TITLE V OPERATING PERMIT APPLICATION FOR THE ARVAH B. HOPKINS GENERATING STATION

CITY OF TALLAHASSEE
ELECTRIC UTILITY

June 14, 1996

Prepared by

FOSTER WHEELER ENVIRONMENTAL CORPORATION

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

RON WEAVER
Mayor
SCOTT MADDOX
Mayor Pro Tem

JOHN PAUL BAILEY
Commissioner
DEBBIE LIGHTSEY
Commissioner
STEVE MEISBURG
Commissioner

STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

June 14, 1996

Mr. John C. Brown, P.E.
Professional Engineering Administrator
Division of Air Resources Management
Air Permitting and Standards
Florida Department of Environmental Protection
160 Governmental Center
Pensacola, Florida 32501-5794

Re: Title V Permit Applications for the Arvah B. Hopkins (Facility ID 0730003) and Sam O. Purdom (Facility ID 1290001) Generating Stations

Dear Mr. Brown:

Please find enclosed four (4) copies each of the Title V operating permit applications for the City of Tallahassee Arvah B. Hopkins and Sam O. Purdom generating stations. Each copy per facility contains my original signature on the Responsible Official Statement located on page two (2) of Section I, Application Information and the Compliance Certification Statement contained in Attachment HGS-08 of the Arvah B. Hopkins Generating Station Application and Attachment PGS-08 of the Sam O. Purdom Generating Station Application. In addition, each copy per facility contains an original signature and Professional Engineer Seal on the Professional Engineer Statement located on page seven (7) of Section I, Application Information.

If you have any questions regarding the attached applications, please feel free to contact either myself at (904) 891-5534 or Ms. Jennette Curtis at (904) 891-8850.

Yours Truly,

R. E. McGarrah
Superintendent, Production
Responsible Official

Enclosures

cc: K. G. Wailes, w/o enclosures
J. D. Curtis, w/ enclosures
T. Singh, w/ enclosures
G. King, w/ enclosures

c:\winword\enviro\envaffr\letter\95\rmlt0614.doc

TITLE V OPERATING PERMIT APPLICATION FOR THE ARVAH B. HOPKINS GENERATING STATION

CITY OF TALLAHASSEE
ELECTRIC UTILITY

June 14, 1996

Prepared by

FOSTER WHEELER ENVIRONMENTAL CORPORATION

FLORIDA DEP LOGO

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: **City of Tallahassee**	
2. Site Name: **Arvah B. Hopkins Generating Station**	
3. Facility Identification Number: **0730003** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **Route 4 Box 450, Geddie Rd County Rd 1585** City: **Tallahassee** County: **Leon** Zip Code: **32304**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	6/14/96
2. Permit Number:	0730003-001-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

DEP Form No. 62-210.900(1) - Form
Effective: 3/21/96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Robert E. McGarrah, Production Superintendent

2. Owner/Authorized Representative or Responsible Official Mailing Address:

   Organization/Firm: **City of Tallahassee, Electric Utility**
   Street Address: **2602 Jackson Bluff Road**
   City: **Tallahassee** State: **Florida** Zip Code: **32304**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(904) 891 -5534** Fax: **(904) 891 -5162**

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.*

   Signature

   6-14-96
   Date

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID	Description of Emissions Unit	Permit Type
EU01	**Fugitive Dust Sources**	
EU02	**Fugitive VOC Sources**	
EU03	**Combustion Turbine No. 1**	
EU04	**Combustion Turbine No. 2**	
EU05	**Boiler No. 1**	
EU06	**Boiler No. 2**	

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[**X**] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit to be revised: _____

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

_____

[ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain:

[ ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: _____

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

[ ] Attached - Amount: $_____ [**X**] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:
2. Projected or Actual Date of Commencement of Construction:
3. Projected Date of Completion of Construction:

Professional Engineer Certification

1. Professional Engineer Name: **Darrel J. Graziani** Registration Number: **44685**
2. Professional Engineer Mailing Address: Organization/Firm: **Foster Wheeler Environmental Corporation** Street Address: **759 South Federal Highway, Suite 100** City: **Stuart** State: **Florida** Zip Code: **34994**
3. Professional Engineer Telephone Numbers: Telephone: (**561**) **781-3434** Fax: (**561**) **781-3411**

4. 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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [X] 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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.

Daniel J. Guy — 6-10-96

Signature — Date

(Seal)

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact:
   Jennette Curtis
   Environmental Administrator

2. Application Contact Mailing Address:

   Organization/Firm: **City of Tallahassee, Utility Services**
   Street Address: **3rd Floor, 300 South Adams Street**
   City: **Tallahassee** State: **Florida** Zip Code: **32301**

3. Application Contact Telephone Numbers:
   Telephone: **(904) 891 -8850** Fax: **(904) 891 -8277**

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **16** East (km): **749.53** North (km): **3371.7**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **30/27/08** Longitude (DD/MM/SS): **84/24/00**			
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 (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: **Jennette Curtis** **Environmental Administrator**
2. Facility Contact Mailing Address Organization/Firm: **City of Tallahassee, Utility Services** Street Address: **3rd Floor, 300 South Adams Street** City: **Tallahassee** State: **Florida** Zip Code: **32301**
3. Facility Contact Telephone Numbers: Telephone: **(904) 891-8850** Fax: **(904) 891-8277**

