOSITY @ 100 °F, SUS	34.8
D 93A	FLASH POINT, °F (PMCC)	146
D 97	POUR POINT, °F	NEGATIVE 5.8
D 4294	SULFUR, WT%	0.0213
D 5762	NITROGEN, wt% **	0.002
D 2709	WATER & SEDIMENT, VOL%	< 0.025
D 482	ASH CONTENT, WT%	< 0.001
D 240	GROSS HEAT OF COMB., MMBTU / bbl **	5.731*
D 5291	HYDROGEN CONTENT **	13.5
D 524	CARBON RESIDUE, (100% SAMPLE) **	0.06
D 524	CARBON RESIDUE, (10% RAMSBTM) **	0.11
D 1401	DEMULSIFICATION RATING @ 54 °C*	40-40-0 (5)
D 6217	PARTICULATE CONTAMINATION, mg/L	< 0.1
D 130	COPPER CORROSION, 3 hrs @ 122 °F **	1a
IP 143	ASPHALTENES, WT%	NONE DETECTED
EASICULT	MICROBIAL TEST, (PASS / FAIL) **	
	(24 HOURS)	PASS (NONE DETECTED)
	(48 HOURS)	PASS (NONE DETECTED)
D 86	DISTILLATION, °F	SEE PAGE 2
D 473	SEDIMENT BY EXTRACTION, WT%	< 0.01
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPM)**	< 0.1
ICP-MS	LEAD, PPM **	< 0.1
ICP-MS	VANADIUM, PPM **	< 0.1
ICP-MS	CALCIUM, PPM **	< 0.1
IP 377	SILICON, PPM	< 0.1

<=OK

* = REVISED

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36609

Colonial Pipeline Company

PRODUCT SPECIFICATIONS

3.41.1 SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL - DYED BY CPC

Cancels Previous Issues of Grade 84

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287, D1298, D4052	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500,D6045		2.5	
Color Visual				3
Viscosity, cSt @ 40°C (104°F)	D445	1.9	3.4	
Pour Point	D97, D5949, D5950, D5985,			2
Cloud Point	D2500, D5771, D5772, D5773			2
Corrosion, 3 hrs. @ 50°C (122°F)	D130		1	
Total Sulfur, wt.%	D129, D1266, D1266, D2622, D4294		0.047	4
Cetane Number	D613	40		5
Aromatics (Volume %)	D1319		31.7	
or Aromatics by Cetane Index	D976	40		
Ash, wt.%	D482		0.01	
Carbon Residue: Ramsbottom on 10% Bottom	D524		0.35	
BS&W, vol.%	D2709 or equivalent		< 0.05	
Thermal stability, 90 minutes 150°C Pad rating, DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176 Procedure 2		2	
Nace Corrosion	TM0172-2001	B+ (Origin)		

-see SWRI test results
0.12 -10%
0.10 - 100%

April 2005
* Denotes Change

Southwest Research Institute

Southwest Georgia Oil Company
November 3, 2005

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 10/27/05
Nitrogen mass %	ASTM D4629	Max 0.03	0.0173
Hydrogen Content, wt %	ASTM D 3701	Min 12.7	12.96
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.10
10% Bottoms		Max 0.25	0.12
Particulate (mg/L) and (mg/gal)	ASTM D 2276	Max 10 mg/gal	15.7 mg/L or 59.4 mg/gal
Asphaltenes, wt %	ASTM D 6560	ND	<0.05*
Silica Content, wt %			66.89% **
Bacterial Growth			Slight
Fungal Growth			Moderate
Calcium	ASTM D 3605	Max 2 ppm	<0.1 mg/kg*
Lead		Max 1 ppm	<0.5 mg/kg
Vanadium		Max 0.2 ppm	<0.5 mg/kg
Lithium (modified method)		Max 0.2 ppm	<0.1 mg/kg
Sodium		Max 0.2 ppm	<0.1 mg/kg
Potassium (modified method)		Max 0.2 ppm	<0.1 mg/kg

**Testing for Asphaltenes, D6560 and Trace Metals by Atomic Absorption, D3605 were performed at SGS North America*

***Silica content was measured from the filter media from ASTM D2276. This is representative of the silica that was deposited on the filter using 1000 mLs of fuel.*

GKIC-
oil test results for #2 FO rec'd from
SWG Oil Company
— B

Results

2005 FEB 20 P 2:54
HOPKINS PLANT OFFICE

DEL, Inc. Project Number	Hopkins Generating Station
060202.02	Project Description: Hopkins Fuel Oil Analysis, A. B. Hopkins

Report Date: February 14, 2006

Sample Number: 5294 **Matrix:** Oil
Sample Designation: Unit #2, J. Dawkins **Date/Time Collected:** 01/04/06 01:30

Parameters	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
BTU/Lb (As Received)	ASTM D240	18301	BTU/Lb	1	1		FAR	02/13/06
Sulfur	ASTM D129	0.85	%	1	0.10		FAR	02/09/06

Results

DEL, Inc. Project Number	Hopkins Generating Station
060313.01	Project Description: Hopkins Fuel Oil Analysis, A. B. Hopkins

Report Date: March 23, 2006

Sample Number: 5396 **Matrix:** Oil
Sample Designation: Unit #2, J.Kennedy **Date/Time Collected:** 02/14/06 20:00

Parameters	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
BTU/Lb (As Received)	ASTM D240	18309	BTU/lb	1	1		FAR	03/21/06
Sulfur	ASTM D129	0.86	%	1	0.10		FAR	03/16/06

1/12/06 ? 11 10 9 8 6 5 4

Results

DEL, Inc. Project Number	Hopkins Generating Station
060502.02	Project Description: Hopkins Fuel Oil Analysis, A. B. Hopkins

Report Date: May 12, 2006

Sample Number: 5593
Sample Designation: Unit 2 / J. Peacock
Matrix: Oil
Date/Time Collected: 04/13/06 10:25

Parameters	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
BTU/Lb (As Received)	ASTM D240	18336	BTU/lb	1	1		FAR	05/09/06
Sulfur	ASTM D129	0.90	%	1	0.10		FAR	05/11/06

Results

DEL, Inc. Project Number	Hopkins Generating Station
060821.01	Project Description: Hopkins Fuel Oil Analysis, A. B. Hopkins

Report Date: August 30, 2006

Sample Number: 6032 **Matrix:** Oil

Sample Designation: Unit 2/Fr. Strafford **Date/Time Collected:** 08/01/06 12:25

Parameters	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
BTU/Lb (As Received)	ASTM D240	18305	BTU/lb	1	1		FAR	08/30/06
Sulfur	ASTM D129	0.31	%	1	0.10		FAR	08/24/06

Results

DEL, Inc. Project Number	Hopkins Generating Station
061107.01	Project Description: Replicate Fuel QA Analysis, A. S. Hopkins

Report Date: November 17, 2006

Sample Number: 6515
Sample Designation: Unit 2, C. Johnson

Matrix: Oil
Date/Time Collected: 11/01/06 03:20

Parameter	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
[illegible]	[illegible]	18435	BTU/lb	1	1		PAR	11/08/06
[illegible]	[illegible]	0.80	%	1	0.30		PAR	11/06/06

Results

DEL, Inc. Project Number	Hopkins Generating Station
061211.01	Project Description
	Hopkins Fuel Oil Analysis, A. B. Hopkins

Report Date: December 21, 2006

Sample Number: 6458 **Matrix:** Oil
Sample Designation: Unit 2 / B. Stafford **Date/Time Collected:** 12/01/06 00:10

Parameters	Method	Results	Units	DF	MDL	Prep Date/Time	Analyst	Analysis Date/Time
BTU/Lb (As Received)	ASTM D240	18330	BTU/lb	1	1		FAR	12/18/06
Sulfur	ASTM D129	0.75	%	1	0.10		FAR	12/19/06

Florida Gas Transmission-8030 May 09 2007 9:03 AM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
05/08/2007	1035	0.807	0.403	0.585	95.808	2.194	0.452	0.104	0.096	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/07/2007	1034	0.802	0.372	0.585	95.926	2.149	0.434	0.098	0.090	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/06/2007	1036	0.795	0.380	0.585	95.816	2.221	0.467	0.101	0.093	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/05/2007	1036	0.886	0.408	0.588	95.510	2.367	0.486	0.108	0.099	0.042	0.026	0.069	0.000	0.000	0.000	0.000
05/04/2007	1036	0.861	0.396	0.587	95.573	2.356	0.475	0.105	0.098	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/03/2007	1034	0.848	0.399	0.586	95.725	2.292	0.429	0.094	0.091	0.037	0.023	0.062	0.000	0.000	0.000	0.000
05/02/2007	1032	0.805	0.404	0.584	95.944	2.189	0.385	0.083	0.080	0.032	0.020	0.057	0.000	0.000	0.000	0.000
05/01/2007	1031	0.813	0.389	0.583	96.103	2.079	0.360	0.079	0.076	0.030	0.019	0.051	0.000	0.000	0.000	0.000
04/30/2007	1030	0.808	0.393	0.582	96.141	2.050	0.352	0.078	0.074	0.031	0.019	0.053	0.000	0.000	0.000	0.000
04/29/2007	1031	0.804	0.390	0.582	96.099	2.095	0.362	0.077	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/28/2007	1032	0.778	0.377	0.582	96.097	2.122	0.376	0.078	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/27/2007	1032	0.812	0.358	0.583	96.087	2.067	0.401	0.087	0.080	0.033	0.020	0.055	0.000	0.000	0.000	0.000
04/26/2007	1029	0.800	0.358	0.581	96.337	1.932	0.336	0.074	0.067	0.029	0.018	0.048	0.000	0.000	0.000	0.000
04/25/2007	1029	0.797	0.354	0.581	96.324	1.949	0.336	0.077	0.069	0.030	0.018	0.048	0.000	0.000	0.000	0.000
04/24/2007	1030	0.795	0.373	0.582	96.273	1.944	0.359	0.081	0.073	0.032	0.019	0.051	0.000	0.000	0.000	0.000
04/23/2007	1030	0.787	0.388	0.581	96.265	1.975	0.346	0.077	0.069	0.029	0.018	0.047	0.000	0.000	0.000	0.000
04/22/2007	1031	0.801	0.378	0.582	96.160	2.027	0.381	0.081	0.077	0.030	0.019	0.047	0.000	0.000	0.000	0.000
04/21/2007	1033	0.781	0.382	0.584	95.990	2.120	0.448	0.090	0.091	0.032	0.020	0.048	0.000	0.000	0.000	0.000
04/20/2007	1034	0.802	0.392	0.584	95.901	2.156	0.461	0.091	0.094	0.033	0.021	0.049	0.000	0.000	0.000	0.000
04/19/2007	1033	0.798	0.393	0.584	95.967	2.111	0.450	0.089	0.095	0.032	0.020	0.047	0.000	0.000	0.000	0.000
04/18/2007	1031	0.848	0.373	0.583	96.109	1.951	0.427	0.090	0.091	0.034	0.022	0.052	0.000	0.000	0.000	0.000
04/17/2007	1031	0.841	0.378	0.583	96.105	1.953	0.435	0.090	0.093	0.034	0.022	0.049	0.000	0.000	0.000	0.000
04/16/2007	1032	0.831	0.369	0.583	96.087	1.976	0.447	0.090	0.095	0.034	0.022	0.048	0.000	0.000	0.000	0.000
04/15/2007	1033	0.795	0.353	0.583	96.077	2.045	0.444	0.091	0.094	0.032	0.021	0.048	0.000	0.000	0.000	0.000
04/14/2007	1032	0.811	0.362	0.583	96.094	2.014	0.433	0.088	0.093	0.033	0.021	0.050	0.000	0.000	0.000	0.000
04/13/2007	1033	0.792	0.346	0.583	96.043	2.083	0.459	0.088	0.093	0.031	0.020	0.045	0.000	0.000	0.000	0.000
04/12/2007	1035	0.821	0.369	0.585	95.838	2.165	0.500	0.096	0.103	0.034	0.022	0.051	0.000	0.000	0.000	0.000
04/11/2007	1034	0.855	0.384	0.585	95.808	2.171	0.475	0.097	0.101	0.035	0.022	0.052	0.000	0.000	0.000	0.000

0.000															
04/10/2007	1033	0.861	0.363	0.584	95.949	2.082	0.449	0.093	0.095	0.035	0.022	0.051	0.000	0.000	0.000
0.000															
04/09/2007	1033	0.847	0.369	0.584	95.953	2.085	0.450	0.093	0.095	0.035	0.022	0.050	0.000	0.000	0.000
0.000															
04/08/2007	1034	0.812	0.378	0.584	95.946	2.099	0.467	0.094	0.099	0.035	0.022	0.049	0.000	0.000	0.000
0.000															
04/07/2007	1034	0.788	0.376	0.584	95.946	2.146	0.459	0.090	0.095	0.032	0.021	0.047	0.000	0.000	0.000
0.000															
04/06/2007	1034	0.807	0.367	0.584	95.949	2.133	0.453	0.092	0.095	0.033	0.021	0.049	0.000	0.000	0.000
0.000															
04/05/2007	1034	0.853	0.380	0.585	95.823	2.186	0.452	0.095	0.098	0.036	0.023	0.054	0.000	0.000	0.000
0.000															
04/04/2007	1034	0.852	0.384	0.585	95.801	2.182	0.461	0.097	0.103	0.038	0.025	0.058	0.000	0.000	0.000
0.000															
04/03/2007	1033	0.852	0.381	0.584	96.005	2.020	0.429	0.093	0.098	0.038	0.024	0.059	0.000	0.000	0.000
0.000															
04/02/2007	1033	0.823	0.357	0.584	96.124	1.954	0.429	0.095	0.097	0.039	0.024	0.059	0.000	0.000	0.000
0.000															
04/01/2007	1031	0.808	0.352	0.582	96.249	1.905	0.396	0.088	0.088	0.036	0.022	0.055	0.000	0.000	0.000
0.000															
03/31/2007	1030	0.793	0.354	0.581	96.389	1.827	0.366	0.083	0.080	0.033	0.021	0.053	0.000	0.000	0.000
0.000															
03/30/2007	1029	0.855	0.356	0.582	96.277	1.907	0.336	0.082	0.073	0.034	0.021	0.058	0.000	0.000	0.000
0.000															
03/29/2007	1031	0.903	0.358	0.584	96.090	1.981	0.370	0.091	0.083	0.038	0.023	0.064	0.000	0.000	0.000
0.000															
03/28/2007	1031	0.882	0.325	0.583	96.124	2.022	0.365	0.089	0.079	0.036	0.021	0.058	0.000	0.000	0.000
0.000															
03/27/2007	1030	0.839	0.319	0.582	96.263	1.967	0.353	0.084	0.073	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/26/2007	1031	0.872	0.337	0.583	96.102	2.048	0.369	0.087	0.075	0.034	0.020	0.054	0.000	0.000	0.000
0.000															
03/25/2007	1034	0.889	0.331	0.585	95.873	2.156	0.430	0.100	0.090	0.042	0.025	0.063	0.000	0.000	0.000
0.000															
03/24/2007	1035	0.845	0.336	0.585	95.856	2.199	0.440	0.100	0.093	0.043	0.026	0.062	0.000	0.000	0.000
0.000															
03/23/2007	1031	0.819	0.334	0.582	96.184	2.032	0.373	0.083	0.073	0.033	0.019	0.050	0.000	0.000	0.000
0.000															
03/22/2007	1030	0.818	0.327	0.582	96.273	1.977	0.360	0.080	0.070	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
03/21/2007	1030	0.841	0.339	0.582	96.223	2.000	0.351	0.079	0.069	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/20/2007	1029	0.815	0.327	0.581	96.386	1.914	0.331	0.074	0.063	0.028	0.016	0.045	0.000	0.000	0.000
0.000															
03/19/2007	1030	0.843	0.335	0.582	96.239	1.971	0.358	0.082	0.071	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/18/2007	1029	0.857	0.345	0.582	96.264	1.938	0.346	0.080	0.070	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/17/2007	1030	0.838	0.349	0.582	96.238	1.964	0.352	0.082	0.071	0.033	0.020	0.053	0.000	0.000	0.000
0.000															
03/16/2007	1029	0.849	0.344	0.582	96.254	1.962	0.340	0.079	0.070	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/15/2007	1030	0.845	0.341	0.582	96.202	1.983	0.363	0.085	0.075	0.034	0.020	0.053	0.000	0.000	0.000
0.000															
03/14/2007	1030	0.834	0.349	0.582	96.280	1.928	0.350	0.083	0.073	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/13/2007	1031	0.877	0.357	0.583	96.101	2.016	0.373	0.088	0.077	0.035	0.021	0.053	0.000	0.000	0.000
0.000															
03/12/2007	1029	0.845	0.352	0.582	96.276	1.930	0.351	0.081	0.069	0.031	0.018	0.048	0.000	0.000	0.000
0.000															

03/11/2007	1029	0.846	0.369	0.582	96.240	1.949	0.349	0.080	0.069	0.031	0.018	0.049	0.000	0.000	0.000
0.000															
03/10/2007	1029	0.840	0.367	0.582	96.296	1.914	0.335	0.078	0.068	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/09/2007	1029	0.851	0.355	0.582	96.249	1.941	0.348	0.080	0.072	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/08/2007	1028	0.820	0.343	0.580	96.471	1.827	0.306	0.073	0.064	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
03/07/2007	1027	0.814	0.339	0.579	96.592	1.743	0.292	0.070	0.061	0.028	0.017	0.043	0.000	0.000	0.000
0.000															
03/06/2007	1027	0.826	0.331	0.580	96.515	1.799	0.308	0.070	0.061	0.028	0.017	0.045	0.000	0.000	0.000
0.000															
03/05/2007	1028	0.880	0.335	0.581	96.343	1.873	0.329	0.075	0.066	0.030	0.018	0.050	0.000	0.000	0.000
0.000															
03/04/2007	1028	0.871	0.341	0.581	96.336	1.878	0.336	0.076	0.066	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
03/03/2007	1028	0.862	0.328	0.581	96.325	1.929	0.328	0.073	0.064	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
03/02/2007	1029	0.851	0.319	0.581	96.332	1.956	0.317	0.071	0.063	0.028	0.017	0.044	0.000	0.000	0.000
0.000															
03/01/2007	1028	0.798	0.320	0.580	96.487	1.877	0.304	0.068	0.062	0.027	0.016	0.042	0.000	0.000	0.000
0.000															
02/28/2007	1028	0.866	0.329	0.581	96.315	1.937	0.323	0.072	0.066	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
02/27/2007	1029	0.892	0.332	0.582	96.217	1.981	0.338	0.076	0.069	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
02/26/2007	1028	0.905	0.345	0.582	96.231	1.961	0.320	0.074	0.068	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/25/2007	1029	0.924	0.353	0.583	96.151	1.971	0.341	0.080	0.075	0.034	0.021	0.051	0.000	0.000	0.000
0.000															
02/24/2007	1029	0.929	0.360	0.583	96.109	1.988	0.350	0.081	0.076	0.035	0.021	0.052	0.000	0.000	0.000
0.000															
02/23/2007	1028	0.897	0.363	0.582	96.236	1.930	0.328	0.075	0.070	0.032	0.020	0.049	0.000	0.000	0.000
0.000															
02/22/2007	1029	0.855	0.355	0.582	96.300	1.923	0.325	0.075	0.068	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/21/2007	1031	0.892	0.365	0.584	95.999	2.099	0.375	0.085	0.077	0.034	0.021	0.053	0.000	0.000	0.000
0.000															
02/20/2007	1032	0.869	0.364	0.584	95.938	2.150	0.405	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/19/2007	1032	0.841	0.357	0.584	96.018	2.107	0.404	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/18/2007	1035	0.874	0.355	0.586	95.765	2.235	0.463	0.101	0.090	0.038	0.023	0.055	0.000	0.000	0.000
0.000															
02/17/2007	1034	0.865	0.402	0.586	95.713	2.259	0.450	0.098	0.090	0.041	0.024	0.057	0.000	0.000	0.000
0.000															
02/16/2007	1031	0.872	0.380	0.583	96.058	2.052	0.364	0.086	0.077	0.036	0.021	0.053	0.000	0.000	0.000
0.000															
02/15/2007	1030	0.880	0.339	0.582	96.184	1.999	0.342	0.081	0.072	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
02/14/2007	1030	0.884	0.334	0.583	96.141	2.046	0.347	0.080	0.069	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/13/2007	1031	0.886	0.334	0.584	95.983	2.166	0.376	0.086	0.073	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/12/2007	1031	0.929	0.341	0.584	95.925	2.180	0.375	0.084	0.071	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/11/2007	1031	0.920	0.341	0.584	95.916	2.194	0.375	0.084	0.072	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
02/10/2007	1029	0.905	0.350	0.583	96.122	2.039	0.342	0.078	0.068	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
02/09/2007	1029	0.843	0.342	0.582	96.226	2.022	0.332	0.076	0.066	0.029	0.017	0.046	0.000	0.000	0.000

0.000

ATTACHMENT EU007-03
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Detailed Description of Control Equipment

There is no air pollution control equipment associated with this emissions unit.