Facility Regulatory Classifications

1. Small Business Stationary Source? [ ] Yes [X] No [ ] Unknown
2. Title V Source? [X] Yes [ ] No
3. Synthetic Non-Title V Source? [ ] Yes [X] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? [X] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs? [ ] Yes [X] No
6. Major Source of Hazardous Air Pollutants (HAPs)? [X] Yes [ ] No
7. Synthetic Minor Source of HAPs? [ ] Yes [X] No
8. One or More Emissions Units Subject to NSPS? [ ] Yes [X] No
9. One or More Emission Units Subject to NESHAP? [ ] Yes [X] No
10. Title V Source by EPA Designation? [ ] Yes [X] No
11. Facility Regulatory Classifications Comment (limit to 200 characters):

B. FACILITY REGULATIONS

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Rule 62-4.030 F.A.C.	**Rule 62-256.500 F.A.C. ***
Rule 62-4.040(1) F.A.C.	**Rule 62-256.700 F.A.C. ***
Rule 62-4.100 F.A.C.	**Rule 62-257.301 F.A.C *.**
Rule 62-4.130 F.A.C.	**Rule 62-257.400 F.A.C. ***
Rule 62-204.800(8)(b)8,(d) F.A.C.	**Rule 62-257.900 F.A.C *.**
Rule 62-210.300(2)[except (b)] F.A.C.	**Rule 62-296.320(2),(4)(b)(c) F.A.C.**
Rule 62-210.300(3)(a) F.A.C.	**Rule 62-297.310(7)a10 F.A.C.**
Rule 62-210.300(3)(b) F.A.C.	**40 CFR 61.05 (b),(c),(d)**
Rule 62-210.350(1)(a)3,(b);(3) F.A.C.	**40 CFR 61.12(b),(c)**
Rule 62-210.370(3) F.A.C.	**40 CFR 61.19**
Rule 62-210.900(5) F.A.C.	**40 CFR 61.145**
Rule 62-213.205(1)[except (d)],(4),(5) F.A.C.	**40 CFR 61.148**
Rule 62-213.400 F.A.C.	**40 CFR 61.150**
Rule 62-213.410 F.A.C.	
Rule 62-213.420(1)(a)1a,(b)1-4,(2)-(4)F.A.C.	*** Indicates State Rule (not federally enforceable)**
Rule 62-213.460 F.A.C.	
Rule 62-213.900(1) F.A.C.	
Rule 62-256.300 F.A.C. *	

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
CO	**A**
NOx	**A**
PM10	**A**
SO2	**A**
PB	**A**
H095	**A**
H106	**A**
H107	**A**
H133	**A**
HAPS	**A**

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

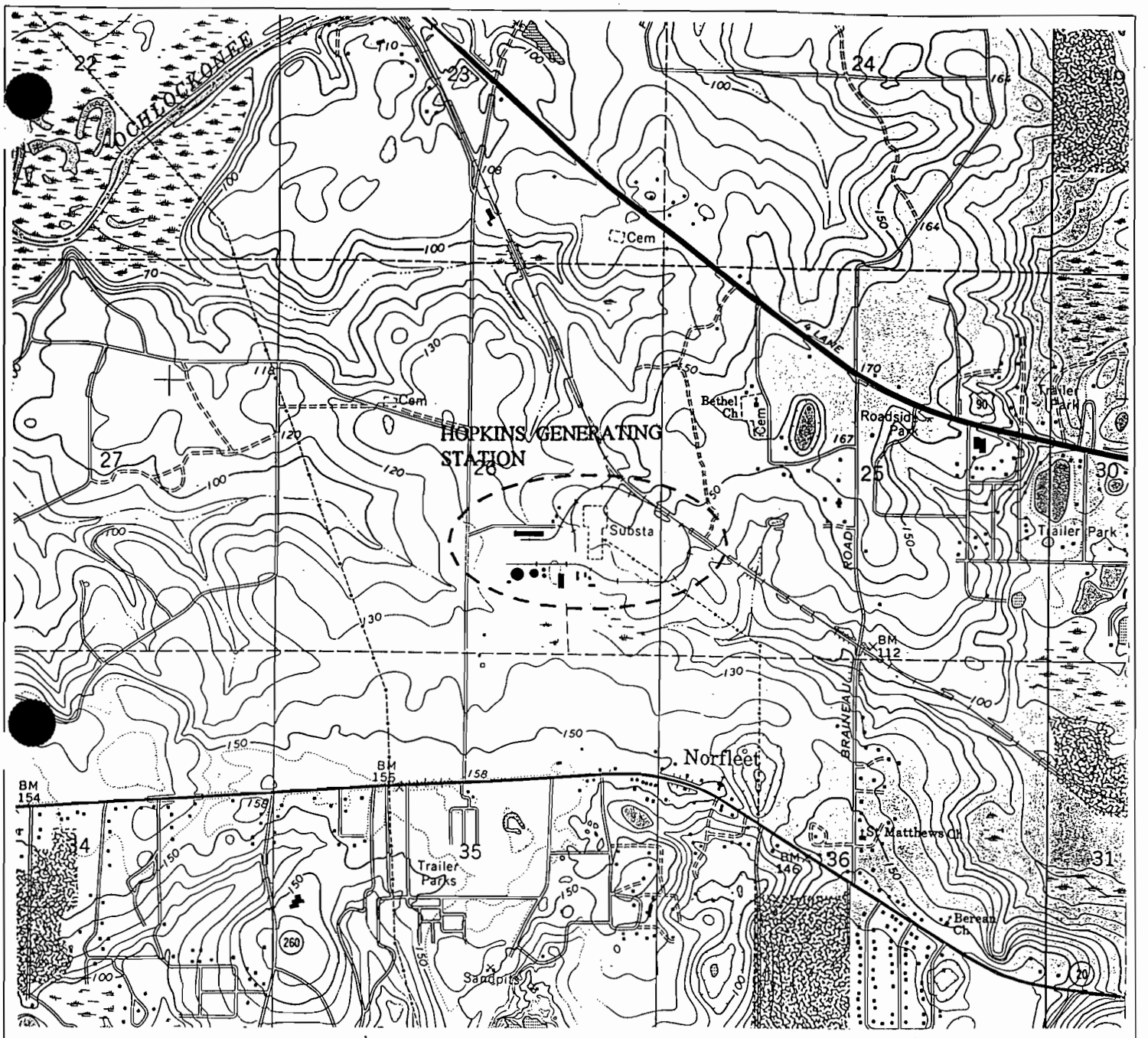
1. Area Map Showing Facility Location: [**X**] Attached, Document ID: **HGS-01** [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [**X**] Attached, Document ID: **HGS-02** [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [**X**] Attached, Document ID: **HGS-03** [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [**X**] Attached, Document ID: **HGS-04** [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [**X**] Attached, Document ID: **HGS-05** [ ] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: [**X**] Attached, Document ID: **HGS-06** [ ] Not Applicable
8. List of Equipment/Activities Regulated under Title VI: [ ] Attached, Document ID:_____ [**X**] Equipment/Activities On site but Not Required to be Individually Listed [ ] Not Applicable
9. Alternative Methods of Operation: [ ] Attached, Document ID:_____ [**X**] Not Applicable (@ facility level)
10. Alternative Modes of Operation (Emissions Trading): [ ] Attached, Document ID:_____ [**X**] Not Applicable