ATTACHMENT EU007-04
PROCEDURES FOR STARTUP AND SHUTDOWN

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the boilers at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the boilers. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU007-05
OPERATION AND MAINTENANCE PLAN

Operation and Maintenance Plan

The City follows best management practices in the operation and maintenance of the Units to minimize the amount and duration of air pollutant emissions. There are numerous volumes of operation and maintenance plans located on-site at the Purdom facility, many of which refer back to the manufacturers' operation and maintenance manuals.

Excerpts from several of these manuals have been previously submitted to the Department. If additional information from these manuals are needed, the City will provide the Department with these materials as requested.

ATTACHMENT EU007-06
ALTERNATIVE METHODS OF OPERATION

Alternative Methods of Operation

Boiler No. 7 (EU007) located at the Purdom Generating Station has a maximum heat input capacity of 621 mmBtu/hour and produces a nominal 44 MW of electricity. The alternative methods of operation (AMO) associated with the steam generator are related to the type of fuel being fired and rate of operation. The current AMOs include the following:

- ❖ Natural Gas Firing – Maximum Rate of 621 mmBtu/hr (LHV)

- ❖ Fuel Oil Firing – Maximum Rate of 621 mmBtu/hr (LHV)

    - Fuel Oil No. 6 (residual fuel oil)
    - Fuel Oil Nos. 2 through 6
    - On-Spec Used Oil
    - Co-firing any combination of Fuel Oil No. 6, Fuel Oil Nos. 2 through 6, On-Spec Used Oil, or Natural Gas

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

ATTACHMENT EU007-07
ACID RAIN PART (FORM NO. 62-210.900(1)(a))

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: ☐ New ☐ Revised ☑ Renewal

STEP 1
Identify the source by plant name, State, and ORIS code

Plant Name **Sam O. Purdom Generating Station**	State **Florida**	ORIS Code **689**

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	c New Units Commence Operation Date	d New Units Monitor Certification Deadline
Boiler No. 7 – EU007	**Yes**		
Combined Cycle Combustion Turbine No. 8 – EU014	**Yes**		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Sam O. Purdom Generating Station
Plant Name (from Step 1)

STEP 3
Read the standard requirements

Acid Rain Part Requirements

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
(2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
(ii) Have an Acid Rain Part.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Sam O. Purdom Generating Station
Plant Name (from Step 1)

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

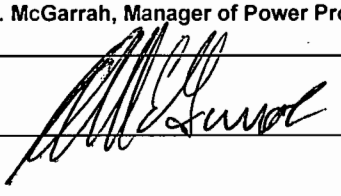
No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

Certification

I 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.

Name **Robert E. McGarrah, Manager of Power Production, City of Tallahassee**	
Signature 	Date **May 1, 2007**

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:

Combustion Turbine Number 1

3. Emissions Unit Identification Number: **-008**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**≈ 1963**	**49**	☐ Yes ☑ No

9. Package Unit:
Manufacturer: **Westinghouse** Model Number: **W171G**

10. Generator Nameplate Rating: **12.3 MW**

11. Emissions Unit Comment:
The maximum allowable operating rate is 228 mmBtu/hr (lower heating value) at an ambient temperature of 80 degrees Fahrenheit when firing fuel oil or natural gas. The maximum hours of operating are not limited, but the units are subject to the NO_x and SO_2 facility wide emissions caps.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **Fuel Quality** **Pursuant to Specific Condition D.6. of current Operating Permit No. 1290001-007-AV, the City of Tallahassee is authorized to fire natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight.**
2. Control Device or Method Code(s): **Use of Fuel with Low Fuel Content – No Code**

EMISSIONS UNIT INFORMATION
Section [2] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**		
2. Maximum Production Rate: **NA**		
3. Maximum Heat Input Rate: **228 million Btu/hr**		
4. Maximum Incineration Rate: **NA**		
5. Requested Maximum Operating Schedule:	**24 hours/day**	**7 days/week**
	52 weeks/year	**8,760 hours/year**
6. Operating Capacity/Schedule Comment: **The maximum heat input rate reflects operation at an ambient temperature of 80° Fahrenheit based on the lower heating value of the fuels. All values herein are based on the value contained in Field 3 above.**		

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: **EU-008**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **The emission point represents the exhaust for Combustion Turbine No. 1.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **38 feet**	7. Exit Diameter: **10 feet**
8. Exit Temperature: **880 °F**	9. Actual Volumetric Flow Rate: **395,080 acfm**	10. Water Vapor: **NA %**
11. Maximum Dry Standard Flow Rate: **NA**	12. Nonstack Emission Point Height: **NA**	
13. Emission Point UTM Coordinates... Zone: **16** East (km): **769.421** North (km): **3339.825**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**	
15. Emission Point Comment: **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

EMISSIONS UNIT INFORMATION
Section [2] of [7]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **20100201**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.245**	5. Maximum Annual Rate: **2143**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: *****	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **932 (LHV)**

10. Segment Comment: ***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.**

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Number 2 (with Sulfur Content 0.05%) Fuel Oil**		
2. Source Classification Code (SCC): **20100101**	3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **1,740**	5. Maximum Annual Rate: **1.52 x 10^7**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **0.05%**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **0.131 (LHV)**
10. Segment Comment: **The value in Field 9 is an estimate and subject to fluctuation.** **Fuel additives typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin may be used.**		

EMISSIONS UNIT INFORMATION
Section [2] of [7]

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
CO			**NS**
NOx			**EL**
PM			**NS**
PM_{10}			**NS**
SO_2			**EL**
VOC			**NS**
H106			**NS**
H107			**NS**
H133			**NS**
HAPS			**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **11.7 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Fuel Oil Sulfur Content: 0.05% (wt)
Fuel Oil Usage Rate: 1,740 gal / hr
MW SO_2: 64
MW S: 32

lb/hr = (1,740 gal/hr) x (7.05 lb/gal) x (0.05/100) x (64/32) x (95/100) = 11.7 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emission rate reflects firing Number 2 (0.05% Sulfur) diesel fuel oil with 95 percent conversion of the sulfur to SO_2. Combustion Turbine No. 1 is part of the requested facility-wide SO_2 and NO_x caps.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.05% sulfur (wt) and 80 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit fuel usage data, fuel density, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **Annual emissions will be based on actual sulfur content of the natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **NA**	
3. Potential Emissions: **159.1 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No	
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year		
7. Emission Factor: **NA** Reference:		7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA**	8.b. Baseline 24-month Period: **NA** From: To:	

9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Maximum Firing Rate: 228 mmBtu/hr** **Emission Factor: 0.698 lb/mmBtu** **lb/hr = (228 mmBtu/hr) x (0.698 lb-Nox/mmBtu) = 159.1 lb/hr**	
11. Potential, Fugitive, and Actual Emissions Comment: **The future potential annual emissions are part of the requested facility-wide cap on NO_x emissions.**	

EMISSIONS UNIT INFORMATION
Section [2] of [7]

POLLUTANT DETAIL INFORMATION
Page [2] of [2]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **467 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit specific fuel usage logs, AP-42 emission factors, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **Annual emissions will be based on the AP-42 emission factors [0.44 lb/mmBtu – natural gas and 0.698 lb/mmBtu – No. 2 diesel fuel oil].**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **<20 %** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: **60 min/hour**	
4. Method of Compliance: **EPA Method 9 in any fiscal year in which the turbine operates greater than 400 hours.**	
5. Visible Emissions Comment: **In accordance with Rule 62-210.700(1) F.A.C., excess emissions resulting from startup, shutdown, or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period unless authorized by the Department for longer duration.**	

EMISSIONS UNIT INFORMATION
Section [2] of [7]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 1

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

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: **EU008-01** ☐ 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: **EU008-02** ☐ 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: **EU008-03** ☐ 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: **EU008-04** ☐ 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: **EU008-05** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☑ Previously Submitted, Date: **May 11, 2007**
   Test Date(s)/Pollutant(s) Tested **Visible Emissions**
   ☐ 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

Additional Requirements for Air Construction Permit Applications

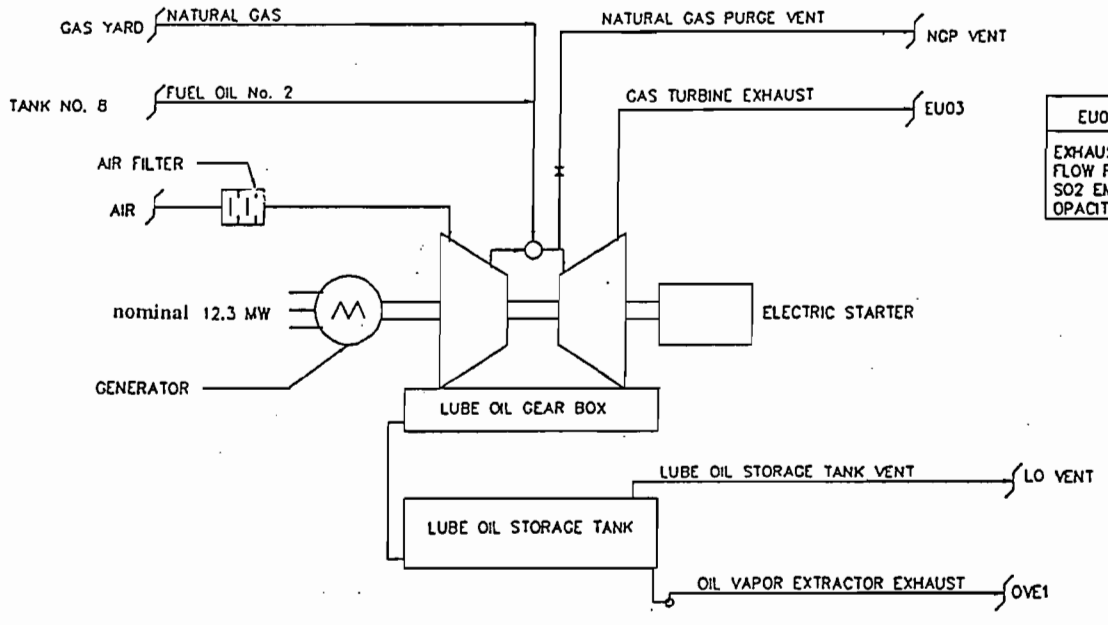
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☑ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document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

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Alternative Methods of Operation
   ☑ Attached, Document ID: **EU008-06** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☑ Not Applicable

Additional Requirements Comment

ATTACHMENT EU008-01
PROCESS FLOW DIAGRAM



EU03 – EXHAUST PARAMETERS
EXHAUST TEMP. ~880 F FLOW RATE – 395,080 ACFM SO2 EMISSIONS – 97.4 LBS/HR OPACITY– <20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 2 FUEL OIL
HEAT RATE (MMBTU/HR)	228	228
FEED RATE (MMCF/HR)	0.228	N/A
FEED RATE (KGAL/HR)	N/A	1.73
FEED RATE (LB/HR)	N/A	12,175

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 1

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE 3/15/95	BY: DJC CKD BY: DF REV. BY: CJT	CAD FILE NO. PGT1.DWG FIGURE NO. EU03-02

ATTACHMENT EU008-02
FUEL ANALYSIS OR SPECIFICATION

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU008, Combustion Turbine No.1. Maximum values could be higher. The fuels represented by the analyses include clean pipeline quality natural gas and No. 2 (0.05% Sulfur) diesel fuel oil.

CERTIFICATE OF ANALYSIS

JOB No.	
DATE	11/29/05

VESSEL	SUBMITTED TANK TRUCK	LAB No.	HTC-10729
CARGO	LOW SULFER DIESEL		
TERMINAL / PORT	HOPKINS PLANT - MOBILE, ALABAMA		
SAMPLE FROM:	SUBMITTED TANK TRUCK		
SAMPLE SUBMITTED BY	AMERICAN GENERAL - MOBILE, ALABAMA		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 4052	API GRAVITY @ 60 °F	33.4
D 4052	SPECIFIC GRAVITY @ 60 °F	0.8574
D 445	VISCOSITY @ 100 °F, Kcst	2.767
D 2171	VISCOSITY @ 100 °F, SUS	35.2
D 93A	FLASH POINT, °F (PMCC)	153
D 97	POUR POINT, °F	< -16
D 4294	SULFUR, WT%	0.0334
D 5762	NITROGEN, PPM	142
D 95	WATER BY DISTILLATION, VOL%	0.00
D 482	SEDIMENT BY EXTRACTION, WT%	< 0.01
D 482	ASH CONTENT, WT%	0.0013
D 240	GROSS HEAT OF COMB., MMBTU / bbl	5.818
D 5291	HYDROGEN CONTENT *	13.0
D 524	CARBON RESIDUE, (100% SAMPLE)	0.16
D 524	CARBON RESIDUE, (10% RAMSBTM)	0.05
D 1401	DEMULSIFICATION *	40-40-0 (5)
D 6217	PARTICULATES CONTAMINATION, PPM	1.2
D 130	COPPER CORROSION, 3 hrs @ 122 °F	1a
IP 143	ASPHALTENES, WT%	< 0.50
IAC-044	MICROBIAL TEST, (PASS / FAIL)	NONE DETECTED
D 86	DISTILLATION, °F	PAGE 2
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPB)	< 5
ICP-MS	LEAD, PPB	< 5
ICP-MS	VANADIUM, PPB	< 5
ICP-MS	CALCIUM, PPB	< 5
IP 377	SILICON, PPB	< 50

* = OUTSIDE LAB

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36608

CERTIFICATE OF ANALYSIS

REVISED

		JOB No.	
		DATE	6/29/2005
VESSEL	MF 725	LAB No.	4527 / 2006-HTC-05897
CARGO	LOW SULFUR DIESEL		
TERMINAL / PORT	SHELL CHEMICAL - SARALAND, ALABAMA		
SAMPLE FROM:	SHORE TANK 5 AFTER DISCHARGE		
SAMPLE SUBMITTED BY	BSI INSPECTORATE - MOBILE, AL		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - MOBILE, AL / ** PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 287	API GRAVITY @ 60 °F	40.5
D 287	SPECIFIC GRAVITY @ 60 °F	0.8227
D 445	VISCOSITY @ 100 °F, Kcst	2.636
D 2171	VISCOSITY @ 100 °F, SUS	34.8
D 93A	FLASH POINT, °F (PMCC)	146
D 97	POUR POINT, °F	NEGATIVE 5.8
D 4294	SULFUR, WT%	0.0213
D 5762	NITROGEN, wt% **	0.002
D 2709	WATER & SEDIMENT, VOL%	< 0.025
D 482	ASH CONTENT, WT%	< 0.001
D 240	GROSS HEAT OF COMB., MMBTU / bbl **	5.731*
D 5291	HYDROGEN CONTENT **	13.5
D 524	CARBON RESIDUE, (100% SAMPLE) **	0.06
D 524	CARBON RESIDUE, (10% RAMSBTM) **	0.11
D 1401	DEMULSIFICATION RATING @ 54 °C*	40-40-0 (5)
D 6217	PARTICULATE CONTAMINATION, mg/L	< 0.1
D 130	COPPER CORROSION, 3 hrs @ 122 °F **	1a
IP 143	ASPHALTENES, WT%	NONE DETECTED
EASICULT	MICROBIAL TEST, (PASS / FAIL) **	
	(24 HOURS)	PASS (NONE DETECTED)
	(48 HOURS)	PASS (NONE DETECTED)
D 86	DISTILLATION, °F	SEE PAGE 2
D 473	SEDIMENT BY EXTRACTION, WT%	< 0.01
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPM)**	< 0.1
ICP-MS	LEAD, PPM **	< 0.1
ICP-MS	VANADIUM, PPM **	< 0.1
ICP-MS	CALCIUM, PPM **	< 0.1
IP 377	SILICON, PPM	< 0.1

* = REVISED

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36609

Colonial Pipeline Company

3.41.1 SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL - DYED BY CPC

Cancels Previous Issues of Grade 84

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287, D1298, D4052	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500,D6045		2.5	
Color Visual				3
Viscosity, cSt @ 40°C (104°F)	D445	1.9	3.4	
Pour Point	D97, D5949, D5950, D5985,			2
Cloud Point	D2500, D5771, D5772, D5773			2
Corrosion, 3 hrs. @ 50°C (122°F)	D130		1	
Total Sulfur, wt.%	D129, D1266, D1266, D2622, D4294		0.047	4
Cetane Number	D613	40		5
Aromatics (Volume %)	D1319		31.7	
or Aromatics by Cetane Index	D976	40		
Asb, wt.%	D482		0.01	
Carbon Residue: Ramsbottom on 10% Bottom	D524		0.35	
BS&W, vol.%	D2709 or equivalent		< 0.05	
Thermal stability, 90 minutes				
150°C Pad rating, DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176 Procedure 2		2	
Nace Corrosion	TM0172-2001	B+ (Origin)		

-see SWRI test result
0.12 - 10%
0.10 - 100%

April 2005
* Denotes Change

Southwest Research Institute

Southwest Georgia Oil Company
November 3, 2005

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 10/27/05
Nitrogen mass %	ASTM D4629	Max 0.03	0.017)
Hydrogen Content, wt %	ASTM D 3701	Min 12.7	12.96
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.10
10% Bottoms		Max 0.25	0.12
Particulate (mg/L) and (mg/gal)	ASTM D 2276	Max 10 mg/gal	15.7 mg/L or 59.4 mg/gal
Asphaltenes, wt %	ASTM D 6560	ND	<0.05*
Silica Content, wt %			66.89% **
Bacterial Growth			Slight
Fungal Growth			Moderate
Calcium	ASTM D 3605	Max 2 ppm	<0.1 mg/kg*
Lead		Max 1 ppm	<0.5 mg/kg
Vanadium		Max 0.2 ppm	<0.5 mg/kg
Lithium (modified method)		Max 0.2 ppm	<0.1 mg/kg
Sodium		Max 0.2 ppm	<0.1 mg/kg
Potassium (modified method)		Max 0.2 ppm	<0.1 mg/kg

**Testing for Asphaltenes, D6560 and Trace Metals by Atomic Absorption, D3605 were performed at SGS North America*

***Silica content was measured from the filter media from ASTM D2276. This is representative of the silica that was deposited on the filter using 1000 mls of fuel.*

(OMTWARC5) page 2 of 2

GKIC -
oil test results for #2 FO rec'd from
SWG Oil Company
— Bo

Florida Gas Transmission-8030 May 09 2007 9:03 AM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
05/08/2007	1035	0.807	0.403	0.585	95.808	2.194	0.452	0.104	0.096	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/07/2007	1034	0.802	0.372	0.585	95.926	2.149	0.434	0.098	0.090	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/06/2007	1036	0.795	0.380	0.585	95.816	2.221	0.467	0.101	0.093	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/05/2007	1036	0.886	0.408	0.588	95.510	2.367	0.486	0.108	0.099	0.042	0.026	0.069	0.000	0.000	0.000	0.000
05/04/2007	1036	0.861	0.396	0.587	95.573	2.356	0.475	0.105	0.098	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/03/2007	1034	0.848	0.399	0.586	95.725	2.292	0.429	0.094	0.091	0.037	0.023	0.062	0.000	0.000	0.000	0.000
05/02/2007	1032	0.805	0.404	0.584	95.944	2.189	0.385	0.083	0.080	0.032	0.020	0.057	0.000	0.000	0.000	0.000
05/01/2007	1031	0.813	0.389	0.583	96.103	2.079	0.360	0.079	0.076	0.030	0.019	0.051	0.000	0.000	0.000	0.000
04/30/2007	1030	0.808	0.393	0.582	96.141	2.050	0.352	0.078	0.074	0.031	0.019	0.053	0.000	0.000	0.000	0.000
04/29/2007	1031	0.804	0.390	0.582	96.099	2.095	0.362	0.077	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/28/2007	1032	0.778	0.377	0.582	96.097	2.122	0.376	0.078	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/27/2007	1032	0.812	0.358	0.583	96.087	2.067	0.401	0.087	0.080	0.033	0.020	0.055	0.000	0.000	0.000	0.000
04/26/2007	1029	0.800	0.358	0.581	96.337	1.932	0.336	0.074	0.067	0.029	0.018	0.048	0.000	0.000	0.000	0.000
04/25/2007	1029	0.797	0.354	0.581	96.324	1.949	0.336	0.077	0.069	0.030	0.018	0.048	0.000	0.000	0.000	0.000
04/24/2007	1030	0.795	0.373	0.582	96.273	1.944	0.359	0.081	0.073	0.032	0.019	0.051	0.000	0.000	0.000	0.000
04/23/2007	1030	0.787	0.388	0.581	96.265	1.975	0.346	0.077	0.069	0.029	0.018	0.047	0.000	0.000	0.000	0.000
04/22/2007	1031	0.801	0.378	0.582	96.160	2.027	0.381	0.081	0.077	0.030	0.019	0.047	0.000	0.000	0.000	0.000
04/21/2007	1033	0.781	0.382	0.584	95.990	2.120	0.448	0.090	0.091	0.032	0.020	0.048	0.000	0.000	0.000	0.000
04/20/2007	1034	0.802	0.392	0.584	95.901	2.156	0.461	0.091	0.094	0.033	0.021	0.049	0.000	0.000	0.000	0.000
04/19/2007	1033	0.798	0.393	0.584	95.967	2.111	0.450	0.089	0.095	0.032	0.020	0.047	0.000	0.000	0.000	0.000
04/18/2007	1031	0.848	0.373	0.583	96.109	1.951	0.427	0.090	0.091	0.034	0.022	0.052	0.000	0.000	0.000	0.000
04/17/2007	1031	0.841	0.378	0.583	96.105	1.953	0.435	0.090	0.093	0.034	0.022	0.049	0.000	0.000	0.000	0.000
04/16/2007	1032	0.831	0.369	0.583	96.087	1.976	0.447	0.090	0.095	0.034	0.022	0.048	0.000	0.000	0.000	0.000
04/15/2007	1033	0.795	0.353	0.583	96.077	2.045	0.444	0.091	0.094	0.032	0.021	0.048	0.000	0.000	0.000	0.000
04/14/2007	1032	0.811	0.362	0.583	96.094	2.014	0.433	0.088	0.093	0.033	0.021	0.050	0.000	0.000	0.000	0.000
04/13/2007	1033	0.792	0.346	0.583	96.043	2.083	0.459	0.088	0.093	0.031	0.020	0.045	0.000	0.000	0.000	0.000
04/12/2007	1035	0.821	0.369	0.585	95.838	2.165	0.500	0.096	0.103	0.034	0.022	0.051	0.000	0.000	0.000	0.000
04/11/2007	1034	0.855	0.384	0.585	95.808	2.171	0.475	0.097	0.101	0.035	0.022	0.052	0.000	0.000	0.000	0.000

0.000															
04/10/2007	1033	0.861	0.363	0.584	95.949	2.082	0.449	0.093	0.095	0.035	0.022	0.051	0.000	0.000	0.000
0.000															
04/09/2007	1033	0.847	0.369	0.584	95.953	2.085	0.450	0.093	0.095	0.035	0.022	0.050	0.000	0.000	0.000
0.000															
04/08/2007	1034	0.812	0.378	0.584	95.946	2.099	0.467	0.094	0.099	0.035	0.022	0.049	0.000	0.000	0.000
0.000															
04/07/2007	1034	0.788	0.376	0.584	95.946	2.146	0.459	0.090	0.095	0.032	0.021	0.047	0.000	0.000	0.000
0.000															
04/06/2007	1034	0.807	0.367	0.584	95.949	2.133	0.453	0.092	0.095	0.033	0.021	0.049	0.000	0.000	0.000
0.000															
04/05/2007	1034	0.853	0.380	0.585	95.823	2.186	0.452	0.095	0.098	0.036	0.023	0.054	0.000	0.000	0.000
0.000															
04/04/2007	1034	0.852	0.384	0.585	95.801	2.182	0.461	0.097	0.103	0.038	0.025	0.058	0.000	0.000	0.000
0.000															
04/03/2007	1033	0.852	0.381	0.584	96.005	2.020	0.429	0.093	0.098	0.038	0.024	0.059	0.000	0.000	0.000
0.000															
04/02/2007	1033	0.823	0.357	0.584	96.124	1.954	0.429	0.095	0.097	0.039	0.024	0.059	0.000	0.000	0.000
0.000															
04/01/2007	1031	0.808	0.352	0.582	96.249	1.905	0.396	0.088	0.088	0.036	0.022	0.055	0.000	0.000	0.000
0.000															
03/31/2007	1030	0.793	0.354	0.581	96.389	1.827	0.366	0.083	0.080	0.033	0.021	0.053	0.000	0.000	0.000
0.000															
03/30/2007	1029	0.855	0.356	0.582	96.277	1.907	0.336	0.082	0.073	0.034	0.021	0.058	0.000	0.000	0.000
0.000															
03/29/2007	1031	0.903	0.358	0.584	96.090	1.981	0.370	0.091	0.083	0.038	0.023	0.064	0.000	0.000	0.000
0.000															
03/28/2007	1031	0.882	0.325	0.583	96.124	2.022	0.365	0.089	0.079	0.036	0.021	0.058	0.000	0.000	0.000
0.000															
03/27/2007	1030	0.839	0.319	0.582	96.263	1.967	0.353	0.084	0.073	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/26/2007	1031	0.872	0.337	0.583	96.102	2.048	0.369	0.087	0.075	0.034	0.020	0.054	0.000	0.000	0.000
0.000															
03/25/2007	1034	0.889	0.331	0.585	95.873	2.156	0.430	0.100	0.090	0.042	0.025	0.063	0.000	0.000	0.000
0.000															
03/24/2007	1035	0.845	0.336	0.585	95.856	2.199	0.440	0.100	0.093	0.043	0.026	0.062	0.000	0.000	0.000
0.000															
03/23/2007	1031	0.819	0.334	0.582	96.184	2.032	0.373	0.083	0.073	0.033	0.019	0.050	0.000	0.000	0.000
0.000															
03/22/2007	1030	0.818	0.327	0.582	96.273	1.977	0.360	0.080	0.070	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
03/21/2007	1030	0.841	0.339	0.582	96.223	2.000	0.351	0.079	0.069	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/20/2007	1029	0.815	0.327	0.581	96.386	1.914	0.331	0.074	0.063	0.028	0.016	0.045	0.000	0.000	0.000
0.000															
03/19/2007	1030	0.843	0.335	0.582	96.239	1.971	0.358	0.082	0.071	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/18/2007	1029	0.857	0.345	0.582	96.264	1.938	0.346	0.080	0.070	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/17/2007	1030	0.838	0.349	0.582	96.238	1.964	0.352	0.082	0.071	0.033	0.020	0.053	0.000	0.000	0.000
0.000															
03/16/2007	1029	0.849	0.344	0.582	96.254	1.962	0.340	0.079	0.070	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/15/2007	1030	0.845	0.341	0.582	96.202	1.983	0.363	0.085	0.075	0.034	0.020	0.053	0.000	0.000	0.000
0.000															
03/14/2007	1030	0.834	0.349	0.582	96.280	1.928	0.350	0.083	0.073	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/13/2007	1031	0.877	0.357	0.583	96.101	2.016	0.373	0.088	0.077	0.035	0.021	0.053	0.000	0.000	0.000
0.000															
03/12/2007	1029	0.845	0.352	0.582	96.276	1.930	0.351	0.081	0.069	0.031	0.018	0.048	0.000	0.000	0.000
0.000															

03/11/2007	1029	0.846	0.369	0.582	96.240	1.949	0.349	0.080	0.069	0.031	0.018	0.049	0.000	0.000	0.000
0.000															
03/10/2007	1029	0.840	0.367	0.582	96.296	1.914	0.335	0.078	0.068	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/09/2007	1029	0.851	0.355	0.582	96.249	1.941	0.348	0.080	0.072	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/08/2007	1028	0.820	0.343	0.580	96.471	1.827	0.306	0.073	0.064	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
03/07/2007	1027	0.814	0.339	0.579	96.592	1.743	0.292	0.070	0.061	0.028	0.017	0.043	0.000	0.000	0.000
0.000															
03/06/2007	1027	0.826	0.331	0.580	96.515	1.799	0.308	0.070	0.061	0.028	0.017	0.045	0.000	0.000	0.000
0.000															
03/05/2007	1028	0.880	0.335	0.581	96.343	1.873	0.329	0.075	0.066	0.030	0.018	0.050	0.000	0.000	0.000
0.000															
03/04/2007	1028	0.871	0.341	0.581	96.336	1.878	0.336	0.076	0.066	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
03/03/2007	1028	0.862	0.328	0.581	96.325	1.929	0.328	0.073	0.064	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
03/02/2007	1029	0.851	0.319	0.581	96.332	1.956	0.317	0.071	0.063	0.028	0.017	0.044	0.000	0.000	0.000
0.000															
03/01/2007	1028	0.798	0.320	0.580	96.487	1.877	0.304	0.068	0.062	0.027	0.016	0.042	0.000	0.000	0.000
0.000															
02/28/2007	1028	0.866	0.329	0.581	96.315	1.937	0.323	0.072	0.066	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
02/27/2007	1029	0.892	0.332	0.582	96.217	1.981	0.338	0.076	0.069	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
02/26/2007	1028	0.905	0.345	0.582	96.231	1.961	0.320	0.074	0.068	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/25/2007	1029	0.924	0.353	0.583	96.151	1.971	0.341	0.080	0.075	0.034	0.021	0.051	0.000	0.000	0.000
0.000															
02/24/2007	1029	0.929	0.360	0.583	96.109	1.988	0.350	0.081	0.076	0.035	0.021	0.052	0.000	0.000	0.000
0.000															
02/23/2007	1028	0.897	0.363	0.582	96.236	1.930	0.328	0.075	0.070	0.032	0.020	0.049	0.000	0.000	0.000
0.000															
02/22/2007	1029	0.855	0.355	0.582	96.300	1.923	0.325	0.075	0.068	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/21/2007	1031	0.892	0.365	0.584	95.999	2.099	0.375	0.085	0.077	0.034	0.021	0.053	0.000	0.000	0.000
0.000															
02/20/2007	1032	0.869	0.364	0.584	95.938	2.150	0.405	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/19/2007	1032	0.841	0.357	0.584	96.018	2.107	0.404	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/18/2007	1035	0.874	0.355	0.586	95.765	2.235	0.463	0.101	0.090	0.038	0.023	0.055	0.000	0.000	0.000
0.000															
02/17/2007	1034	0.865	0.402	0.586	95.713	2.259	0.450	0.098	0.090	0.041	0.024	0.057	0.000	0.000	0.000
0.000															
02/16/2007	1031	0.872	0.380	0.583	96.058	2.052	0.364	0.086	0.077	0.036	0.021	0.053	0.000	0.000	0.000
0.000															
02/15/2007	1030	0.880	0.339	0.582	96.184	1.999	0.342	0.081	0.072	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
02/14/2007	1030	0.884	0.334	0.583	96.141	2.046	0.347	0.080	0.069	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/13/2007	1031	0.886	0.334	0.584	95.983	2.166	0.376	0.086	0.073	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/12/2007	1031	0.929	0.341	0.584	95.925	2.180	0.375	0.084	0.071	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/11/2007	1031	0.920	0.341	0.584	95.916	2.194	0.375	0.084	0.072	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
02/10/2007	1029	0.905	0.350	0.583	96.122	2.039	0.342	0.078	0.068	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
02/09/2007	1029	0.843	0.342	0.582	96.226	2.022	0.332	0.076	0.066	0.029	0.017	0.046	0.000	0.000	0.000

0.000

ATTACHMENT EU008-03
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Detailed Description of Control Equipment

There is no air pollution control equipment associated with this emissions unit.

ATTACHMENT EU008-04
PROCEDURES FOR STARTUP AND SHUTDOWN

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the gas turbines at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the gas turbines. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU008-05
OPERATION AND MAINTENANCE PLAN

Operation and Maintenance Plan

The City follows best management practices in the operation and maintenance of the Units to minimize the amount and duration of air pollutant emissions. There are numerous volumes of operation and maintenance plans located on-site at the Purdom facility, many of which refer back to the manufacturers' operation and maintenance manuals.

Excerpts from several of these manuals have been previously submitted to the Department. If additional information from these manuals are needed, the City will provide the Department with these materials as requested.

ATTACHMENT EU008-06
ALTERNATIVE METHODS OF OPERATION

Alternative Methods of Operation

Combustion Turbine No. 1 (EU008) is used as a peaking and emergency reserve unit. It is fueled by natural gas or No. 2 fuel oil. The alternative methods of operation (AMO) associated with the combustion turbine are related to the type of fuel being fired and rate of operation. The combustion turbine has a nominal production capacity of 12.3 MW. The current AMOs include the following:

- ❖ Natural Gas Firing - Maximum Rate of 228 mmBtu/hr (LHV)
- ❖ No. 2 Fuel Oil Firing - Maximum Rate of 228 mmBtu/hr (LHV)

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:

Combustion Turbine Number 2

3. Emissions Unit Identification Number: **-009**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**≈ 1963**	**49**	☐ Yes ☑ No

9. Package Unit:
Manufacturer: **Westinghouse** Model Number: **W171G**

10. Generator Nameplate Rating: **12.3 MW**

11. Emissions Unit Comment:
The maximum allowable operating rate is 228 mmBtu/hr (lower heating value) at an ambient temperature of 80 degrees Fahrenheit when firing fuel oil or natural gas. The maximum hours of operating are not limited, but the units are subject to the NO_x and SO_2 facility wide emissions caps.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **Fuel Quality** **Pursuant to Specific Condition D.6. of current Operating Permit No. 1290001-007-AV, the City of Tallahassee is authorized to fire natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight.**
2. Control Device or Method Code(s): **Use of Fuel with Low Fuel Content – No Code**

EMISSIONS UNIT INFORMATION
Section [3] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**		
2. Maximum Production Rate: **NA**		
3. Maximum Heat Input Rate: **228 million Btu/hr**		
4. Maximum Incineration Rate: **NA pounds/hr** **NA 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: **The maximum heat input rate reflects operation at an ambient temperature of 80° Fahrenheit based on the lower heating value of the fuels. All values herein are based on the value contained in Field 3 above.**		

EMISSIONS UNIT INFORMATION
Section [3] of [7]

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: **EU-009**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **The emission point represents the exhaust for Combustion Turbine No. 2.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **38 feet**	7. Exit Diameter: **10 feet**
8. Exit Temperature: **880 °F**	9. Actual Volumetric Flow Rate: **395,080 acfm**	10. Water Vapor: **NA %**
11. Maximum Dry Standard Flow Rate: **NA dscfm**	12. Nonstack Emission Point Height: **NA feet**	
13. Emission Point UTM Coordinates... Zone: **16** East (km): **769.421** North (km): **3339.825**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**	
15. Emission Point Comment: **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

EMISSIONS UNIT INFORMATION
Section [3] of [7]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **20100201**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.245**	5. Maximum Annual Rate: **2143**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: *****	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **932 (LHV)**

10. Segment Comment: ***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.**

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Number 2 (with Sulfur Content 0.05%) Fuel Oil**		
2. Source Classification Code (SCC): **20100101**	3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **1,740**	5. Maximum Annual Rate: **1.52×10^7**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **0.05%**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **0.131 (LHV)**
10. Segment Comment: **The value in Field 9 is an estimate and subject to fluctuation.** **Fuel additives typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin may be used.**		

EMISSIONS UNIT INFORMATION
Section [3] of [7]

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
CO			**NS**
NOx			**EL**
PM			**NS**
PM_{10}			**NS**
SO_2			**EL**
VOC			**NS**
H106			**NS**
H107			**NS**
H133			**NS**
HAPS			**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **11.7 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Fuel Oil Sulfur Content: 0.05% (wt)
Fuel Oil Usage Rate: 1,740 gal / hr
MW SO_2: 64
MW S: 32

lb/hr = (1,740 gal/hr) x (7.05 lb/gal) x (0.05/100) x (64/32) x (95/100) = 11.7 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emission rate reflects firing Number 2 (0.05% Sulfur) diesel fuel oil with 95 percent conversion of the sulfur to SO_2. Combustion Turbine No. 2 is part of the requested facility-wide SO_2 and NO_x caps.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.05% sulfur (wt) and 80 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit fuel usage data, fuel density, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **Annual emissions will be based on actual sulfur content of the natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **NA**	
3. Potential Emissions: **159.1 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No	
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year		
7. Emission Factor: **NA** Reference:		7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:	

9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Maximum Firing Rate: 228 mmBtu/hr** **Emission Factor: 0.698 lb/mmBtu** **lb/hr = (228 mmBtu/hr) x (0.698 lb-Nox/mmBtu) = 159.1 lb/hr**	
11. Potential, Fugitive, and Actual Emissions Comment: **The future potential annual emissions are part of the requested facility-wide cap on NO_x emissions.**	

EMISSIONS UNIT INFORMATION
Section [3] of [7]

POLLUTANT DETAIL INFORMATION
Page [2] of [2]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **467 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit specific fuel usage logs, AP-42 emission factors, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **Annual emissions will be based on the AP-42 emission factors [0.44 lb/mmBtu – natural gas and 0.698 lb/mmBtu – No. 2 diesel fuel oil].**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **<20 %** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: **60 min/hour**	
4. Method of Compliance: **EPA Method 9 in any fiscal year in which the turbine operates greater than 400 hours.**	
5. Visible Emissions Comment: **In accordance with Rule 62-210.700(1) F.A.C., excess emissions resulting from startup, shutdown, or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period unless authorized by the Department for longer duration.**	

EMISSIONS UNIT INFORMATION
Section [3] of [7]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: **NA**	2. Pollutant(s): **NA**
3. CMS Requirement: **NA**	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **NA** Model Number: **NA**	Serial Number: **NA**
5. Installation Date: **0NA**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **NA**	

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: **EU009-01** ☐ 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: **EU009-02** ☐ 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: **EU009-03** ☐ 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: **EU009-04** ☐ 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: **EU009-05** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☑ Previously Submitted, Date: **May 11, 2007**
   Test Date(s)/Pollutant(s) Tested: **Visible Emissions**
   ☐ 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

Additional Requirements for Air Construction Permit Applications

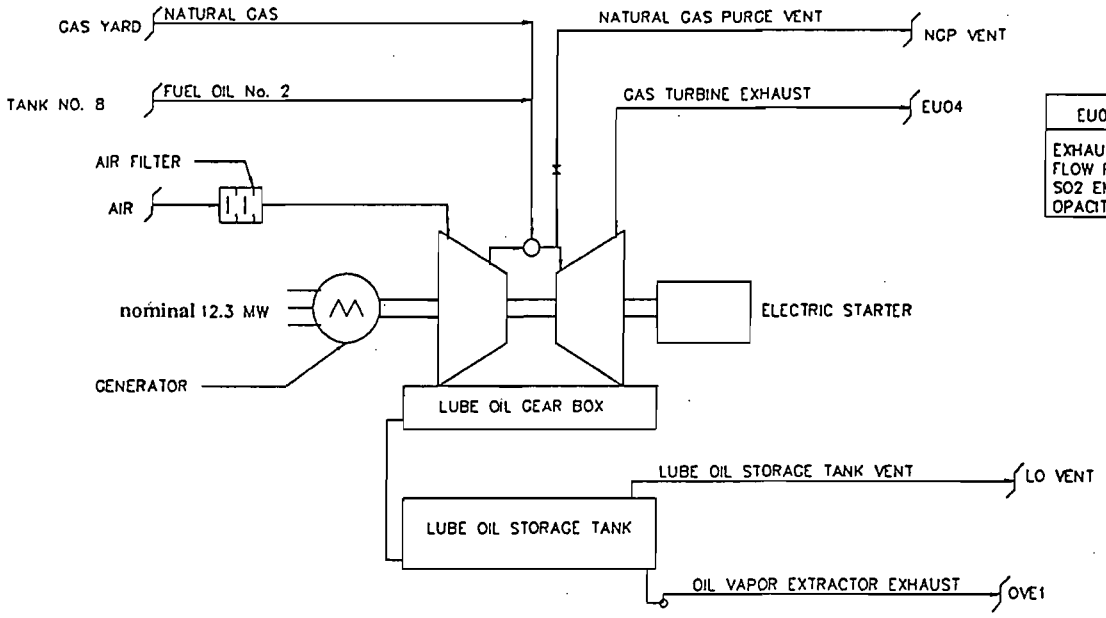
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☑ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document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

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Alternative Methods of Operation
   ☑ Attached, Document ID: **EU009-06** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☑ Not Applicable

Additional Requirements Comment

ATTACHMENT EU009-01
PROCESS FLOW DIAGRAM



EU04 – EXHAUST PARAMETERS
EXHAUST TEMP. – 880 F
FLOW RATE – 395,080 ACFM
SO2 EMISSIONS – 97.4 LBS/HR
OPACITY– <20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 2 FUEL OIL
HEAT RATE (MMBTU/HR)	228	228
FEED RATE (MMCF/HR)	0.228	N/A
FEED RATE (KGAL/HR)	N/A	1.73
FEED RATE (LB/HR)	N/A	12,175

CITY OF TALLAHASSEE, FLORIDA
TITLE V PERMIT APPLICATION
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 2

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A	BY: DJC	CAD FILE NO. PGT1.DWG
DATE 3/15/95	CKD' BY: DF REV. BY: CJT	FIGURE NO. EU04-02

ATTACHMENT EU009-02
FUEL ANALYSIS OR SPECIFICATION

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU009, Combustion Turbine No.2. Maximum values could be higher. The fuels represented by the analyses include clean pipeline quality natural gas and No. 2 (0.05% Sulfur) diesel fuel oil.