11. Identification of Additional Applicable Requirements: [ ] Attached, Document ID:_____ [**X**] Not Applicable
12. Compliance Assurance Monitoring Plan: [ ] Attached, Document ID:_____ [**X**] Not Applicable
13. Risk Management Plan Verification: [ ] Plan Submitted to Implementing Agency - Verification Attached, Document ID:_____ [**X**] Plan to be Submitted to Implementing Agency by Required Date [ ] Not Applicable
14. Compliance Report and Plan: [**X**] Attached, Document ID: **HGS-07** [ ] Not Applicable
15. Compliance Certification (Hard-copy Required): [**X**] Attached, Document ID: **HGS-08** [ ] Not Applicable

ATTACHMENT HGS-01



1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

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

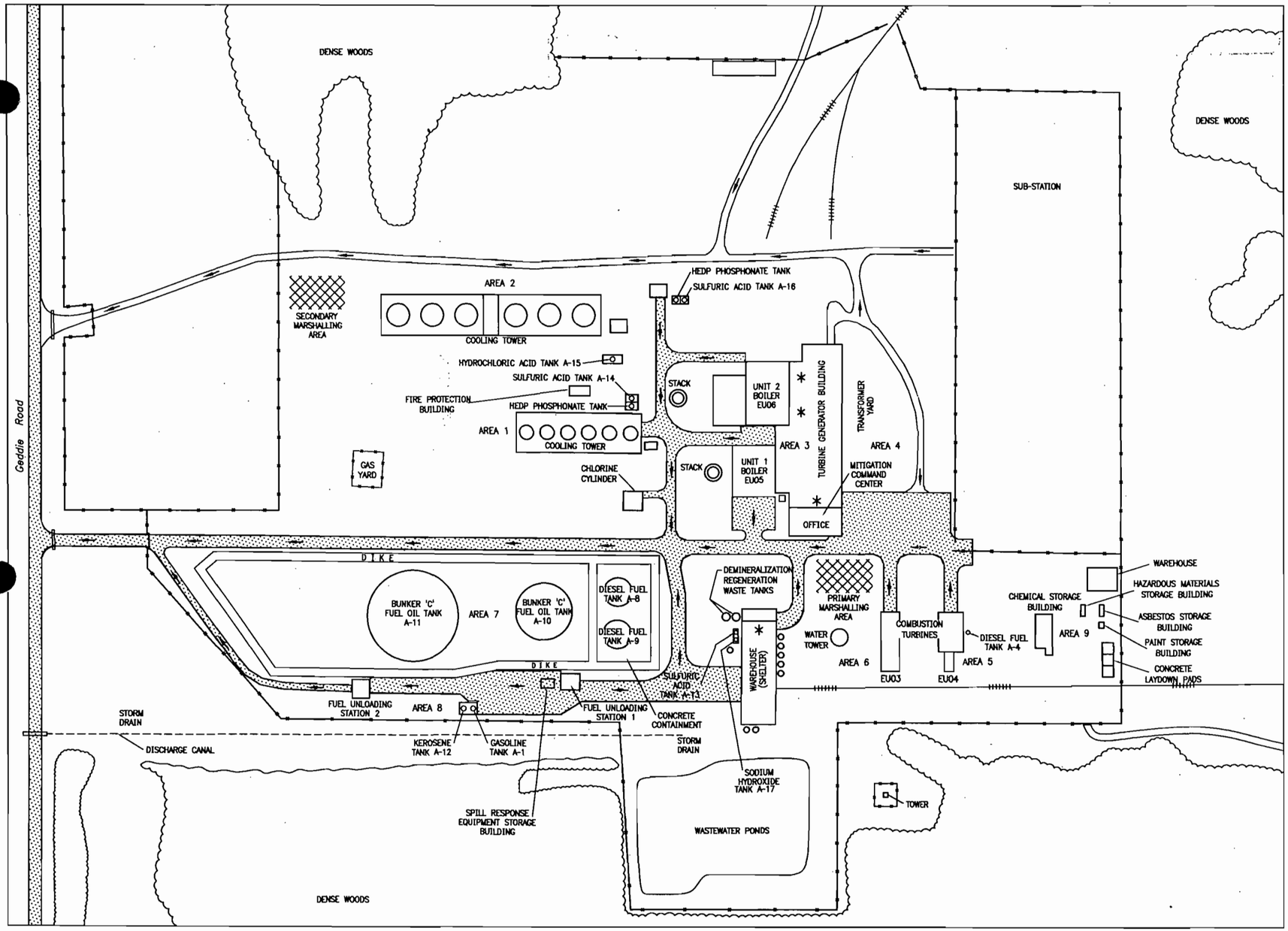
FACILITY LOCATION MAP

MN GN
0° 1°18' 23 MILS

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 5/8/96	BY: MAB CKD' BY: CJT REV. BY:	USGS 7.5' QUAD MIDWAY, FL FIGURE NO. HGS-01

ATTACHMENT HGS-02



LEGEND

- TREELINE
- FENCE
- RAILROAD
- PAVED AREA
- EVACUATION ROUTE
- MARSHALLING AREA
- * FIRE ALARM

NOTE:
THIS SITE PLAN DEPICTS THAT PORTION OF THE CITY OF TALLAHASSEE ARVAH B. HOPKINS GENERATING STATION THAT CONTAINS EMISSIONS POINTS AS DESCRIBED IN THE TITLE V APPLICATION. THE ACTUAL PROPERTY BOUNDARY OF THE ARVAH B. HOPKINS GENERATING STATION EXTENDS OUTSIDE THE LIMITS OF THIS SITE PLAN.

N

0 100 200

Graphic Scale in Feet (Approx)