BEST AVAILABLE COPY

CERTIFICATE OF ANALYSIS

JOB No.	
DATE	11/29/05

VESSEL	SUBMITTED TANK TRUCK	LAB No.	HTC-10729
CARGO	LOW SULFER DIESEL		
TERMINAL / PORT	HOPKINS PLANT - MOBILE, ALABAMA		
SAMPLE FROM:	SUBMITTED TANK TRUCK		
SAMPLE SUBMITTED BY	AMERICAN GENERAL - MOBILE, ALABAMA		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 4052	API GRAVITY @ 60 °F	33.4
D 4052	SPECIFIC GRAVITY @ 60 °F	0.8574
D 445	VISCOSITY @ 100 °F, Kcst	2.767
D 2171	VISCOSITY @ 100 °F, SUS	35.2
D 93A	FLASH POINT, °F (PMCC)	153
D 97	POUR POINT, °F	< -16
D 4294	SULFUR, WT%	0.0334
D 5762	NITROGEN, PPM	142
D 95	WATER BY DISTILLATION, VOL%	0.00
D 482	SEDIMENT BY EXTRACTION, WT%	< 0.01
D 482	ASH CONTENT, WT%	0.0013
D 240	GROSS HEAT OF COMB., MMBTU / bbl	5.818
D 5291	HYDROGEN CONTENT *	13.0
D 524	CARBON RESIDUE, (100% SAMPLE)	0.10
D 524	CARBON RESIDUE, (10% RAMSBTM)	0.05
D 1401	DEMULSIFICATION *	40-40-0 (5)
D 6217	PARTICULATES CONTAMINATION, PPM	1.2
D 130	COPPER CORROSION, 3 hrs @ 122 °F	1a
IP 143	ASPHALTENES, WT%	< 0.50
IAC-044	MICROBIAL TEST, (PASS / FAIL)	NONE DETECTED
D 86	DISTILLATION, °F	PAGE 2
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPB)	< 5
ICP-MS	LEAD, PPB	< 5
ICP-MS	VANADIUM, PPB	< 5
ICP-MS	CALCIUM, PPB	< 5
IP 377	SILICON, PPB	< 50

* = OUTSIDE LAB

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36608

BSI INSPECTORATE

CERTIFICATE OF ANALYSIS

REVISED

		JOB No.	
		DATE	6/29/2005
VESSEL	MF 725	LAB No.	4527 / 2005-HTC-05897
CARGO	LOW SULFUR DIESEL		
TERMINAL / PORT	SHELL CHEMICAL - SARALAND, ALABAMA		
SAMPLE FROM:	SHORE TANK 5 AFTER DISCHARGE		
SAMPLE SUBMITTED BY	BSI INSPECTORATE - MOBILE, AL		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - MOBILE, AL / ** PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 287	API GRAVITY @ 60 °F	40.5
D 287	SPECIFIC GRAVITY @ 60 °F	0.8227
D 445	VISCOSITY @ 100 °F, Kcst	2.636
D 2171	VISCOSITY @ 100 °F, SUS	34.8
D 93A	FLASH POINT, °F (PMCC)	146
D 97	POUR POINT, °F	NEGATIVE 5.8
D 4294	SULFUR, WT%	0.0213
D 5762	NITROGEN, wt% **	0.002
D 2709	WATER & SEDIMENT, VOL%	< 0.025
D 482	ASH CONTENT, WT%	< 0.001
D 240	GROSS HEAT OF COMB., MMBTU / bbl **	5.731*
D 5291	HYDROGEN CONTENT **	13.5
D 524	CARBON RESIDUE, (100% SAMPLE) **	0.06
D 524	CARBON RESIDUE, (10% RAMSBTM) **	0.11
D 1401	DEMULSIFICATION RATING @ 54 °C*	40-40-0 (5)
D 6217	PARTICULATE CONTAMINATION, mg/L	< 0.1
D 130	COPPER CORROSION, 3 hrs @ 122 °F **	1a
IP 143	ASPHALTENES, WT%	NONE DETECTED
EASICULT	MICROBIAL TEST, (PASS / FAIL) **	
	(24 HOURS)	PASS (NONE DETECTED)
	(48 HOURS)	PASS (NONE DETECTED)
D 86	DISTILLATION, °F	SEE PAGE 2
D 473	SEDIMENT BY EXTRACTION, WT%	< 0.01
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPM)**	< 0.1
ICP-MS	LEAD, PPM **	< 0.1
ICP-MS	VANADIUM, PPM **	< 0.1
ICP-MS	CALCIUM, PPM **	< 0.1
IP 377	SILICON, PPM	< 0.1

OK

* = REVISED

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36609

Colonial Pipeline Company

PRODUCT SPECIFICATIONS

3.41.1 SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL - DYED BY CPC

Cancels Previous Issues of Grade 84

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287, D1298, D4052	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500,D6045		2.5	
Color Visual				3
Viscosity, cSt @ 40°C (104°F)	D445	1.9	3.4	
Pour Point	D97, D5949, D5950, D5985,			2
Cloud Point	D2500, D5771, D5772, D5773			2
Corrosion, 3 hrs. @ 50°C (122°F)	D130		1	
Total Sulfur, wt.%	D129, D1266, D1266, D2622, D4294		0.047	4
Cetane Number	D613	40		5
Aromatics (Volume %)	D1319		31.7	
or Aromatics by Cetane Index	D976	40		
Asb, wt.%	D482		0.01	
Carbon Residue: Ramsbottom on 10% Bottom	D524		0.35	
BS&W, vol.%	D2709 or equivalent		< 0.05	
Thermal stability, 90 minutes				
150°C Pad rating, DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176 Procedure 2		2	
Nace Corrosion	TM0172-2001	B+ (Origin)		

-sec SWRI test results
0.12 -10%
0.10 - 100%

April 2005
* Denotes Change

Southwest Research Institute

Southwest Georgia Oil Company
November 3, 2005

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 10/27/05
Nitrogen mass %	ASTM D4629	Max 0.03	0.017
Hydrogen Content, wt %	ASTM D 3701	Min 12.7	12.96
Carbon Residue, wt %	ASTM D 52a		
100 % Bottoms		Max 1.0	0.10
10% Bottoms		Max 0.25	0.12
Particulate (mg/L) and (mg/gal)	ASTM D 2276	Max 10 mg/gal	15.7 mg/L or 59.4 mg/gal
Asphaltenes, wt %	ASTM D 6560	ND	<0.05*
Silica Content, wt %			66.89% **
Bacterial Growth			Slight
Fungal Growth			Moderate
Calcium	ASTM D 3605	Max 2 ppm	<0.1 mg/kg*
Lead		Max 1 ppm	<0.5 mg/kg
Vanadium		Max 0.2 ppm	<0.5 mg/kg
Lithium (modified method)		Max 0.2 ppm	<0.1 mg/kg
Sodium		Max 0.2 ppm	<0.1 mg/kg
Potassium (modified method)		Max 0.2 ppm	<0.1 mg/kg

**Testing for Asphaltenes, D6560 and Trace Metals by Atomic Absorption, D3605 were performed at SGS North America*

***Silica content was measured from the filter media from ASTM D2276. This is representative of the silica that was deposited on the filter using 1000 mls of fuel.*

GKIC-
oil test results for #2 FO rec'd from
SWG Oil Company
— Bo

Florida Gas Transmission-8030 May 09 2007 9:03 AM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
05/08/2007	1035	0.807	0.403	0.585	95.808	2.194	0.452	0.104	0.096	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/07/2007	1034	0.802	0.372	0.585	95.926	2.149	0.434	0.098	0.090	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/06/2007	1036	0.795	0.380	0.585	95.816	2.221	0.467	0.101	0.093	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/05/2007	1036	0.886	0.408	0.588	95.510	2.367	0.486	0.108	0.099	0.042	0.026	0.069	0.000	0.000	0.000	0.000
05/04/2007	1036	0.861	0.396	0.587	95.573	2.356	0.475	0.105	0.098	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/03/2007	1034	0.848	0.399	0.586	95.725	2.292	0.429	0.094	0.091	0.037	0.023	0.062	0.000	0.000	0.000	0.000
05/02/2007	1032	0.805	0.404	0.584	95.944	2.189	0.385	0.083	0.080	0.032	0.020	0.057	0.000	0.000	0.000	0.000
05/01/2007	1031	0.813	0.389	0.583	96.103	2.079	0.360	0.079	0.076	0.030	0.019	0.051	0.000	0.000	0.000	0.000
04/30/2007	1030	0.808	0.393	0.582	96.141	2.050	0.352	0.078	0.074	0.031	0.019	0.053	0.000	0.000	0.000	0.000
04/29/2007	1031	0.804	0.390	0.582	96.099	2.095	0.362	0.077	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/28/2007	1032	0.778	0.377	0.582	96.097	2.122	0.376	0.078	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/27/2007	1032	0.812	0.358	0.583	96.087	2.067	0.401	0.087	0.080	0.033	0.020	0.055	0.000	0.000	0.000	0.000
04/26/2007	1029	0.800	0.358	0.581	96.337	1.932	0.336	0.074	0.067	0.029	0.018	0.048	0.000	0.000	0.000	0.000
04/25/2007	1029	0.797	0.354	0.581	96.324	1.949	0.336	0.077	0.069	0.030	0.018	0.048	0.000	0.000	0.000	0.000
04/24/2007	1030	0.795	0.373	0.582	96.273	1.944	0.359	0.081	0.073	0.032	0.019	0.051	0.000	0.000	0.000	0.000
04/23/2007	1030	0.787	0.388	0.581	96.265	1.975	0.346	0.077	0.069	0.029	0.018	0.047	0.000	0.000	0.000	0.000
04/22/2007	1031	0.801	0.378	0.582	96.160	2.027	0.381	0.081	0.077	0.030	0.019	0.047	0.000	0.000	0.000	0.000
04/21/2007	1033	0.781	0.382	0.584	95.990	2.120	0.448	0.090	0.091	0.032	0.020	0.048	0.000	0.000	0.000	0.000
04/20/2007	1034	0.802	0.392	0.584	95.901	2.156	0.461	0.091	0.094	0.033	0.021	0.049	0.000	0.000	0.000	0.000
04/19/2007	1033	0.798	0.393	0.584	95.967	2.111	0.450	0.089	0.095	0.032	0.020	0.047	0.000	0.000	0.000	0.000
04/18/2007	1031	0.848	0.373	0.583	96.109	1.951	0.427	0.090	0.091	0.034	0.022	0.052	0.000	0.000	0.000	0.000
04/17/2007	1031	0.841	0.378	0.583	96.105	1.953	0.435	0.090	0.093	0.034	0.022	0.049	0.000	0.000	0.000	0.000
04/16/2007	1032	0.831	0.369	0.583	96.087	1.976	0.447	0.090	0.095	0.034	0.022	0.048	0.000	0.000	0.000	0.000
04/15/2007	1033	0.795	0.353	0.583	96.077	2.045	0.444	0.091	0.094	0.032	0.021	0.048	0.000	0.000	0.000	0.000
04/14/2007	1032	0.811	0.362	0.583	96.094	2.014	0.433	0.088	0.093	0.033	0.021	0.050	0.000	0.000	0.000	0.000
04/13/2007	1033	0.792	0.346	0.583	96.043	2.083	0.459	0.088	0.093	0.031	0.020	0.045	0.000	0.000	0.000	0.000
04/12/2007	1035	0.821	0.369	0.585	95.838	2.165	0.500	0.096	0.103	0.034	0.022	0.051	0.000	0.000	0.000	0.000
04/11/2007	1034	0.855	0.384	0.585	95.808	2.171	0.475	0.097	0.101	0.035	0.022	0.052	0.000	0.000	0.000	0.000

0.000															
04/10/2007	1033	0.861	0.363	0.584	95.949	2.082	0.449	0.093	0.095	0.035	0.022	0.051	0.000	0.000	0.000
0.000															
04/09/2007	1033	0.847	0.369	0.584	95.953	2.085	0.450	0.093	0.095	0.035	0.022	0.050	0.000	0.000	0.000
0.000															
04/08/2007	1034	0.812	0.378	0.584	95.946	2.099	0.467	0.094	0.099	0.035	0.022	0.049	0.000	0.000	0.000
0.000															
04/07/2007	1034	0.788	0.376	0.584	95.946	2.146	0.459	0.090	0.095	0.032	0.021	0.047	0.000	0.000	0.000
0.000															
04/06/2007	1034	0.807	0.367	0.584	95.949	2.133	0.453	0.092	0.095	0.033	0.021	0.049	0.000	0.000	0.000
0.000															
04/05/2007	1034	0.853	0.380	0.585	95.823	2.186	0.452	0.095	0.098	0.036	0.023	0.054	0.000	0.000	0.000
0.000															
04/04/2007	1034	0.852	0.384	0.585	95.801	2.182	0.461	0.097	0.103	0.038	0.025	0.058	0.000	0.000	0.000
0.000															
04/03/2007	1033	0.852	0.381	0.584	96.005	2.020	0.429	0.093	0.098	0.038	0.024	0.059	0.000	0.000	0.000
0.000															
04/02/2007	1033	0.823	0.357	0.584	96.124	1.954	0.429	0.095	0.097	0.039	0.024	0.059	0.000	0.000	0.000
0.000															
04/01/2007	1031	0.808	0.352	0.582	96.249	1.905	0.396	0.088	0.088	0.036	0.022	0.055	0.000	0.000	0.000
0.000															
03/31/2007	1030	0.793	0.354	0.581	96.389	1.827	0.366	0.083	0.080	0.033	0.021	0.053	0.000	0.000	0.000
0.000															
03/30/2007	1029	0.855	0.356	0.582	96.277	1.907	0.336	0.082	0.073	0.034	0.021	0.058	0.000	0.000	0.000
0.000															
03/29/2007	1031	0.903	0.358	0.584	96.090	1.981	0.370	0.091	0.083	0.038	0.023	0.064	0.000	0.000	0.000
0.000															
03/28/2007	1031	0.882	0.325	0.583	96.124	2.022	0.365	0.089	0.079	0.036	0.021	0.058	0.000	0.000	0.000
0.000															
03/27/2007	1030	0.839	0.319	0.582	96.263	1.967	0.353	0.084	0.073	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/26/2007	1031	0.872	0.337	0.583	96.102	2.048	0.369	0.087	0.075	0.034	0.020	0.054	0.000	0.000	0.000
0.000															
03/25/2007	1034	0.889	0.331	0.585	95.873	2.156	0.430	0.100	0.090	0.042	0.025	0.063	0.000	0.000	0.000
0.000															
03/24/2007	1035	0.845	0.336	0.585	95.856	2.199	0.440	0.100	0.093	0.043	0.026	0.062	0.000	0.000	0.000
0.000															
03/23/2007	1031	0.819	0.334	0.582	96.184	2.032	0.373	0.083	0.073	0.033	0.019	0.050	0.000	0.000	0.000
0.000															
03/22/2007	1030	0.818	0.327	0.582	96.273	1.977	0.360	0.080	0.070	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
03/21/2007	1030	0.841	0.339	0.582	96.223	2.000	0.351	0.079	0.069	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/20/2007	1029	0.815	0.327	0.581	96.386	1.914	0.331	0.074	0.063	0.028	0.016	0.045	0.000	0.000	0.000
0.000															
03/19/2007	1030	0.843	0.335	0.582	96.239	1.971	0.358	0.082	0.071	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/18/2007	1029	0.857	0.345	0.582	96.264	1.938	0.346	0.080	0.070	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/17/2007	1030	0.838	0.349	0.582	96.238	1.964	0.352	0.082	0.071	0.033	0.020	0.053	0.000	0.000	0.000
0.000															
03/16/2007	1029	0.849	0.344	0.582	96.254	1.962	0.340	0.079	0.070	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/15/2007	1030	0.845	0.341	0.582	96.202	1.983	0.363	0.085	0.075	0.034	0.020	0.053	0.000	0.000	0.000
0.000															
03/14/2007	1030	0.834	0.349	0.582	96.280	1.928	0.350	0.083	0.073	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/13/2007	1031	0.877	0.357	0.583	96.101	2.016	0.373	0.088	0.077	0.035	0.021	0.053	0.000	0.000	0.000
0.000															
03/12/2007	1029	0.845	0.352	0.582	96.276	1.930	0.351	0.081	0.069	0.031	0.018	0.048	0.000	0.000	0.000
0.000															

03/11/2007	1029	0.846	0.369	0.582	96.240	1.949	0.349	0.080	0.069	0.031	0.018	0.049	0.000	0.000	0.000
0.000															
03/10/2007	1029	0.840	0.367	0.582	96.296	1.914	0.335	0.078	0.068	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/09/2007	1029	0.851	0.355	0.582	96.249	1.941	0.348	0.080	0.072	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/08/2007	1028	0.820	0.343	0.580	96.471	1.827	0.306	0.073	0.064	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
03/07/2007	1027	0.814	0.339	0.579	96.592	1.743	0.292	0.070	0.061	0.028	0.017	0.043	0.000	0.000	0.000
0.000															
03/06/2007	1027	0.826	0.331	0.580	96.515	1.799	0.308	0.070	0.061	0.028	0.017	0.045	0.000	0.000	0.000
0.000															
03/05/2007	1028	0.880	0.335	0.581	96.343	1.873	0.329	0.075	0.066	0.030	0.018	0.050	0.000	0.000	0.000
0.000															
03/04/2007	1028	0.871	0.341	0.581	96.336	1.878	0.336	0.076	0.066	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
03/03/2007	1028	0.862	0.328	0.581	96.325	1.929	0.328	0.073	0.064	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
03/02/2007	1029	0.851	0.319	0.581	96.332	1.956	0.317	0.071	0.063	0.028	0.017	0.044	0.000	0.000	0.000
0.000															
03/01/2007	1028	0.798	0.320	0.580	96.487	1.877	0.304	0.068	0.062	0.027	0.016	0.042	0.000	0.000	0.000
0.000															
02/28/2007	1028	0.866	0.329	0.581	96.315	1.937	0.323	0.072	0.066	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
02/27/2007	1029	0.892	0.332	0.582	96.217	1.981	0.338	0.076	0.069	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
02/26/2007	1028	0.905	0.345	0.582	96.231	1.961	0.320	0.074	0.068	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/25/2007	1029	0.924	0.353	0.583	96.151	1.971	0.341	0.080	0.075	0.034	0.021	0.051	0.000	0.000	0.000
0.000															
02/24/2007	1029	0.929	0.360	0.583	96.109	1.988	0.350	0.081	0.076	0.035	0.021	0.052	0.000	0.000	0.000
0.000															
02/23/2007	1028	0.897	0.363	0.582	96.236	1.930	0.328	0.075	0.070	0.032	0.020	0.049	0.000	0.000	0.000
0.000															
02/22/2007	1029	0.855	0.355	0.582	96.300	1.923	0.325	0.075	0.068	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/21/2007	1031	0.892	0.365	0.584	95.999	2.099	0.375	0.085	0.077	0.034	0.021	0.053	0.000	0.000	0.000
0.000															
02/20/2007	1032	0.869	0.364	0.584	95.938	2.150	0.405	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/19/2007	1032	0.841	0.357	0.584	96.018	2.107	0.404	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/18/2007	1035	0.874	0.355	0.586	95.765	2.235	0.463	0.101	0.090	0.038	0.023	0.055	0.000	0.000	0.000
0.000															
02/17/2007	1034	0.865	0.402	0.586	95.713	2.259	0.450	0.098	0.090	0.041	0.024	0.057	0.000	0.000	0.000
0.000															
02/16/2007	1031	0.872	0.380	0.583	96.058	2.052	0.364	0.086	0.077	0.036	0.021	0.053	0.000	0.000	0.000
0.000															
02/15/2007	1030	0.880	0.339	0.582	96.184	1.999	0.342	0.081	0.072	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
02/14/2007	1030	0.884	0.334	0.583	96.141	2.046	0.347	0.080	0.069	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/13/2007	1031	0.886	0.334	0.584	95.983	2.166	0.376	0.086	0.073	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/12/2007	1031	0.929	0.341	0.584	95.925	2.180	0.375	0.084	0.071	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/11/2007	1031	0.920	0.341	0.584	95.916	2.194	0.375	0.084	0.072	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
02/10/2007	1029	0.905	0.350	0.583	96.122	2.039	0.342	0.078	0.068	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
02/09/2007	1029	0.843	0.342	0.582	96.226	2.022	0.332	0.076	0.066	0.029	0.017	0.046	0.000	0.000	0.000

0.000

ATTACHMENT EU009-03
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Detailed Description of Control Equipment

There is no air pollution control equipment associated with this emissions unit.

ATTACHMENT EU009-04
PROCEDURES FOR STARTUP AND SHUTDOWN

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the gas turbines at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the gas turbines. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU009-05
OPERATION AND MAINTENANCE PLAN

Operation and Maintenance Plan

The City follows best management practices in the operation and maintenance of the Units to minimize the amount and duration of air pollutant emissions. There are numerous volumes of operation and maintenance plans located on-site at the Purdom facility, many of which refer back to the manufacturers' operation and maintenance manuals.

Excerpts from several of these manuals have been previously submitted to the Department. If additional information from these manuals are needed, the City will provide the Department with these materials as requested.

ATTACHMENT EU009-06
ALTERNATIVE METHODS OF OPERATION

Alternative Methods of Operation

Combustion Turbine No. 2 (EU009) is used as a peaking and emergency reserve unit. It is fueled by natural gas or No. 2 fuel oil. The alternative methods of operation (AMO) associated with the combustion turbine are related to the type of fuel being fired and rate of operation. The combustion turbine has a nominal production capacity of 12.3 MW. The current AMOs include the following:

- ❖ Natural Gas Firing - Maximum Rate of 228 mmBtu/hr (LHV)
- ❖ No. 2 Fuel Oil Firing - Maximum Rate of 228 mmBtu/hr (LHV)

Note: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Fugitive VOC Sources – Unregulated Surface Coating & Painting Operations

3. Emissions Unit Identification Number: **-010**

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

9. Package Unit: **NA**
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
NA

EMISSIONS UNIT INFORMATION
Section [4] of [7]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **NA**
2. Control Device or Method Code(s): **NA**

EMISSIONS UNIT INFORMATION
Section [4] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**
2. Maximum Production Rate: **NA**
3. Maximum Heat Input Rate: **NA**
4. Maximum Incineration Rate: pounds/hr **NA** tons/day
5. Requested Maximum Operating Schedule: **NA**
6. Operating Capacity/Schedule Comment: **NA**

EMISSIONS UNIT INFORMATION
Section [4] of [7]

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: **EU010**	2. Emission Point Type Code: **NA**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **NA**	6. Stack Height: **NA**	7. Exit Diameter: **NA**
8. Exit Temperature: **NA**	9. Actual Volumetric Flow Rate: **NA**	10. Water Vapor: **NA**

11. Maximum Dry Standard Flow Rate: **NA**	12. Nonstack Emission Point Height: **NA**
13. Emission Point UTM Coordinates... Zone: **NA** East (km): **NA** North (km): **NA**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**
15. Emission Point Comment: **NA**	

EMISSIONS UNIT INFORMATION
Section [4] of [7]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Surface Coating – Normal Operations**		
2. Source Classification Code (SCC): **2401001000***	3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **NA**	5. Maximum Annual Rate: NA	6. Estimated Annual Activity Factor: **5,000**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment: **Annual Activity Factor is based on maximum surface area coated.** ***Other codes may also apply.**		

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
VOC			**NS**
HAPS			**NS**
H120			**NS**
H169			**NS**
H189			**NS**
H123			**NS**
H085			**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NA**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **NA**	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor **NA** Reference: **NA**	7. Emissions Method Code: **NA**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: From: **NA** To: **NA**
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **NA**	
11. Potential, Fugitive, and Actual Emissions Comment: **NA**	

EMISSIONS UNIT INFORMATION
Section [4] of [7]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **NA**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **NA**	4. Equivalent Allowable Emissions: **NA**
5. Method of Compliance: **NA**	
6. Allowable Emissions Comment (Description of Operating Method): **NA**	

EMISSIONS UNIT INFORMATION
Section [4] of [7]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

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

H. CONTINUOUS MONITOR INFORMATION

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

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

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

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: _____ ☐ 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: _____ ☐ 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: _____ ☐ 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: _____ ☐ 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

EMISSIONS UNIT INFORMATION
Section [4] of [7]

Additional Requirements for Air Construction Permit Applications

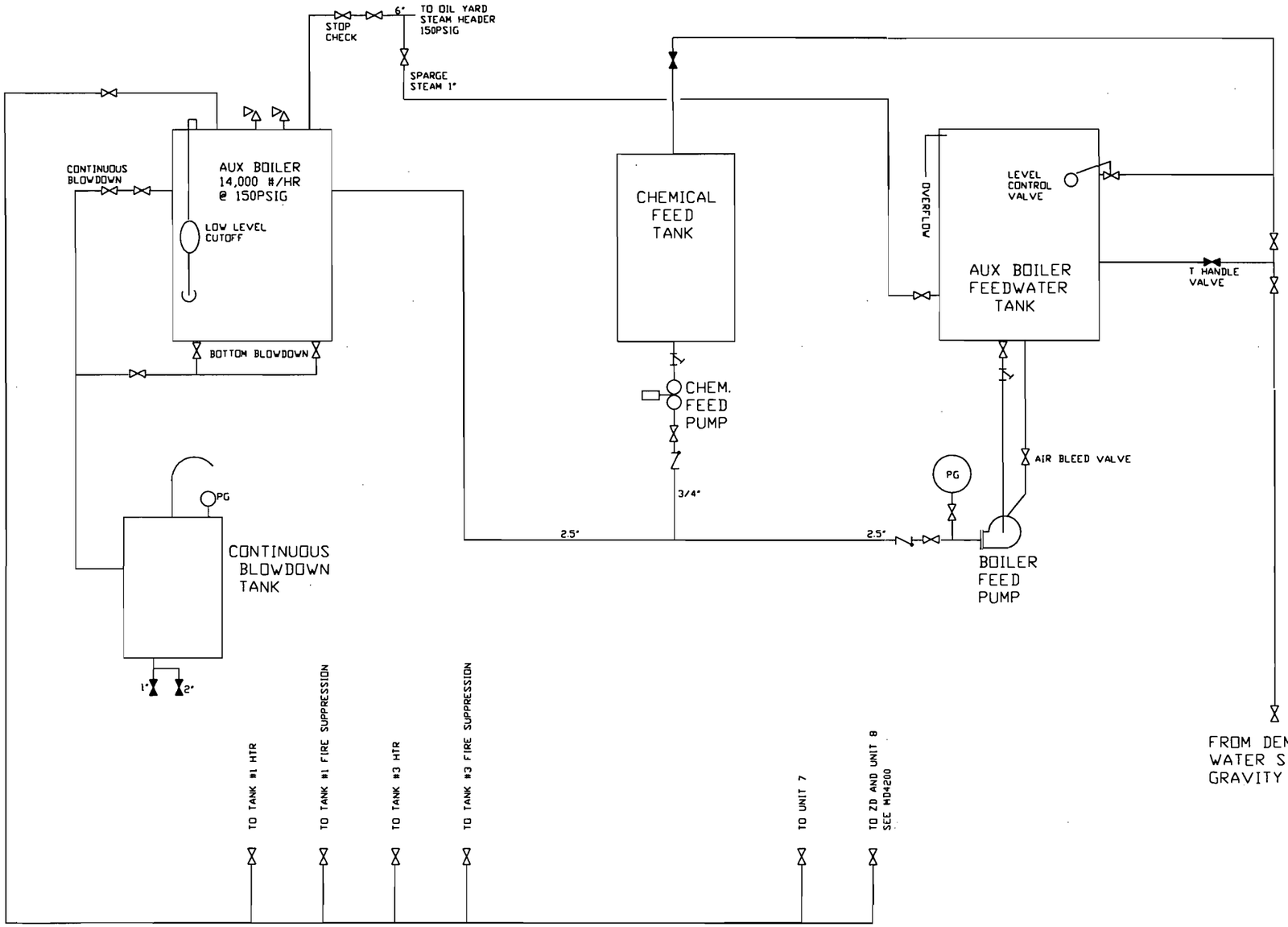
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☑ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document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

Additional Requirements for Title V Air Operation Permit Applications

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

Additional Requirements Comment

REV NO.	DATE	REVISION	DR	CH	APPROVED
	5/97	PRELIMINARY	GM		



NOTES:

1. FOR A LIST OF REFERENCE SCHEMATIC ABBREVIATIONS AND SYMBOLS, SEE DWG. CTAL-PDMD-I-SK100
2. PID DEVELOPED FOR KEWANNEE AUXILIARY BOILER INSTALLED 5/97.

REFERENCE DRAWINGS

1. FOR A LIST OF REFERENCE DRAWINGS, SEE DRAWING CTAL-PDMD-I-SK100.

ATTENTION: ANY REVISION TO THIS DRAWING MUST BE MADE BY COMPUTER AIDED DESIGN

CITY OF TALLAHASSEE
PURDOM GENERATING STATION

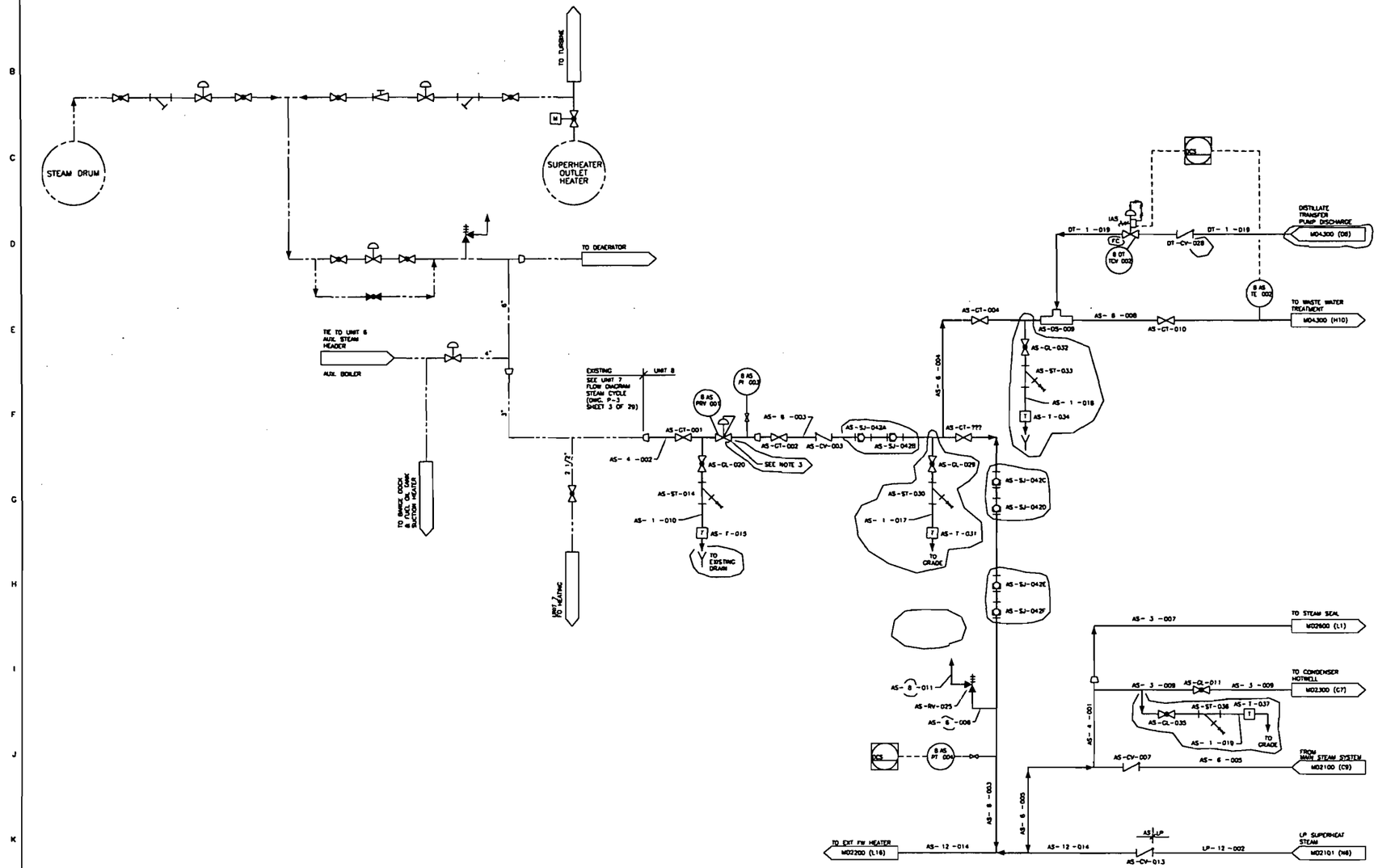
AUXILIARY BOILER
WATER / STEAM

CITY OF TALLAHASSEE

SCALE:	APPROVED	DATE: 9-8-95
DEPT:	GEH	CTAL-PDMC
DR:		I-SK111
CK:		

MD4200

NO	DATE	REVISION	BY	CH	APPROVED
1	3/3/99	GENERAL REVISION	RP	SC	CD CC RCR PC
2	8/24/99	REVISED AS CIRCLED	JTA	LS	CD CC RCR PC



NOTES:

1. FOR LEGENDS, SYMBOLS AND GENERAL NOTES SEE DWG. MD2000.
2. UNLESS OTHERWISE NOTED, VENT, DRAIN AND INSTRUMENT ROOT VALVES AND LINES SHALL HAVE UNIQUE NUMBERS AS FOLLOWS:

SYSTEM	VALVE NO.	LINE NO.	REMARKS
AS	AS-GL-016	AS-1-013	

3. SELF CONTAINED PRESSURE REGULATOR WITH PNEUMATIC CONTROLLER.

CITY OF TALLAHASSEE
PURDOM GENERATING STATION
UNIT NO.8
225MW COMBINED CYCLE STATION

P&ID
AUXILIARY STEAM SYSTEM

Raytheon Engineers & Constructors

SCALE NONE	APPROVED	DATE 1/22/98	
DEPT MECHANICAL	R.C. ROEST		
DES	P. FREDERICKS	76855	
DR J.T. ABBRUSCATO	CD CM CC PC	MD4200	02
CH S. CHANG			

DWG FILE: MD4200002 OPER: JTA 8/11/99.1

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Auxiliary Boiler

3. Emissions Unit Identification Number: **-011**

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

9. Package Unit:
Manufacturer: **Kewanee** Model Number: **H3S-400-G**

10. Generator Nameplate Rating: **NA MW**

11. Emissions Unit Comment: **This emissions unit is regulated under 40 CFR 60, Subpart D.c. However, since it is only permitted to combust natural gas, the standards, the monitoring and the associated reporting requirements contained in Subpart D.c. do not apply, with the exception that the reporting requirements pertaining to "start-up," as referenced in 40 CFR 60.7, do apply.** **Except for compliance testing, this boiler may only operate when Unit 7 or Unit 8 is not operating; therefore there will be no significant increase in emissions for PSD purposes.**

EMISSIONS UNIT INFORMATION
Section [5] of [7]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **NA**
2. Control Device or Method Code(s): **NA**

EMISSIONS UNIT INFORMATION
Section [5] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**
2. Maximum Production Rate: **NA**
3. Maximum Heat Input Rate: **16.74 million Btu/hr**
4. Maximum Incineration Rate: **NA pounds/hr** **NA tons/day**
5. Requested Maximum Operating Schedule: **2000 hours/year ***
6. Operating Capacity/Schedule Comment: *** This emissions unit may operate 2,000 hours/year as an auxiliary source of steam; it may only operate when either Unit 7 or Unit 8 is not operating.** **The City of Tallahassee maintains an operation log certifying the total hours of operation and fuel consumption annually.**

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: **EU-011**		2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **The emission point represents the exhaust for the Auxiliary Boiler.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **30 feet**	7. Exit Diameter: **2 feet**
8. Exit Temperature: **420 °F**	9. Actual Volumetric Flow Rate: **4,000 acfm**	10. Water Vapor: **NA %**
11. Maximum Dry Standard Flow Rate: **NA dscfm**		12. Nonstack Emission Point Height: **NA feet**
13. Emission Point UTM Coordinates... Zone: **16** East (km): **769.767** North (km): **3339.784**		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**
15. Emission Point Comment: **Value in Fields 8 and 9 are based on design and subject to change based on factors including ambient conditions.**		

EMISSIONS UNIT INFORMATION
Section [5] of [7]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **10200602**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.0161**	5. Maximum Annual Rate: **32.19**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: *****	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1040 (assumed gross calorific value)**

10. Segment Comment:
***Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **Maximum Annual Rate is based on 2,000 hours per year operation.** **The value in Field 9 is an estimate subject to fluctuation.**

EMISSIONS UNIT INFORMATION
Section [5] of [7]

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			**EL**
SO_2			**EL**

EMISSIONS UNIT INFORMATION
Section [5] of [7]

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.46 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years

10. Calculation of Emissions: **lb/hr = (16.74 mmBTU/hr) x (MCF / 1040 mmBTU) x (100 gr-S / 1000 CF) x (1 lb-S / 7000 gr) x (64 lb- SO_2 / 32 lb-S) = 0.46 lb/hr**
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions unit is subject to facility-wide cap on SO_2.**

EMISSIONS UNIT INFORMATION
Section [5] of [7]

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **80 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit fuel usage data, fuel density, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **The Auxiliary Boiler is currently limited to firing natural gas not to exceed 2,000 hours per year. Its emissions unit is subject to facility-wide cap on SO_2.** **Annual emissions will be based on actual sulfur content of the natural gas.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **2.44 lb/hour CAP tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
7. Emission Factor: **NA** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **lb/hr = (16.74 mmBtu/hr) x (MCF / 1040 mmBtu) x (mmCF / 100 MCF) x (140 lb/mmCF) = 2.44 lb/hr**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions unit is subject to facility-wide cap on NO_x.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **467 TPY cap for the facility**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Compliance will be based on unit specific fuel usage logs, AP-42 emission factors, and vendor fuel data.**	
6. Allowable Emissions Comment (Description of Operating Method): **The Auxiliary Boiler is currently limited to firing natural gas not to exceed 2,000 hours per year. Its emissions unit is subject to facility-wide cap on NO_x.**	

EMISSIONS UNIT INFORMATION
Section [5] of [7]

G. VISIBLE EMISSIONS INFORMATION

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

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: **27 %** Maximum Period of Excess Opacity Allowed: **6 min/hour**	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **NA**	

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: **2 hours/ 24 hours**	
4. Method of Compliance:	
5. Visible Emissions Comment: **In accordance with 62-210.700(1) F.A.C., excess emissions resulting from startup, shutdown or malfunction are permitted providing that the duration of excess emissions be minimized but in no case to exceed two hours in any 24 hour period, unless authorized by the Department for longer duration.**	

EMISSIONS UNIT INFORMATION
Section [5] of [7]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 1

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

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: **EU011-01** ☐ 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: **EU011-02** ☐ 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: **EU011-03** ☐ 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: **EU011-04** ☐ 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: **EU011-05** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☑ Previously Submitted, Date: **May 11, 2007**
   Test Date(s)/Pollutant(s) Tested: **Visible Emissions**
   ☐ 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

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

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

Additional Requirements Comment

ATTACHMENT EU011-01
PROCESS FLOW DIAGRAM

ATTACHMENT EU011-02
FUEL ANALYSIS AND SPECIFICATION

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU011, Auxiliary Boiler. Maximum values may be higher. The fuels represented in the analyses include natural gas only.