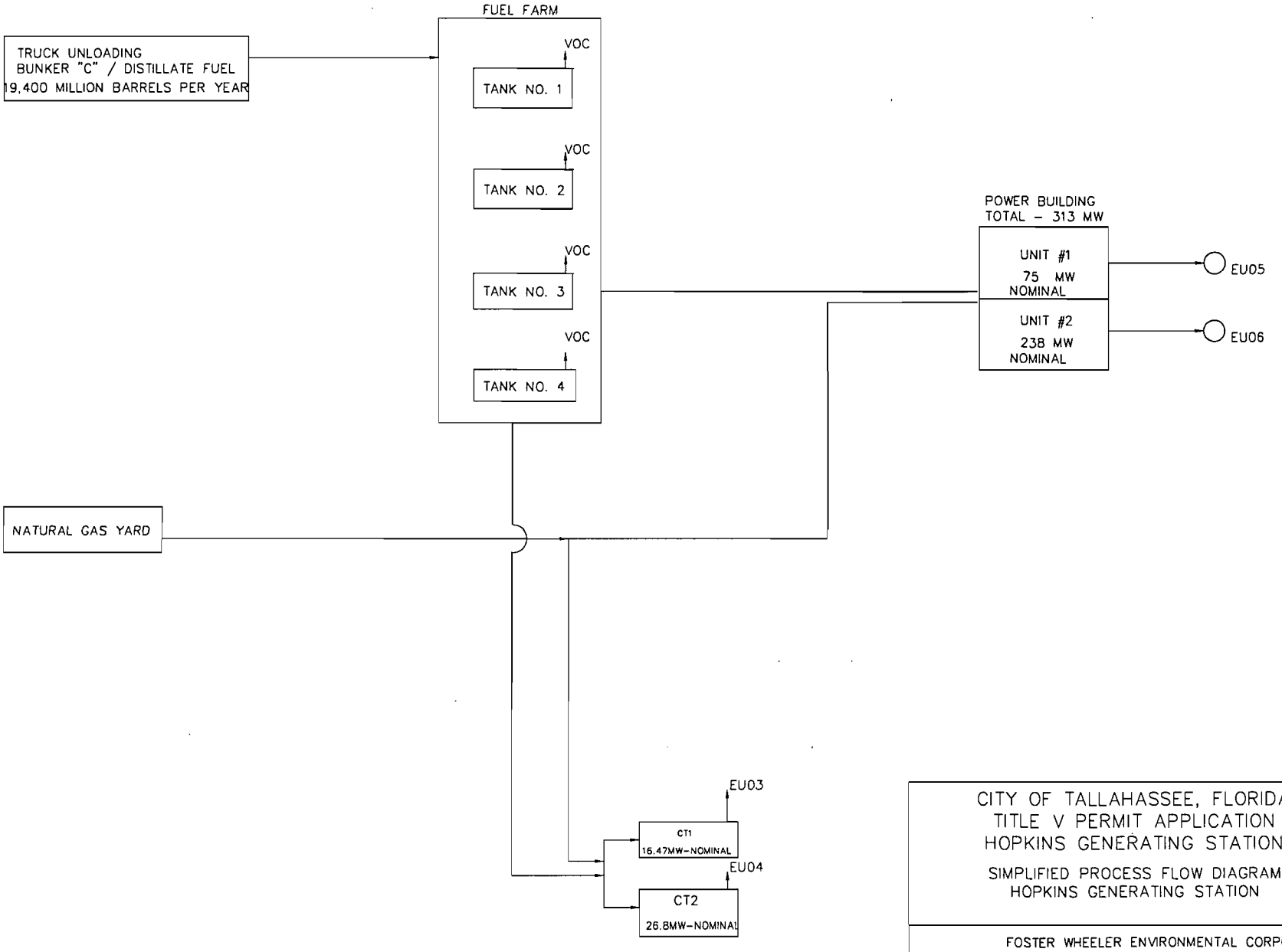
ARVAH B. HOPKINS GENERATING STATION
TALLAHASSEE, FLORIDA

SITE PLAN

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE AS SHOWN	PREPARED R.PAV	CAD FILE NO. ERAP14
DIV. ENV.	CHECKED	FIGURE No. HGS-02
DATE	APPROVED	

ATTACHMENT HGS-03



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

SIMPLIFIED PROCESS FLOW DIAGRAM
HOPKINS GENERATING STATION

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 5/3/96	BY: MAB CKD' BY: CJT REV. BY:	CAD FILE NO. HPFD.DWG
		FIGURE NO. HGS-03

ATTACHMENT HGS-04

As part of the Title V application development, the City of Tallahassee reviewed the potential sources of unconfined particulate emissions at its Hopkins 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, and application of water as needed by the use of hoses (manual operation).

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

ATTACHMENT HGS-05

Fugitive emissions resulting from the operation of the Hopkins Generating Station are addressed in Attachment HGS-06 of this application form, Exempt Activities. Fugitive emissions that exceed the emissions threshold amount set forth in Section III (G) of this application form have been assigned an Emissions Unit Identification Number, and an Emissions Unit Information Section has been completed for those units.

ATTACHMENT HGS-06

In developing the Title V application, the City of Tallahassee's consultant, Foster Wheeler Environmental Corporation, conducted a comprehensive emissions unit inventory of the Hopkins Generating Station. The attached inventory (File: HOPEI.XLS) represents a comprehensive examination of the facility, its operations, and potential emissions units. The inventory identified fifteen emissions unit areas. These areas included the following:

1. Steam Generator (Boiler) Operations;
2. Combustion Turbine 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; and
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 four categories. These categories include: 1) Regulated (with or without emissions limitations); 2) Unregulated; 3) Proposed to be exempt under criteria listed in Rule 62-213.430(6), F.A.C.; and 4) Trivial - per FDEP guidance dated March 15, 1996. All trivial emissions units and activities have been omitted form the inventory list per FDEP guidance dated March 15, 1996.

The Title V application includes all regulated emissions units, and the unregulated fugitive dust and VOC sources. The regulated emissions units have specific emission 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 either the specific exemption criteria of Rule 62-210.300 and 62-213.430(6), F.A.C. The City of Tallahassee bases its exemption request for these units on the regulations and requirements of the Title V Operating Permit Programs.

The list of emissions units also contains several unpermitted emissions units which have been in operation since the facility started-up. These activities are currently operating under the temporary exemption of Rule 62-210.300(3)(b), F.A.C. The City of Tallahassee requests that

all of the existing unpermitted activities at the Hopkins Generating Station be exempted from the permit requirements of Rule 62-210.300, F.A.C. under the authority provided to the FDEP in Rule 62-4.040(1)(b), F.A.C. The emissions units include the following:

- Fugitive Dust - Exemption is requested for the heavy construction activities listed under this category. Emissions from these activities are of the Fugitive Area type generated by the operation of heavy equipment on site. This activity has also been included in the Title V application within Emissions Unit No. 1 (EU01). 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 EU02.

The attached list and the above comments are intended to meet the requirements of Rule 62-213.420(3)(m), F.A.C. and to serve as an official request for the exemption of all the units listed as unregulated from the requirements of Rule 62-210.300, F.A.C.