Florida Gas Transmission-8030 May 09 2007 9:03 AM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
05/08/2007	1035	0.807	0.403	0.585	95.808	2.194	0.452	0.104	0.096	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/07/2007	1034	0.802	0.372	0.585	95.926	2.149	0.434	0.098	0.090	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/06/2007	1036	0.795	0.380	0.585	95.816	2.221	0.467	0.101	0.093	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/05/2007	1036	0.886	0.408	0.588	95.510	2.367	0.486	0.108	0.099	0.042	0.026	0.069	0.000	0.000	0.000	0.000
05/04/2007	1036	0.861	0.396	0.587	95.573	2.356	0.475	0.105	0.098	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/03/2007	1034	0.848	0.399	0.586	95.725	2.292	0.429	0.094	0.091	0.037	0.023	0.062	0.000	0.000	0.000	0.000
05/02/2007	1032	0.805	0.404	0.584	95.944	2.189	0.385	0.083	0.080	0.032	0.020	0.057	0.000	0.000	0.000	0.000
05/01/2007	1031	0.813	0.389	0.583	96.103	2.079	0.360	0.079	0.076	0.030	0.019	0.051	0.000	0.000	0.000	0.000
04/30/2007	1030	0.808	0.393	0.582	96.141	2.050	0.352	0.078	0.074	0.031	0.019	0.053	0.000	0.000	0.000	0.000
04/29/2007	1031	0.804	0.390	0.582	96.099	2.095	0.362	0.077	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/28/2007	1032	0.778	0.377	0.582	96.097	2.122	0.376	0.078	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/27/2007	1032	0.812	0.358	0.583	96.087	2.067	0.401	0.087	0.080	0.033	0.020	0.055	0.000	0.000	0.000	0.000
04/26/2007	1029	0.800	0.358	0.581	96.337	1.932	0.336	0.074	0.067	0.029	0.018	0.048	0.000	0.000	0.000	0.000
04/25/2007	1029	0.797	0.354	0.581	96.324	1.949	0.336	0.077	0.069	0.030	0.018	0.048	0.000	0.000	0.000	0.000
04/24/2007	1030	0.795	0.373	0.582	96.273	1.944	0.359	0.081	0.073	0.032	0.019	0.051	0.000	0.000	0.000	0.000
04/23/2007	1030	0.787	0.388	0.581	96.265	1.975	0.346	0.077	0.069	0.029	0.018	0.047	0.000	0.000	0.000	0.000
04/22/2007	1031	0.801	0.378	0.582	96.160	2.027	0.381	0.081	0.077	0.030	0.019	0.047	0.000	0.000	0.000	0.000
04/21/2007	1033	0.781	0.382	0.584	95.990	2.120	0.448	0.090	0.091	0.032	0.020	0.048	0.000	0.000	0.000	0.000
04/20/2007	1034	0.802	0.392	0.584	95.901	2.156	0.461	0.091	0.094	0.033	0.021	0.049	0.000	0.000	0.000	0.000
04/19/2007	1033	0.798	0.393	0.584	95.967	2.111	0.450	0.089	0.095	0.032	0.020	0.047	0.000	0.000	0.000	0.000
04/18/2007	1031	0.848	0.373	0.583	96.109	1.951	0.427	0.090	0.091	0.034	0.022	0.052	0.000	0.000	0.000	0.000
04/17/2007	1031	0.841	0.378	0.583	96.105	1.953	0.435	0.090	0.093	0.034	0.022	0.049	0.000	0.000	0.000	0.000
04/16/2007	1032	0.831	0.369	0.583	96.087	1.976	0.447	0.090	0.095	0.034	0.022	0.048	0.000	0.000	0.000	0.000
04/15/2007	1033	0.795	0.353	0.583	96.077	2.045	0.444	0.091	0.094	0.032	0.021	0.048	0.000	0.000	0.000	0.000
04/14/2007	1032	0.811	0.362	0.583	96.094	2.014	0.433	0.088	0.093	0.033	0.021	0.050	0.000	0.000	0.000	0.000
04/13/2007	1033	0.792	0.346	0.583	96.043	2.083	0.459	0.088	0.093	0.031	0.020	0.045	0.000	0.000	0.000	0.000
04/12/2007	1035	0.821	0.369	0.585	95.838	2.165	0.500	0.096	0.103	0.034	0.022	0.051	0.000	0.000	0.000	0.000
04/11/2007	1034	0.855	0.384	0.585	95.808	2.171	0.475	0.097	0.101	0.035	0.022	0.052	0.000	0.000	0.000	0.000

0.000															
04/10/2007	1033	0.861	0.363	0.584	95.949	2.082	0.449	0.093	0.095	0.035	0.022	0.051	0.000	0.000	0.000
0.000															
04/09/2007	1033	0.847	0.369	0.584	95.953	2.085	0.450	0.093	0.095	0.035	0.022	0.050	0.000	0.000	0.000
0.000															
04/08/2007	1034	0.812	0.378	0.584	95.946	2.099	0.467	0.094	0.099	0.035	0.022	0.049	0.000	0.000	0.000
0.000															
04/07/2007	1034	0.788	0.376	0.584	95.946	2.146	0.459	0.090	0.095	0.032	0.021	0.047	0.000	0.000	0.000
0.000															
04/06/2007	1034	0.807	0.367	0.584	95.949	2.133	0.453	0.092	0.095	0.033	0.021	0.049	0.000	0.000	0.000
0.000															
04/05/2007	1034	0.853	0.380	0.585	95.823	2.186	0.452	0.095	0.098	0.036	0.023	0.054	0.000	0.000	0.000
0.000															
04/04/2007	1034	0.852	0.384	0.585	95.801	2.182	0.461	0.097	0.103	0.038	0.025	0.058	0.000	0.000	0.000
0.000															
04/03/2007	1033	0.852	0.381	0.584	96.005	2.020	0.429	0.093	0.098	0.038	0.024	0.059	0.000	0.000	0.000
0.000															
04/02/2007	1033	0.823	0.357	0.584	96.124	1.954	0.429	0.095	0.097	0.039	0.024	0.059	0.000	0.000	0.000
0.000															
04/01/2007	1031	0.808	0.352	0.582	96.249	1.905	0.396	0.088	0.088	0.036	0.022	0.055	0.000	0.000	0.000
0.000															
03/31/2007	1030	0.793	0.354	0.581	96.389	1.827	0.366	0.083	0.080	0.033	0.021	0.053	0.000	0.000	0.000
0.000															
03/30/2007	1029	0.855	0.356	0.582	96.277	1.907	0.336	0.082	0.073	0.034	0.021	0.058	0.000	0.000	0.000
0.000															
03/29/2007	1031	0.903	0.358	0.584	96.090	1.981	0.370	0.091	0.083	0.038	0.023	0.064	0.000	0.000	0.000
0.000															
03/28/2007	1031	0.882	0.325	0.583	96.124	2.022	0.365	0.089	0.079	0.036	0.021	0.058	0.000	0.000	0.000
0.000															
03/27/2007	1030	0.839	0.319	0.582	96.263	1.967	0.353	0.084	0.073	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/26/2007	1031	0.872	0.337	0.583	96.102	2.048	0.369	0.087	0.075	0.034	0.020	0.054	0.000	0.000	0.000
0.000															
03/25/2007	1034	0.889	0.331	0.585	95.873	2.156	0.430	0.100	0.090	0.042	0.025	0.063	0.000	0.000	0.000
0.000															
03/24/2007	1035	0.845	0.336	0.585	95.856	2.199	0.440	0.100	0.093	0.043	0.026	0.062	0.000	0.000	0.000
0.000															
03/23/2007	1031	0.819	0.334	0.582	96.184	2.032	0.373	0.083	0.073	0.033	0.019	0.050	0.000	0.000	0.000
0.000															
03/22/2007	1030	0.818	0.327	0.582	96.273	1.977	0.360	0.080	0.070	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
03/21/2007	1030	0.841	0.339	0.582	96.223	2.000	0.351	0.079	0.069	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/20/2007	1029	0.815	0.327	0.581	96.386	1.914	0.331	0.074	0.063	0.028	0.016	0.045	0.000	0.000	0.000
0.000															
03/19/2007	1030	0.843	0.335	0.582	96.239	1.971	0.358	0.082	0.071	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/18/2007	1029	0.857	0.345	0.582	96.264	1.938	0.346	0.080	0.070	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/17/2007	1030	0.838	0.349	0.582	96.238	1.964	0.352	0.082	0.071	0.033	0.020	0.053	0.000	0.000	0.000
0.000															
03/16/2007	1029	0.849	0.344	0.582	96.254	1.962	0.340	0.079	0.070	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/15/2007	1030	0.845	0.341	0.582	96.202	1.983	0.363	0.085	0.075	0.034	0.020	0.053	0.000	0.000	0.000
0.000															
03/14/2007	1030	0.834	0.349	0.582	96.280	1.928	0.350	0.083	0.073	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/13/2007	1031	0.877	0.357	0.583	96.101	2.016	0.373	0.088	0.077	0.035	0.021	0.053	0.000	0.000	0.000
0.000															
03/12/2007	1029	0.845	0.352	0.582	96.276	1.930	0.351	0.081	0.069	0.031	0.018	0.048	0.000	0.000	0.000
0.000															

03/11/2007	1029	0.846	0.369	0.582	96.240	1.949	0.349	0.080	0.069	0.031	0.018	0.049	0.000	0.000	0.000
0.000															
03/10/2007	1029	0.840	0.367	0.582	96.296	1.914	0.335	0.078	0.068	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/09/2007	1029	0.851	0.355	0.582	96.249	1.941	0.348	0.080	0.072	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/08/2007	1028	0.820	0.343	0.580	96.471	1.827	0.306	0.073	0.064	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
03/07/2007	1027	0.814	0.339	0.579	96.592	1.743	0.292	0.070	0.061	0.028	0.017	0.043	0.000	0.000	0.000
0.000															
03/06/2007	1027	0.826	0.331	0.580	96.515	1.799	0.308	0.070	0.061	0.028	0.017	0.045	0.000	0.000	0.000
0.000															
03/05/2007	1028	0.880	0.335	0.581	96.343	1.873	0.329	0.075	0.066	0.030	0.018	0.050	0.000	0.000	0.000
0.000															
03/04/2007	1028	0.871	0.341	0.581	96.336	1.878	0.336	0.076	0.066	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
03/03/2007	1028	0.862	0.328	0.581	96.325	1.929	0.328	0.073	0.064	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
03/02/2007	1029	0.851	0.319	0.581	96.332	1.956	0.317	0.071	0.063	0.028	0.017	0.044	0.000	0.000	0.000
0.000															
03/01/2007	1028	0.798	0.320	0.580	96.487	1.877	0.304	0.068	0.062	0.027	0.016	0.042	0.000	0.000	0.000
0.000															
02/28/2007	1028	0.866	0.329	0.581	96.315	1.937	0.323	0.072	0.066	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
02/27/2007	1029	0.892	0.332	0.582	96.217	1.981	0.338	0.076	0.069	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
02/26/2007	1028	0.905	0.345	0.582	96.231	1.961	0.320	0.074	0.068	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/25/2007	1029	0.924	0.353	0.583	96.151	1.971	0.341	0.080	0.075	0.034	0.021	0.051	0.000	0.000	0.000
0.000															
02/24/2007	1029	0.929	0.360	0.583	96.109	1.988	0.350	0.081	0.076	0.035	0.021	0.052	0.000	0.000	0.000
0.000															
02/23/2007	1028	0.897	0.363	0.582	96.236	1.930	0.328	0.075	0.070	0.032	0.020	0.049	0.000	0.000	0.000
0.000															
02/22/2007	1029	0.855	0.355	0.582	96.300	1.923	0.325	0.075	0.068	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/21/2007	1031	0.892	0.365	0.584	95.999	2.099	0.375	0.085	0.077	0.034	0.021	0.053	0.000	0.000	0.000
0.000															
02/20/2007	1032	0.869	0.364	0.584	95.938	2.150	0.405	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/19/2007	1032	0.841	0.357	0.584	96.018	2.107	0.404	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/18/2007	1035	0.874	0.355	0.586	95.765	2.235	0.463	0.101	0.090	0.038	0.023	0.055	0.000	0.000	0.000
0.000															
02/17/2007	1034	0.865	0.402	0.586	95.713	2.259	0.450	0.098	0.090	0.041	0.024	0.057	0.000	0.000	0.000
0.000															
02/16/2007	1031	0.872	0.380	0.583	96.058	2.052	0.364	0.086	0.077	0.036	0.021	0.053	0.000	0.000	0.000
0.000															
02/15/2007	1030	0.880	0.339	0.582	96.184	1.999	0.342	0.081	0.072	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
02/14/2007	1030	0.884	0.334	0.583	96.141	2.046	0.347	0.080	0.069	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/13/2007	1031	0.886	0.334	0.584	95.983	2.166	0.376	0.086	0.073	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/12/2007	1031	0.929	0.341	0.584	95.925	2.180	0.375	0.084	0.071	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/11/2007	1031	0.920	0.341	0.584	95.916	2.194	0.375	0.084	0.072	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
02/10/2007	1029	0.905	0.350	0.583	96.122	2.039	0.342	0.078	0.068	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
02/09/2007	1029	0.843	0.342	0.582	96.226	2.022	0.332	0.076	0.066	0.029	0.017	0.046	0.000	0.000	0.000

0.000

ATTACHMENT EU011-03
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Detailed Description of Control Equipment

There is no air pollution control equipment associated with this emissions unit.

ATTACHMENT EU011-04
PROCEDURES FOR STARTUP AND SHUTDOWN

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the boilers at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the boilers. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU011-05
OPERATION AND MAINTENANCE PLAN

Operation and Maintenance Plan

The City follows best management practices in the operation and maintenance of the Units to minimize the amount and duration of air pollutant emissions. There are numerous volumes of operation and maintenance plans located on-site at the Purdom facility, many of which refer back to the manufacturers' operation and maintenance manuals.

Excerpts from several of these manuals have been previously submitted to the Department. If additional information from these manuals are needed, the City will provide the Department with these materials as requested.

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Combined Cycle Combustion Turbine Unit Number 8

3. Emissions Unit Identification Number: **-014**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**May 19, 2000**	**49**	☑ Yes ☐ No

9. Package Unit:
Manufacturer: **General Electric** Model Number: **MS7001FA**

10. Generator Nameplate Rating: **160 MW**

11. Emissions Unit Comment:
This emissions unit consists a GE Series 7FA combustion turbine with DLN-2.6 (or later version) dry low NO_x (gas) and water injection (diesel) burners and a non-fired heat recovery stream generator (HRSG) with a steam turbine. The turbine can be fired either by natural gas or No. 2 fuel oil. The compressor inlet air will be conditioned by an evaporate cooler when needed. The turbine is started using the generator and a static start system.

Emissions Unit Control Equipment Control Equipment **1** of **2**

1. Control Equipment/Method(s) Description: **Oxides of Nitrogen** **Dry Low NO_x Combustors – Natural Gas Firing.**
2. Control Device or Method Code(s): **025**

Emissions Unit Control Equipment Control Equipment **2** of **2**

1. Control Equipment/Method(s) Description: **Oxides of Nitrogen** **Water Injection – Fuel Oil Firing.**
2. Control Device or Method Code(s): **028**

EMISSIONS UNIT INFORMATION
Section [6] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**	
2. Maximum Production Rate: **NA**	
3. Maximum Heat Input Rate: **1914.1 million Btu/hr**	
4. Maximum Incineration Rate: **NA pounds/hr** **NA 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: **The total generating capacity of the unit has been set at a nominal 250 MW (GT0160 MW and ST-90 MW). The maximum heat input occurs while firing distillate fuel oil at 100% load. At 59 °Fahrenheit, 60% Relative Humidity and 14.7 psi this corresponds to 1,897 mmBtu/hr for Number 2 (0.05% Sulfur) diesel fuel oil and 1,696 mmBtu/hr for natural gas.**	

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: **EU-014**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **The emission point represents the exhaust for the Combined Cycle Combustion Turbine – Unit 8.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **200 feet (above ground level)**	7. Exit Diameter: **16.5 feet**
8. Exit Temperature: **171-203 °F**	9. Actual Volumetric Flow Rate: **622,306 – 1,119,935 acfm***	10. Water Vapor: **NA %**
11. Maximum Dry Standard Flow Rate: **NA**	12. Nonstack Emission Point Height: **NA**	
13. Emission Point UTM Coordinates... Zone: **16** East (km): **769.611** North (km): **3339.767**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**	
15. Emission Point Comment: ***Depending upon fuel, ambient temperature and load.**		

EMISSIONS UNIT INFORMATION
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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **2**

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **20100201**	3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **1.9***	5. Maximum Annual Rate: **	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: ***	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **932 (LHV)**

10. Segment Comment: ***Maximum hourly rate is based on full load operation at an ambient temperature of 20° Fahrenheit. Actual hourly rate will vary depending on ambient conditions.** **** Maximum Annual Rates will vary based on facility-wide SO_2 and NO_x caps.** *****Clean pipeline quality natural gas with sulfur content limited to FERC tariff.** **The value in Field 9 is an estimate subject to fluctuation.**

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Number 2 (with Sulfur Content 0.05%) Fuel Oil**		
2. Source Classification Code (SCC): **20100101**	3. SCC Units: **Kgals**	
4. Maximum Hourly Rate: **12.7***	5. Maximum Annual Rate: ******	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **0.05%**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **131 (LHV)**
10. Segment Comment: ***Maximum hourly rate is based on full load operation at an ambient temperature of 20° Fahrenheit. Actual hourly rate will vary depending on ambient conditions.** **** Maximum Annual Rates will vary based on facility-wide SO_2 and NO_x caps.** **The value in Field 9 is an estimate and subject to fluctuation.**		

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
CO			**EL**
NO_x			**EL**
PM			**NS**
PM_{10}			**NS**
SO_2			**EL**
VOC			**NS**
H106			**NS**
H107			**NS**
H133			**NS**
HAPS			**NS**
H113			**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **192 lb/hour See Field 11**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **0**

8.a. Baseline Actual Emissions (if required): **NA**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **lb/hr = See Appendix A of the PSD Application** **See Field 11 below**	
11. Potential, Fugitive, and Actual Emissions Comment: **Actual hourly emissions will vary based on load and ambient temperature. The facility-wide emission cap on SO_2 and NO_X will limit actual annual emissions indirectly.**	

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Section [6] of [7]

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

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule – BACT (62-212.400(5)(c) F.A.C.)**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **Natural Gas – 25 ppmvd** **Fuel Oil – 90 ppmvd**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Testing concurrent to 40 CFR Part 75 RATA testing, or by 3 one-hour runs by Method 10 (may be performed at less than capacity).**	
6. Allowable Emissions Comment (Description of Operating Method): **NA**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **17 lb/hour See Field 11**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **lb/hr = See Appendix A of the PSD Application**	
11. Potential, Fugitive, and Actual Emissions Comment: **The facility-wide emission cap on SO_2 and NO_X will limit actual annual emissions indirectly.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule – BACT (62-212.400(5)(c) F.A.C.)**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **NA**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **NA**	
6. Allowable Emissions Comment (Description of Operating Method): **BACT for this unit is combustion turbine inlet air filtration, good combustion practices and fuel quality. No emissions limits are proposed.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **NA**	
3. Potential Emissions: **17 lb/hour**	4. Synthetically Limited? ☑ Yes ☐ No	
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year		
6. Emission Factor: **NA** Reference:		7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:	
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years	

10. Calculation of Emissions: **lb/hr = See Appendix A of the PSD Application**
11. Potential, Fugitive, and Actual Emissions Comment: **The facility-wide emission cap on SO_2 and NO_X will limit actual annual emissions indirectly.**

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

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule – BACT (62-212.400(5)(c) F.A.C.)**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **NA**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **NA**	
6. Allowable Emissions Comment (Description of Operating Method): **BACT for this unit is combustion turbine inlet air filtration, good combustion practices and fuel quality. No emissions limits are purposed.**	

EMISSIONS UNIT INFORMATION
Section [6] of [7]

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **347 lb/hour Cap tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	

6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **lb/hr = See Appendix A of the PSD Application** **Facility-Wide Cap = 467 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment: **Potential hourly emissions based on 100 percent load at an ambient temperature of 20° Fahrenheit when firing fuel oil. These short-term potentials do not include start-up, shutdown or malfunctions, which are included within the requested annual cap.** **Information contained in Appendix A of the PSD application regarding short-term NOX emission rates reflects operations at steady state and does not include allowances for fuels containing fuel bound nitrogen levels above 0.015 percent. Predicted short-term steady state emissions levels follow 2-4 hour start-up periods.**	

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

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

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

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **NSPS Emissions Limits**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **EPA Reference Method 20**	
6. Allowable Emissions Comment (Description of Operating Method): **This unit is subject to 40 CFR Part 60, Subpart GG. Maximum short-term rates, excluding start-up, shutdown and malfunction must meet the limits of 40 CFR 60.332(a)(1) and (3). The facility-wide caps on NO_X and SO_2 limit actual annual emissions.**	

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **98 lb/hour Cap tons/year**	4. Synthetically Limited? ☑ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): **NA** to tons/year	
6. Emission Factor: **NA** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: **NA** From: To:
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **lb/hr = See Appendix A of the PSD Application** **Facility-Wide Cap = 80 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment: **Potential hourly emissions based on 100 percent load at an ambient temperature of 20° Fahrenheit while firing No. 2 diesel fuel oil with a maximum sulfur content of 0.05 percent by weight, based on 95 percent conversion of the sulfur to SO_2.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **Maximum Fuel Sulfur Content of 0.05 percent by weight**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **Custom Fuel Monitoring Schedule (see Appendix PGS-10).**	
6. Allowable Emissions Comment (Description of Operating Method): **The facility-wide caps on SO_2 and NO_X limit actual emissions.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **80 TPY**	4. Equivalent Allowable Emissions: **NA** lb/hour tons/year
5. Method of Compliance: **40 CFR 75 Appendix D with a 95 percent conversion factor based on the custom fuel-monitoring schedule.**	
6. Allowable Emissions Comment (Description of Operating Method): **NA**	

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10 %** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: **2 hours/ 24 hours**	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Excess emissions allowed by Rule 62-210.700(1) F.A.C.**	

EMISSIONS UNIT INFORMATION
Section [6] of [7]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: **Flow**	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Triad** Model Number: **Orfice Plate**	Serial Number: **92-2264**
5. Installation Date: **June 1, 2000**	6. Performance Specification Test Date: **September 1, 2000**
7. Continuous Monitor Comment: **See Attachment EU014-01- Acid Rain Regulations**	

Continuous Monitoring System: Continuous Monitor **2** of **4**

1. Parameter Code: **Flow**	2. Pollutant(s): **Oil Fuel Flow Meter**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Precision Flow, inc.** Model Number: **Orfice**	Serial Number: **A-95033275**
5. Installation Date: **June 1, 2000**	6. Performance Specification Test Date: **September 1, 2000**
7. Continuous Monitor Comment: **See Attachment EU014-01– Acid Rain Regulations**	

Continuous Monitoring System: Continuous Monitor **3** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_X**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermo Environmental** Model Number: **42C**	Serial Number: **42C-63473-339**
5. Installation Date: **June 1, 2000**	6. Performance Specification Test Date: **September 1, 2000**
7. Continuous Monitor Comment: **See Attachment EU014-01– NSPS Regulations**	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: **CO_2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement:	☑ Rule ☐ Other
4. Monitor Information... Manufacturer: **Siemens** Model Number: **Ultramat 6E**	Serial Number: **N1-L5-0290**
5. Installation Date: **June 1, 2000**	6. Performance Specification Test Date: **September 1, 2000**
7. Continuous Monitor Comment: **See Attachment EU014-01**	

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: **EU014-01** ☐ 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: **EU014-02** ☐ 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: **EU014-03** ☐ 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: **EU014-04** ☐ 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: **EU014-05** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
_____
☑ Previously Submitted, Date: **October 6, 2006**
Test Date(s)/Pollutant(s) Tested: **Carbon Monoxide (CO)/ RATA**
☐ 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

EMISSIONS UNIT INFORMATION
Section [6] of [7]

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

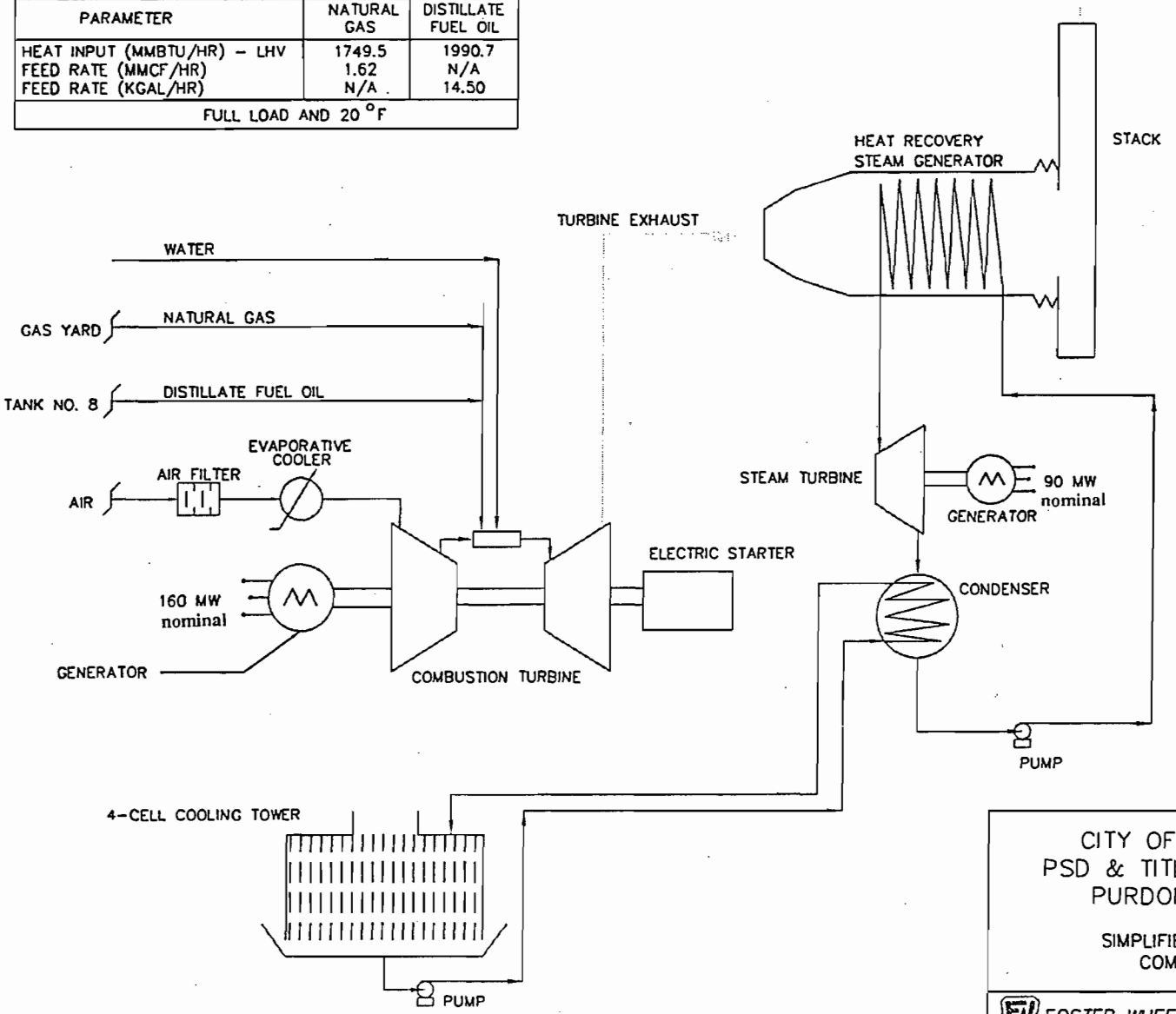
1. Identification of Applicable Requirements
   ☑ Attached, Document ID: **EU014-06**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☑ Not Applicable
3. Alternative Methods of Operation
   ☑ Attached, Document ID: **EU014-07** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☑ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☑ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☑ Attached, Document ID: **EU014-08** ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Not Applicable

Additional Requirements Comment

ATTACHMENT EU014-01
PROCESS FLOW DIAGRAM

GE OPERATING DATA		
PARAMETER	NATURAL GAS	DISTILLATE FUEL OIL
HEAT INPUT (MMBTU/HR) – LHV	1749.5	1990.7
FEED RATE (MMCF/HR)	1.62	N/A
FEED RATE (KGAL/HR)	N/A	14.50
FULL LOAD AND 20 °F		

EU13 – EXHAUST PARAMETERS
EXHAUST TEMP. – 171 TO 203 °F
STACK HEIGHT – 200'
SO2 EMISSIONS – 80 TPY
NOx EMISSIONS – 467 TPY
OPACITY – 20% EXCEPT AS ALLOWED



SOURCE: FOSTER WHEELER ENVIRONMENTAL CORPORATION, 1997

CITY OF TALLAHASSEE, FLORIDA
PSD & TITLE V PERMIT APPLICATIONS
PURDOM GENERATING STATION

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBINED CYCLE – UNIT 8

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A	BY: DJG	CAD FILE NO. PUNIT8.DWG
DATE: 02/27/97	CKD' BY: DF	
REV: 06/15/01	REV. BY: DJG	FIGURE NO. EU13-02

ATTACHMENT EU014-02
FUEL ANALYSIS AND SPECIFICATION

Fuel Analysis

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in the Unit 8 combined cycle combustion turbine. Actual values may vary. The fuels represented in the analyses include natural gas and Number 2 (0.05% Sulfur) diesel fuel oil.

BEST AVAILABLE COPY

CERTIFICATE OF ANALYSIS

JOB No.	
DATE	11/29/05

VESSEL	SUBMITTED TANK TRUCK	LAB No.	HTC-10729
CARGO	LOW SULFER DIESEL		
TERMINAL / PORT	HOPKINS PLANT - MOBILE, ALABAMA		
SAMPLE FROM:	SUBMITTED TANK TRUCK		
SAMPLE SUBMITTED BY	AMERICAN GENERAL - MOBILE, ALABAMA		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 4052	API GRAVITY @ 60 °F	33.4
D 4052	SPECIFIC GRAVITY @ 60 °F	0.8574
D 445	VISCOSITY @ 100 °F, Kcst	2.757
D 2171	VISCOSITY @ 100 °F, SUS	35.2
D 93A	FLASH POINT, °F (PMCC)	153
D 97	POUR POINT, °F	< -16
D 4294	SULFUR, WT%	0.0334
D 5762	NITROGEN, PPM	142
D 95	WATER BY DISTILLATION, VOL%	0.00
D 482	SEDIMENT BY EXTRACTION, WT%	< 0.01
D 482	ASH CONTENT, WT%	0.0013
D 240	GROSS HEAT OF COMB., MMBTU / bbl	5.818
D 5291	HYDROGEN CONTENT *	13.0
D 524	CARBON RESIDUE, (100% SAMPLE)	0.10
D 524	CARBON RESIDUE, (10% RAMSBTM)	0.05
D 1401	DEMULSIFICATION *	40-40-0 (5)
D 6217	PARTICULATES CONTAMINATION, PPM	1.2
D 130	COPPER CORROSION, 3 hrs @ 122 °F	1a
IP 143	ASPHALTENES, WT%	< 0.50
IAC-044	MICROBIAL TEST, (PASS / FAIL)	NONE DETECTED
D 86	DISTILLATION, °F	PAGE 2
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPB)	< 5
ICP-MS	LEAD, PPB	< 5
ICP-MS	VANADIUM, PPB	< 6
ICP-MS	CALCIUM, PPB	< 5
IP 377	SILICON, PPB	< 50

* = OUTSIDE LAB

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36608

CERTIFICATE OF ANALYSIS

REVISED

		JOB No.	
		DATE	6/29/2005
VESSEL	MF 725	LAB No.	4527 / 2006-HTC-05897
CARGO	LOW SULFUR DIESEL		
TERMINAL / PORT	SHELL CHEMICAL - SARALAND, ALABAMA		
SAMPLE FROM:	SHORE TANK 5 AFTER DISCHARGE		
SAMPLE SUBMITTED BY	BSI INSPECTORATE - MOBILE, AL		
ANALYSIS PERFORMED BY	BSI INSPECTORATE - MOBILE, AL / ** PASADENA, TX		
CLIENT (S) REF:			

METHOD	TEST DESCRIPTION	RESULTS
D 287	API GRAVITY @ 60 °F	40.5
D 287	SPECIFIC GRAVITY @ 60 °F	0.8227
D 445	VISCOSITY @ 100 °F, Kcst	2.636
D 2171	VISCOSITY @ 100 °F, SUS	34.8
D 93A	FLASH POINT, °F (PMCC)	146
D 97	POUR POINT, °F	NEGATIVE 5.8
D 4294	SULFUR, WT%	0.0213
D 5762	NITROGEN, wt% **	0.002
D 2709	WATER & SEDIMENT, VOL%	< 0.025
D 482	ASH CONTENT, WT%	< 0.001
D 240	GROSS HEAT OF COMB., MMBTU / bbl **	5.731*
D 5291	HYDROGEN CONTENT **	13.5
D 524	CARBON RESIDUE, (100% SAMPLE) **	0.06
D 524	CARBON RESIDUE, (10% RAMSBTM) **	0.11
D 1401	DEMULSIFICATION RATING @ 54 °C*	40-40-0 (5)
D 6217	PARTICULATE CONTAMINATION, mg/L	< 0.1
D 130	COPPER CORROSION, 3 hrs @ 122 °F **	1a
IP 143	ASPHALTENES, WT%	NONE DETECTED
EASICULT	MICROBIAL TEST, (PASS / FAIL) **	
	(24 HOURS)	PASS (NONE DETECTED)
	(48 HOURS)	PASS (NONE DETECTED)
D 86	DISTILLATION, °F	SEE PAGE 2
D 473	SEDIMENT BY EXTRACTION, WT%	< 0.01
ICP-MS	(SODIUM + POTASSIUM + LITHIUM, PPM)**	< 0.1
ICP-MS	LEAD, PPM **	< 0.1
ICP-MS	VANADIUM, PPM **	< 0.1
ICP-MS	CALCIUM, PPM **	< 0.1
IP 377	SILICON, PPM	< 0.1

ok

* = REVISED

FOR INSPECTORATE:

Q-COA
REV.#2-2/94

5237 Halls Mill Road, Bldg F
Mobile, AL 36609

Colonial Pipeline Company

3.41.1 SPECIFICATIONS FOR FUNGIBLE LOW SULFUR DIESEL FUEL - DYED BY CPC

Cancels Previous Issues of Grade 84

PRODUCT PROPERTY	ASTM Test Method	Test Results Minimum	Maximum	Note
Gravity API	D287, D1298, D4052	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500,D6045		2.5	
Color Visual				3
Viscosity, cSt @ 40°C (104°F)	D445	1.9	3.4	
Pour Point	D97, D5949, D5950, D5985,			2
Cloud Point	D2500, D5771, D5772, D5773			2
Corrosion, 3 hrs. @ 50°C (122°F)	D130		1	
Total Sulfur, wt.%	D129, D1266, D1266, D2622, D4294		0.047	4
Cetane Number	D613	40		5
Aromatics (Volume %)	D1319		31.7	
or Aromatics by Cetane Index	D976	40		
Ash, wt.%	D482		0.01	
Carbon Residue: Ramsbottom on 10% Bottom	D524		0.35	
BS&W, vol.%	D2709 or equivalent		< 0.05	
Thermal stability, 90 minutes				
150°C Pad rating, DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176 Procedure 2		2	
Nace Corrosion	TM0172-2001	B+ (Origin)		

-sec SWRI for result
0.12 - 10%
0.10 - 100%

April 2005
* Denotes Change

Southwest Research Institute

Southwest Georgia Oil Company
November 3, 2005

SUMMARY OF TEST DATA

Test Parameter	Test Method	Spec	Sample rec'd 10/27/05
Nitrogen mass %	ASTM D4629	Max 0.03	0.0173
Hydrogen Content, wt %	ASTM D 3701	Min 12.7	12.96
Carbon Residue, wt %	ASTM D 524		
100 % Bottoms		Max 1.0	0.10
10% Bottoms		Max 0.25	0.12
Particulate (mg/L) and (mg/gal)	ASTM D 2276	Max 10 mg/gal	15.7 mg/L or 59.4 mg/gal
Asphaltenes, wt %	ASTM D 6560	ND	<0.05*
Silica Content, wt %			66.89% **
Bacterial Growth			Slight
Fungal Growth			Moderate
Calcium	ASTM D 3605	Max 2 ppm	<0.1 mg/kg*
Lead		Max 1 ppm	<0.5 mg/kg
Vanadium		Max 0.2 ppm	<0.5 mg/kg
Lithium (modified method)		Max 0.2 ppm	<0.1 mg/kg
Sodium		Max 0.2 ppm	<0.1 mg/kg
Potassium (modified method)		Max 0.2 ppm	<0.1 mg/kg

**Testing for Asphaltenes, D6560 and Trace Metals by Atomic Absorption, D3605 were performed at SGS North America*

***Silica content was measured from the filter media from ASTM D2276. This is representative of the silica that was deposited on the filter using 1900 mls of fuel.*