CITY OF TALLAHASSEE ELECTRIC DEPARTMENT EMISSIONS UNIT INVENTORY SOURCE - HOPKINS GENERATING STATION			
Unit No.	**Emissions Unit**	**Emissions Unit Description**	**Regulatory [1] [2] Classification**
1	Steam Generator No. 1	Steam Generator - 903 mmBtu/hr	Regulated -Permit # AO37-242825
1a	Deareator Vents	Deareator Vents	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1b	Air Ejectors	Air Ejectors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1c	Oil Vapor Extractors	Oil Vapor Extractors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1d	Noncondensable Gas	Noncondensable Gas Extractors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1e	Seal Oil Vacuum Pumps	Seal Oil Vacuum Pumps	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1f	Lube Oil Tanks	Lube Oil Tanks	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1g	Lube/Fuel Oil Drip Pans	Lube/Fuel Oil Drip Pans	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1h	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
1i	Fuel Oil Piping	Fuel Oil Piping	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2	Steam Generator No. 2	Steam Generator - 2500 mmBtu/hr	Regulated -Site Certification PA 74-03D
2a	Deareator Vents	Deareator Vents	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2b	Air Ejectors	Air Ejectors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2c	Noncondensable Gas	Noncondensable Gas Extractors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2d	Lube Oil Tanks	Lube Oil Tanks	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2e	Oil Vapor Extractors	Oil Vapor Extractors	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2f	Seal Oil Vacuum Pumps	Seal Oil Vacuum Pumps	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2g	Lube/Fuel Oil Drip Pans	Lube/Fuel Oil Drip Pans	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2h	Hydrogen Gas Vents	Hydrogen Gas Vents	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
2i	Fuel Oil Piping	Fuel Oil Piping	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
3	CT #1	Combustion Turbine -228 mmBtu/hr	Regulated -Permit # AO37-242824
3a	Diesel Engine	Diesel Engine Starter	Unregulated - Exempt per Rule 62-210.300(3)(a)21
3b	Diesel Tank	Diesel Tank #10	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
3c	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
3d	Lube Oil Tank	Lube Oil Tank	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
3e	Natural Gas Blowdown	Natural Gas Blowdown	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
3f	Fuel Oil Piping	Fuel Oil Piping	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
4	CT #2	Combustion Turbine - 446 mmBtu/hr	Regulated -Permit # AO37-242824
4a	Diesel Engine	Diesel Engine Starter	Unregulated - Exempt per Rule 62-210.300(3)(a)21
4b	Diesel Tank	Diesel Tank #11	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
4c	Oil Vapor Extractor	Oil Vapor Extractor	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
4d	Lube Oil Tank	Lube Oil Tank	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
4e	Natural Gas Blowdown	Natural Gas Blowdown	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
4f	Fuel Oil Piping	Fuel Oil Piping	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
5	Day Tank	Diesel Tank #12	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
5a	Fuel Dispensing Operation	Diesel Fuel	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE ELECTRIC DEPARTMENT
EMISSIONS UNIT INVENTORY
SOURCE - HOPKINS GENERATING STATION

Unit No.	Emissions Unit	Emissions Unit Description	Regulatory [1] [2] Classification
6	Diesel Engine	Emergency Generator	Unregulated - Exempt per Rule 62-210.300(3)(a)21
6a	Diesel Tank	Diesel Tank #13	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7	Fuel Farm	Diesel Tank #1	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7a	Fuel Farm	Diesel Tank #2	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7b	Fuel Farm	Fuel Oil Tank #3	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7c	Fuel Farm	Fuel Oil Tank #4	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7d	Fuel Farm	Fuel Oil Piping	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7e	Fuel Farm	Fuel Station #1	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7f	Fuel Farm	Fuel Station #2	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
7g	Fuel Dispensing Operation	Truck loading/unloading	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
8	Fuel Dispensing Operation	Gasoline Tank	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
8a	Fuel Dispensing Operation	Gasoline Pump	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
9	Fuel Dispensing Operation	Diesel Tank	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
9a	Fuel Dispensing Operation	Diesel Pump	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
10	Organic Liquid Storage	Kerosene Tank #7	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
10a	Organic Liquid Storage	Lube Oil Tank #8	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
10b	Organic Liquid Storage	Lube Oil Tank #9	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11a	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11b	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11c	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11d	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11e	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11f	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11g	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11h	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11i	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11j	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11k	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11l	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11m	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
11n	Solvent Cleaning	Parts Washer - Nonhalogenated	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
12	Cooling Tower	Fresh Water Cooling Tower	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
13	Cooling Tower	Fresh Water Cooling Tower	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
14	Central Vacuum System	Central Vacuum System	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
15	Maintenance Activities	Welding	Unregulated - Exempt per Rule 62-210.300(3)(a)16
16a	Plant Operations	Lube Oil Storage Tanks	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)

CITY OF TALLAHASSEE ELECTRIC DEPARTMENT
EMISSIONS UNIT INVENTORY
SOURCE - HOPKINS GENERATING STATION

Unit No.	Emissions Unit	Emissions Unit Description	Regulatory [1] [2] Classification
16b	Plant Operations	Propane Storage Tanks	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
17	Fugitive Dust	Paved Roads	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
17a	Fugitive Dust	Unpaved Roads	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
17b	Fugitive Dust	Heavy Construction Activities	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
17c	Fugitive Dust	Aggregate Handling & Storage	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)
18	Gasoline Engine	Welding Generator	Unregulated - Exempt per Rule 62-210.300(3)(a)21
18a	Gasoline Engine	Emergency Generator	Unregulated - Exempt per Rule 62-210.300(3)(a)21
18b	Gasoline Engine	Emergency Generator	Unregulated - Exempt per Rule 62-210.300(3)(a)21
19	Laboratory	Laboratory Fume Hoods	Unregulated - Propose exemption under criteria in Rule 62-213.430(6)

[1]Note: The designation "proposed exemption under critieria in Rule 62-213.430(6)" indicates that an exemption is requested for this unit pursuant to Rule 62-213.420(3), F.A.C., in accordance with the provisions of Rule 62-213.430(6), F.A.C.

[2]Note: All trivial emissions units and activities are omitted per FDEP 3/15/96 guidance memo. In addition, all mobil sources are omitted as outside the scope of Title V stationary source permitting.

ATTACHMENT HGS-07

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 application as of the date of application submittal.

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)(b), F.A.C. once the Title V permit is issued.

ATTACHMENT HGS-08

COMPLIANCE CERTIFICATION

In accordance with the instructions for the Florida Department of Environmental Protection's Form No. 62-210.900(1), F.A.C., and Rule 62-213.420(3)(j), F.A.C., a compliance statement must be included in each application for an air pollution permit (i.e., Construction, Modification, State Operating or Title V Operating Permit). This Compliance Certification is intended to meet the requirements of the instructions and the regulation.

CERTIFICATION STATEMENT

"I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V Source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and the data contained in the Compliance Report and Plan located in Attachment HGS-07 of this application are true, accurate and complete.

Signed

6-14-96
Date

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III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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.

[X] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Fugitive Dust Sources**		
2. Emissions Unit Identification Number: [**X**] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **This emissions unit includes fugitive dust associated with heavy construction activities.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Reasonable precautions as described in Attachment HGS-04.**
2. Control Device or Method Code: **061**

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:		
2. Long-term Reserve Shutdown Date:		
3. Package Unit: Manufacturer:	Model Number:	
4. Generator Nameplate Rating:	MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:		°F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters):		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	
2. Emission Point Type Code: [ ] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [ ] V [ ] W	
6. Stack Height:	feet
7. Exit Diameter:	feet
8. Exit Temperature:	°F

9. Actual Volumetric Flow Rate:	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters):	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

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

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Heavy Construction Activities**	
2. Source Classification Code (SCC):	
3. SCC Units: **Acre-Year**	
4. Maximum Hourly Rate: **0**	5. Maximum Annual Rate: **0**
6. Estimated Annual Activity Factor: **5**	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): **Heavy construction includes such activities as ground excavation and building construction and demolition. Annual construction activities may either fall short of or exceed the esimated annual activity factor above. However, this estimated annual activity factor is reflective of ordinary construction activity at the Hopkins Plant.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**061**		**NS**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted:		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	lb/hour	tons/year
4. Synthetically Limited? [ ] Yes [ ] No		
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3	_____ to _____ tons/year	
6. Emission Factor: Reference:		
7. Emissions Method Code: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?
   If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[X] Unknown
SO2	[ ] C	[ ] E	[ ] Unknown
NO2	[ ] C	[ ] E	[ ] Unknown

4. Baseline Emissions:		
PM	lb/hour	tons/year
SO2	lb/hour	tons/year
NO2		tons/year

5. PSD Comment (limit to 200 characters):

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [ ] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [ ] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [ ] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [ ] Not Applicable

12. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [ ] Not Applicable

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [ ] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Not Applicable

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III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

[**X**] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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.

[**X**] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Fugitive VOC Sources**		
2. Emissions Unit Identification Number: [**X**] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **Fugitive VOC sources include organic liquid storage, truck loading/unloading , fuel dispensing, parts washing and surface coating. ONLY surface coating is listed all others are exempt.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **None**
2. Control Device or Method Code: **0**

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:		
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer:	Model Number:	
4. Generator Nameplate Rating:	MW	
5. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters):		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	
2. Emission Point Type Code: [ ] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [ ] V [ ] W	
6. Stack Height:	feet
7. Exit Diameter:	feet
8. Exit Temperature:	°F

9. Actual Volumetric Flow Rate:	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

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

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Surface Coating**	
2. Source Classification Code (SCC):	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: **5065**	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): **Annual Activity factor is based on maximum surface area covered.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

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
H186			NS
H123			NS
H085			NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted:	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: lb/hour	tons/year
4. Synthetically Limited? [ ] Yes [ ] No	
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3	_____ to _____ tons/year
6. Emission Factor: Reference:	
7. Emissions Method Code: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5	
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity:	[ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity:	[ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[ ] Unknown
SO2	[ ] C	[ ] E	[ ] Unknown
NO2	[ ] C	[ ] E	[ ] Unknown
4. Baseline Emissions:			
PM		lb/hour	tons/year
SO2		lb/hour	tons/year
NO2			tons/year
5. PSD Comment (limit to 200 characters):			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [ ] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [ ] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [ ] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation [ ] Attached, Document ID:_____ [ ] Not Applicable
11. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:_____ [ ] Not Applicable
12. Identification of Additional Applicable Requirements [ ] Attached, Document ID:_____ [ ] Not Applicable
13. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:_____ [ ] Not Applicable
14. Acid Rain Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:_____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:_____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:_____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:_____ [ ] Not Applicable

EU - 03

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[X] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Combustion Turbine (No. 1)**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **002**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **The maximum allowable operating rate is currently 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 operation are 8491 hours per year. This unit pre-dates PSD regulations.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **Westinghouse**	Model Number **W191G**:
4. Generator Nameplate Rating: **16.47** MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **228** mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters): **The maximum heat input rate is based on the lower heating value at an ambient temperature of 80 degrees fahreneit.**		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	**8491** hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Rule 62-210.700(1),(4),(6) F.A.C.	
Rule 62-296.320(4)(b) F.A.C.	
Rule 62-297.310(2)(a) F.A.C.	
Rule 62-297.310(4)(a)2 (except a-c) F.A.C.	
Rule 62-297.310(7)(a)3,4a,8,9 F.A.C.	
Rule 62-297.310(8) F.A.C.	
40 CFR 72.6(b)(1)	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU03**
2. Emission Point Type Code: [**X**] 1 [ ] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emission point, EU03, represents the exhaust for Combustion Turbine No. 1.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [**X**] V [ ] W
6. Stack Height: **29** feet
7. Exit Diameter: **9.2** feet
8. Exit Temperature: **802.4** °F
9. Actual Volumetric Flow Rate: **456,297.2** acfm