(OMTWARCS) page 2 of 2

GKIC-
oil test results for #2 FO recv'd from
SWG Oil Company
— B

Florida Gas Transmission-8030 May 09 2007 9:03 AM

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	H2	Helium	Oxygen
05/08/2007	1035	0.807	0.403	0.585	95.808	2.194	0.452	0.104	0.096	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/07/2007	1034	0.802	0.372	0.585	95.926	2.149	0.434	0.098	0.090	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/06/2007	1036	0.795	0.380	0.585	95.816	2.221	0.467	0.101	0.093	0.039	0.024	0.065	0.000	0.000	0.000	0.000
05/05/2007	1036	0.886	0.408	0.588	95.510	2.367	0.486	0.108	0.099	0.042	0.026	0.069	0.000	0.000	0.000	0.000
05/04/2007	1036	0.861	0.396	0.587	95.573	2.356	0.475	0.105	0.098	0.042	0.026	0.068	0.000	0.000	0.000	0.000
05/03/2007	1034	0.848	0.399	0.586	95.725	2.292	0.429	0.094	0.091	0.037	0.023	0.062	0.000	0.000	0.000	0.000
05/02/2007	1032	0.805	0.404	0.584	95.944	2.189	0.385	0.083	0.080	0.032	0.020	0.057	0.000	0.000	0.000	0.000
05/01/2007	1031	0.813	0.389	0.583	96.103	2.079	0.360	0.079	0.076	0.030	0.019	0.051	0.000	0.000	0.000	0.000
04/30/2007	1030	0.808	0.393	0.582	96.141	2.050	0.352	0.078	0.074	0.031	0.019	0.053	0.000	0.000	0.000	0.000
04/29/2007	1031	0.804	0.390	0.582	96.099	2.095	0.362	0.077	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/28/2007	1032	0.778	0.377	0.582	96.097	2.122	0.376	0.078	0.074	0.030	0.018	0.051	0.000	0.000	0.000	0.000
04/27/2007	1032	0.812	0.358	0.583	96.087	2.067	0.401	0.087	0.080	0.033	0.020	0.055	0.000	0.000	0.000	0.000
04/26/2007	1029	0.800	0.358	0.581	96.337	1.932	0.336	0.074	0.067	0.029	0.018	0.048	0.000	0.000	0.000	0.000
04/25/2007	1029	0.797	0.354	0.581	96.324	1.949	0.336	0.077	0.069	0.030	0.018	0.048	0.000	0.000	0.000	0.000
04/24/2007	1030	0.795	0.373	0.582	96.273	1.944	0.359	0.081	0.073	0.032	0.019	0.051	0.000	0.000	0.000	0.000
04/23/2007	1030	0.787	0.388	0.581	96.265	1.975	0.346	0.077	0.069	0.029	0.018	0.047	0.000	0.000	0.000	0.000
04/22/2007	1031	0.801	0.378	0.582	96.160	2.027	0.381	0.081	0.077	0.030	0.019	0.047	0.000	0.000	0.000	0.000
04/21/2007	1033	0.781	0.382	0.584	95.990	2.120	0.448	0.090	0.091	0.032	0.020	0.048	0.000	0.000	0.000	0.000
04/20/2007	1034	0.802	0.392	0.584	95.901	2.156	0.461	0.091	0.094	0.033	0.021	0.049	0.000	0.000	0.000	0.000
04/19/2007	1033	0.798	0.393	0.584	95.967	2.111	0.450	0.089	0.095	0.032	0.020	0.047	0.000	0.000	0.000	0.000
04/18/2007	1031	0.848	0.373	0.583	96.109	1.951	0.427	0.090	0.091	0.034	0.022	0.052	0.000	0.000	0.000	0.000
04/17/2007	1031	0.841	0.378	0.583	96.105	1.953	0.435	0.090	0.093	0.034	0.022	0.049	0.000	0.000	0.000	0.000
04/16/2007	1032	0.831	0.369	0.583	96.087	1.976	0.447	0.090	0.095	0.034	0.022	0.048	0.000	0.000	0.000	0.000
04/15/2007	1033	0.795	0.353	0.583	96.077	2.045	0.444	0.091	0.094	0.032	0.021	0.048	0.000	0.000	0.000	0.000
04/14/2007	1032	0.811	0.362	0.583	96.094	2.014	0.433	0.088	0.093	0.033	0.021	0.050	0.000	0.000	0.000	0.000
04/13/2007	1033	0.792	0.346	0.583	96.043	2.083	0.459	0.088	0.093	0.031	0.020	0.045	0.000	0.000	0.000	0.000
04/12/2007	1035	0.821	0.369	0.585	95.838	2.165	0.500	0.096	0.103	0.034	0.022	0.051	0.000	0.000	0.000	0.000
04/11/2007	1034	0.855	0.384	0.585	95.808	2.171	0.475	0.097	0.101	0.035	0.022	0.052	0.000	0.000	0.000	0.000

0.000															
04/10/2007	1033	0.861	0.363	0.584	95.949	2.082	0.449	0.093	0.095	0.035	0.022	0.051	0.000	0.000	0.000
0.000															
04/09/2007	1033	0.847	0.369	0.584	95.953	2.085	0.450	0.093	0.095	0.035	0.022	0.050	0.000	0.000	0.000
0.000															
04/08/2007	1034	0.812	0.378	0.584	95.946	2.099	0.467	0.094	0.099	0.035	0.022	0.049	0.000	0.000	0.000
0.000															
04/07/2007	1034	0.788	0.376	0.584	95.946	2.146	0.459	0.090	0.095	0.032	0.021	0.047	0.000	0.000	0.000
0.000															
04/06/2007	1034	0.807	0.367	0.584	95.949	2.133	0.453	0.092	0.095	0.033	0.021	0.049	0.000	0.000	0.000
0.000															
04/05/2007	1034	0.853	0.380	0.585	95.823	2.186	0.452	0.095	0.098	0.036	0.023	0.054	0.000	0.000	0.000
0.000															
04/04/2007	1034	0.852	0.384	0.585	95.801	2.182	0.461	0.097	0.103	0.038	0.025	0.058	0.000	0.000	0.000
0.000															
04/03/2007	1033	0.852	0.381	0.584	96.005	2.020	0.429	0.093	0.098	0.038	0.024	0.059	0.000	0.000	0.000
0.000															
04/02/2007	1033	0.823	0.357	0.584	96.124	1.954	0.429	0.095	0.097	0.039	0.024	0.059	0.000	0.000	0.000
0.000															
04/01/2007	1031	0.808	0.352	0.582	96.249	1.905	0.396	0.088	0.088	0.036	0.022	0.055	0.000	0.000	0.000
0.000															
03/31/2007	1030	0.793	0.354	0.581	96.389	1.827	0.366	0.083	0.080	0.033	0.021	0.053	0.000	0.000	0.000
0.000															
03/30/2007	1029	0.855	0.356	0.582	96.277	1.907	0.336	0.082	0.073	0.034	0.021	0.058	0.000	0.000	0.000
0.000															
03/29/2007	1031	0.903	0.358	0.584	96.090	1.981	0.370	0.091	0.083	0.038	0.023	0.064	0.000	0.000	0.000
0.000															
03/28/2007	1031	0.882	0.325	0.583	96.124	2.022	0.365	0.089	0.079	0.036	0.021	0.058	0.000	0.000	0.000
0.000															
03/27/2007	1030	0.839	0.319	0.582	96.263	1.967	0.353	0.084	0.073	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/26/2007	1031	0.872	0.337	0.583	96.102	2.048	0.369	0.087	0.075	0.034	0.020	0.054	0.000	0.000	0.000
0.000															
03/25/2007	1034	0.889	0.331	0.585	95.873	2.156	0.430	0.100	0.090	0.042	0.025	0.063	0.000	0.000	0.000
0.000															
03/24/2007	1035	0.845	0.336	0.585	95.856	2.199	0.440	0.100	0.093	0.043	0.026	0.062	0.000	0.000	0.000
0.000															
03/23/2007	1031	0.819	0.334	0.582	96.184	2.032	0.373	0.083	0.073	0.033	0.019	0.050	0.000	0.000	0.000
0.000															
03/22/2007	1030	0.818	0.327	0.582	96.273	1.977	0.360	0.080	0.070	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
03/21/2007	1030	0.841	0.339	0.582	96.223	2.000	0.351	0.079	0.069	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/20/2007	1029	0.815	0.327	0.581	96.386	1.914	0.331	0.074	0.063	0.028	0.016	0.045	0.000	0.000	0.000
0.000															
03/19/2007	1030	0.843	0.335	0.582	96.239	1.971	0.358	0.082	0.071	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/18/2007	1029	0.857	0.345	0.582	96.264	1.938	0.346	0.080	0.070	0.031	0.018	0.050	0.000	0.000	0.000
0.000															
03/17/2007	1030	0.838	0.349	0.582	96.238	1.964	0.352	0.082	0.071	0.033	0.020	0.053	0.000	0.000	0.000
0.000															
03/16/2007	1029	0.849	0.344	0.582	96.254	1.962	0.340	0.079	0.070	0.032	0.019	0.050	0.000	0.000	0.000
0.000															
03/15/2007	1030	0.845	0.341	0.582	96.202	1.983	0.363	0.085	0.075	0.034	0.020	0.053	0.000	0.000	0.000
0.000															
03/14/2007	1030	0.834	0.349	0.582	96.280	1.928	0.350	0.083	0.073	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/13/2007	1031	0.877	0.357	0.583	96.101	2.016	0.373	0.088	0.077	0.035	0.021	0.053	0.000	0.000	0.000
0.000															
03/12/2007	1029	0.845	0.352	0.582	96.276	1.930	0.351	0.081	0.069	0.031	0.018	0.048	0.000	0.000	0.000
0.000															

03/11/2007	1029	0.846	0.369	0.582	96.240	1.949	0.349	0.080	0.069	0.031	0.018	0.049	0.000	0.000	0.000
0.000															
03/10/2007	1029	0.840	0.367	0.582	96.296	1.914	0.335	0.078	0.068	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
03/09/2007	1029	0.851	0.355	0.582	96.249	1.941	0.348	0.080	0.072	0.033	0.020	0.052	0.000	0.000	0.000
0.000															
03/08/2007	1028	0.820	0.343	0.580	96.471	1.827	0.306	0.073	0.064	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
03/07/2007	1027	0.814	0.339	0.579	96.592	1.743	0.292	0.070	0.061	0.028	0.017	0.043	0.000	0.000	0.000
0.000															
03/06/2007	1027	0.826	0.331	0.580	96.515	1.799	0.308	0.070	0.061	0.028	0.017	0.045	0.000	0.000	0.000
0.000															
03/05/2007	1028	0.880	0.335	0.581	96.343	1.873	0.329	0.075	0.066	0.030	0.018	0.050	0.000	0.000	0.000
0.000															
03/04/2007	1028	0.871	0.341	0.581	96.336	1.878	0.336	0.076	0.066	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
03/03/2007	1028	0.862	0.328	0.581	96.325	1.929	0.328	0.073	0.064	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
03/02/2007	1029	0.851	0.319	0.581	96.332	1.956	0.317	0.071	0.063	0.028	0.017	0.044	0.000	0.000	0.000
0.000															
03/01/2007	1028	0.798	0.320	0.580	96.487	1.877	0.304	0.068	0.062	0.027	0.016	0.042	0.000	0.000	0.000
0.000															
02/28/2007	1028	0.866	0.329	0.581	96.315	1.937	0.323	0.072	0.066	0.029	0.017	0.045	0.000	0.000	0.000
0.000															
02/27/2007	1029	0.892	0.332	0.582	96.217	1.981	0.338	0.076	0.069	0.030	0.018	0.047	0.000	0.000	0.000
0.000															
02/26/2007	1028	0.905	0.345	0.582	96.231	1.961	0.320	0.074	0.068	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/25/2007	1029	0.924	0.353	0.583	96.151	1.971	0.341	0.080	0.075	0.034	0.021	0.051	0.000	0.000	0.000
0.000															
02/24/2007	1029	0.929	0.360	0.583	96.109	1.988	0.350	0.081	0.076	0.035	0.021	0.052	0.000	0.000	0.000
0.000															
02/23/2007	1028	0.897	0.363	0.582	96.236	1.930	0.328	0.075	0.070	0.032	0.020	0.049	0.000	0.000	0.000
0.000															
02/22/2007	1029	0.855	0.355	0.582	96.300	1.923	0.325	0.075	0.068	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/21/2007	1031	0.892	0.365	0.584	95.999	2.099	0.375	0.085	0.077	0.034	0.021	0.053	0.000	0.000	0.000
0.000															
02/20/2007	1032	0.869	0.364	0.584	95.938	2.150	0.405	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/19/2007	1032	0.841	0.357	0.584	96.018	2.107	0.404	0.088	0.079	0.034	0.020	0.052	0.000	0.000	0.000
0.000															
02/18/2007	1035	0.874	0.355	0.586	95.765	2.235	0.463	0.101	0.090	0.038	0.023	0.055	0.000	0.000	0.000
0.000															
02/17/2007	1034	0.865	0.402	0.586	95.713	2.259	0.450	0.098	0.090	0.041	0.024	0.057	0.000	0.000	0.000
0.000															
02/16/2007	1031	0.872	0.380	0.583	96.058	2.052	0.364	0.086	0.077	0.036	0.021	0.053	0.000	0.000	0.000
0.000															
02/15/2007	1030	0.880	0.339	0.582	96.184	1.999	0.342	0.081	0.072	0.032	0.019	0.051	0.000	0.000	0.000
0.000															
02/14/2007	1030	0.884	0.334	0.583	96.141	2.046	0.347	0.080	0.069	0.031	0.019	0.049	0.000	0.000	0.000
0.000															
02/13/2007	1031	0.886	0.334	0.584	95.983	2.166	0.376	0.086	0.073	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/12/2007	1031	0.929	0.341	0.584	95.925	2.180	0.375	0.084	0.071	0.031	0.018	0.047	0.000	0.000	0.000
0.000															
02/11/2007	1031	0.920	0.341	0.584	95.916	2.194	0.375	0.084	0.072	0.031	0.018	0.048	0.000	0.000	0.000
0.000															
02/10/2007	1029	0.905	0.350	0.583	96.122	2.039	0.342	0.078	0.068	0.030	0.018	0.048	0.000	0.000	0.000
0.000															
02/09/2007	1029	0.843	0.342	0.582	96.226	2.022	0.332	0.076	0.066	0.029	0.017	0.046	0.000	0.000	0.000

0.000

ATTACHMENT EU014-03
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Description of Control Equipment

For the Unit 8 Combustion Turbine, the air pollution controls based on the evaluation of Best Available Control Technology (BACT) include the following:

- For the primary control of CO and VOC, good combustion practices which maximize NOx reductions while minimizing CO, VOC, and PM_{10} emissions.

- For the primary control of PM_{10}, trace metals, and total fluorides, combustion inlet air filtration coupled with good combustion practices and fuel quality. The use of clean pipeline quality natural gas and Number 2 (0.05% Sulfur) diesel fuel oil is the most stringent control technology available.

- For the primary control of NOx, combustion controls including dry-low NOx combustors and wet injection techniques coupled with fuel quality.

- For the primary control of SO_2 and H_2SO_4, and the secondary control of NOx and PM_{10}, clean pipeline quality natural gas and Number 2 (0.05% Sulfur) diesel fuel oil is the most stringent control technology available.

The overall control technology is based on the use of clean fuels and good combustion practices which are necessary for the proper operation of the combustion turbine.

ATTACHMENT EU014-05
PROCEDURES FOR STARTUP AND SHUTDOWN

Procedures for Startup and Shutdown

The City of Tallahassee follows best operational practices in the startup and shutdown of the Unit 8 combined cycle combustion turbine at the Purdom Generating Station. Under normal conditions, standard operating guidelines are followed for startup and shutdown of the unit. Under any abnormal condition of operation, best operational practices are followed to minimize emissions and to minimize the duration of any excess emissions.

ATTACHMENT EU014-05
OPERATION AND MAINTENANCE PLAN

Operation and Maintenance Plan

The City follows best management practices in the operation and maintenance of the Units to minimize the amount and duration of air pollutant emissions. There are numerous volumes of operation and maintenance plans located on-site at the Purdom facility, many of which refer back to the manufacturers' operation and maintenance manuals.

Excerpts from several of these manuals have been previously submitted to the Department. If additional information from these manuals are needed, the City will provide the Department with these materials as requested.

ATTACHMENT EU014-06
IDENTIFICATION OF APPLICABLE REQUIREMENTS

Identification of Additional Applicable Requirements

The information contained in this Title V Renewal Application is based on the data and allowable rates contained in current Operating Permit No. 1290001-007-AV, which expires on December 31, 2007.

In addition, the City of Tallahassee requests the following revisions to be incorporated into the Title V Operating Permit:

F.25 For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard and the 0.05% S limit, fuel oil analysis using ASTM D2880-71, D-129, or D4294 (or latest edition), or equivalent, for the sulfur content of liquid fuels . . . shall be utilized"

ATTACHMENT EU014-07
ALTERNATIVE METHODS OF OPERATION

Alternative Methods of Operation

The Unit 8 Combustion Turbine located at the Purdom Generating Station has a maximum heat input capacity of 1,659.5 mmBtu/hour LHV at 95°F and produces a nominal 160 MW of electricity. The alternative methods of operation (AMO) associated with the unit are related to the type of fuel being fired and rate of operation. The current AMOs include the following:

- Natural Gas Firing – Maximum Rate of 1467.7 mmBtu/hr (LHV) at 95°F
- No. 2 Fuel Oil Firing – Maximum Rate of 1659.5 mmBtu/hr (LHV) at 95°F

ATTACHMENT EU014-08
ACID RAIN PART APPLICATION (FORM NO. 62-210.900(1)(A))

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: ☐ New ☐ Revised ☑ Renewal

STEP 1
Identify the source by plant name, State, and ORIS code

Plant Name **Sam O. Purdom Generating Station**	State **Florida**	ORIS Code **689**

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	c New Units Commence Operation Date	d New Units Monitor Certification Deadline
Boiler No. 7 – EU007	**Yes**		
Combined Cycle Combustion Turbine No. 8 – EU014	**Yes**		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Sam O. Purdom Generating Station
Plant Name (from Step 1)

STEP 3
Read the standard requirements

Acid Rain Part Requirements

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
(ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
(2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
(ii) Have an Acid Rain Part.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Sam O. Purdom Generating Station Plant Name (from Step 1)

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_X averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

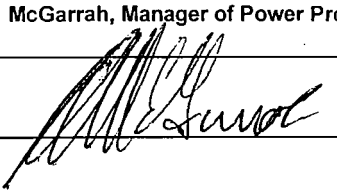
No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

Certification

I 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.

Name **Robert E. McGarrah, Manager of Power Production, City of Tallahassee**	
Signature 	Date **May 1, 2007**

III. EMISSIONS UNIT INFORMATION

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

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

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

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

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
Cooling Tower/ Unregulated PM Units and Activities

3. Emissions Unit Identification Number: **-015**

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

9. Package Unit: **NA**
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
This emissions unit includes the unregulated particular matter unit (Unit 8 Cooling Tower) and activities, which emit or have the potential to emit more than five tons per year. The emissions unit does not include trivial or insignificant units or activities.

EMISSIONS UNIT INFORMATION
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Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: **Cooling Tower- Drift Eliminators**
2. Control Device or Method Code(s): **015**

EMISSIONS UNIT INFORMATION
Section [7] of [7]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**
2. Maximum Production Rate: **NA**
3. Maximum Heat Input Rate: **NA**
4. Maximum Incineration Rate: pounds/hr **NA** tons/day
5. Requested Maximum Operating Schedule: **NA**
6. Operating Capacity/Schedule Comment: **NA**

EMISSIONS UNIT INFORMATION
Section [7] of [7]

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: **NA**	2. Emission Point Type Code: **NA**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **NA**	6. Stack Height: **NA**	7. Exit Diameter: **NA**
8. Exit Temperature: **NA**	9. Actual Volumetric Flow Rate: **NA**	10. Water Vapor: **NA**

11. Maximum Dry Standard Flow Rate: **NA**	12. Nonstack Emission Point Height: **NA**
13. Emission Point UTM Coordinates... Zone: **NA** East (km): **NA** North (km): **NA**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **NA** Longitude (DD/MM/SS) **NA**
15. Emission Point Comment: **NA**	

EMISSIONS UNIT INFORMATION
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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Cooling Tower – Fresh Water**		
2. Source Classification Code (SCC): **2820000000***	3. SCC Units: **kGals**	
4. Maximum Hourly Rate: **62**	5. Maximum Annual Rate: **543,120**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment: **Emissions from the cooling tower are associated with drift losses. Drift loss emission includes particulate matter and is a direct result of the dissolved solids contained within the cooling tower. Drift eliminators have been installed as a Best Available Control Technology for the cooling tower.**		

EMISSIONS UNIT INFORMATION
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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
PM	**015**		**NS**

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

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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

1. Pollutant Emitted: **NA**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **NA**	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor **NA** Reference: **NA**	7. Emissions Method Code: **NA**
8.a. Baseline Actual Emissions (if required): **NA tons/year**	8.b. Baseline 24-month Period: From: **NA** To: **NA**
9.a. Projected Actual Emissions (if required): **NA tons/year**	9.b. Projected Monitoring Period: **NA** ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **NA**	
11. Potential, Fugitive, and Actual Emissions Comment: **NA**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **NA**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **NA**	4. Equivalent Allowable Emissions: **NA**
5. Method of Compliance: **NA**	
6. Allowable Emissions Comment (Description of Operating Method): **NA**	

EMISSIONS UNIT INFORMATION
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G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

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

H. CONTINUOUS MONITOR INFORMATION

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

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

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

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: _____ ☐ 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: _____ ☐ 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: _____ ☐ 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: _____ ☐ 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

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Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

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

Additional Requirements Comment