10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters):	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural Gas**	
2. Source Classification Code (SCC): **20100201**	
3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.228**	5. Maximum Annual Rate: **1936**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.1 (grains/cf)**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8491 hours per year operation.**	

Emissions Unit Information Section 3 of 6

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Fuel Oil No. 2**	
2. Source Classification Code (SCC): **20100101**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **1727**	5. Maximum Annual Rate: **1.47 x 10^7**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.4**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.132**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8491 hours per year operation.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			**NS**
NOX			**NS**
PM			**NS**
PM10			**NS**
SO2			**EL**
VOC			**NS**
H095			**NS**
H106			**NS**
H107			**NS**
H133			**NS**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **97.4** lb/hour, **413.6** tons/year

4. Synthetically Limited?
   [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:
   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor:
   Reference:

7. Emissions Method Code:
   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   Fuel Oil Sulfur Content: 0.4 % (wt)
   Fuel Oil Usage Rate: 1.218 x 10^4 lb/hr
   MW SO_2: 64, MW O_2: 32

   lb/hr =(1.218 x 10^4 lb/hr) x (0.4/100) x (64/32) = 97.4 lb/hr

   TPY = (97.4 lb/hr) x (8491 hrs/yr) x (ton/2000 lb) = 413.6 TPY

   See Attachment EU03-01

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   The current maximum permitted fuel sulfur content is 0.4 % and the maximum hours of operation are 8491 hours per year. Potential emissions are set equal to the equivalent allowable emissions.

Emissions Unit Information Section 3 of 6

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **OTHER**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.4 % sulfur (wt)**
4. Equivalent Allowable Emissions: **97.4** lb/hour **413.6** tons/year
5. Method of Compliance (limit to 60 characters): **Records of fuel oil sulfur content as received from vendor are maintained and kept available for Department Inspections.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitation entered in Field 1 is Specific Condition No. 6 in current operating Permit No. AO37-242824. This condition requires that the sulfur content of the oil shall not exceed 0.4% sulfur by weight.**

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

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

1. Visible Emissions Subtype: **VE20**
2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested 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 (limit to 200 characters): **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.**

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[**X**] Unknown
SO2	[ ] C	[ ] E	[**X**] Unknown
NO2	[ ] C	[ ] E	[**X**] Unknown
4. Baseline Emissions:			
PM		lb/hour	tons/year
SO2		lb/hour	tons/year
NO2			tons/year
5. PSD Comment (limit to 200 characters):			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [**X**] Attached, Document ID: **EU03-02** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU03-03** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: :_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU03-04** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [**X**] Previously submitted, Date: **Dec. 17, 1993** [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU03-05** [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU03-06** [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU03-07** [ ] Not Applicable

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT EU03-01

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Rv'd: 04/25/96

Client: City of Tallahassee
OFS No: 1000.4015.0027

Sheet No.: 1 of 2
Calc. No.: 960425DH01

Emission Unit Description:
The emissions unit is a Westinghouse combustion turbine designated CT 1. The unit is currently operating under a nonfederally enforceable permit (AO37-242824) issued by the FDEP. The unit pre-dates the PSD regulations. The unit is capable of firing No. 2 fuel oil or natural gas. The unit is currently rated for a maximum heat input rate of 228 mmBtu/hr when firing fuel oil or natural gas and a nominal production capacity of 16.47 MW. The unit operates as a peaking or emergency unit in a simple cycle mode. The existing permit limits visible emissions (VE) and the sulfur content of the fuel oil (0.4% by weight). The federally enforceable operating and emission limitations established through the SIP allow continuous operation and limit VE to less than 20%.

References:
No. 1 - FDEP Permit No. AO37-242824, Spec. Condition Nos. 2,3,4, and 6.
No. 2 -FDEP Rule 62-296.320(4)(b)1

Operating Parameters

Annual Hours Of Operation (hrs/yr)	AHOP := 8491
Maximum Heat Input Rate on Fuel oil (mmBtu/hr) (lower heating value)	MHR1 := 228
Maximum Heat Input Rate on Natural Gas (mmBtu/hr) (lower heating value)	MHR2 := 228
Fuel Oil Heat Content (Btu/Gal)	FOHC := 132000
Fuel Oil Density (lb/gal)	FOD := 7.05
Natural Gas Heat Content (Btu/CF)	NGHC := 1000
Fuel Oil Sulfur Content (% wt)	FOSC := 0.4

Calculated Fuel Oil Usage Rate (lb/hr)

$$FOUR1 := MHR1 \cdot \frac{10^6}{FOHC} \cdot FOD \qquad FOUR1 = 1.218 \cdot 10^4$$

Calculated Fuel Oil Usage Rate (kgal/hr)

$$FOUR2 := \frac{FOUR1}{FOD \cdot 1000} \qquad FOUR2 = 1.727$$

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Client: City of Tallahassee
OFS No: 1000.4015.0027

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Sheet No.: 2 of 2
Calc. No.: 960425DH01

Rv'd: 04/25/96

Emission Estimates

The following emission estimates are provided as required by Rule 62-213.420(3)(c) F.A.C. The emission estimates are based on allowable emission limitations as specified by Rule or permit condition. The emission estimates provide hourly rates (lbs/hr) denoted with a "H" and annual emission rates (tons/year) denoted with an "A".

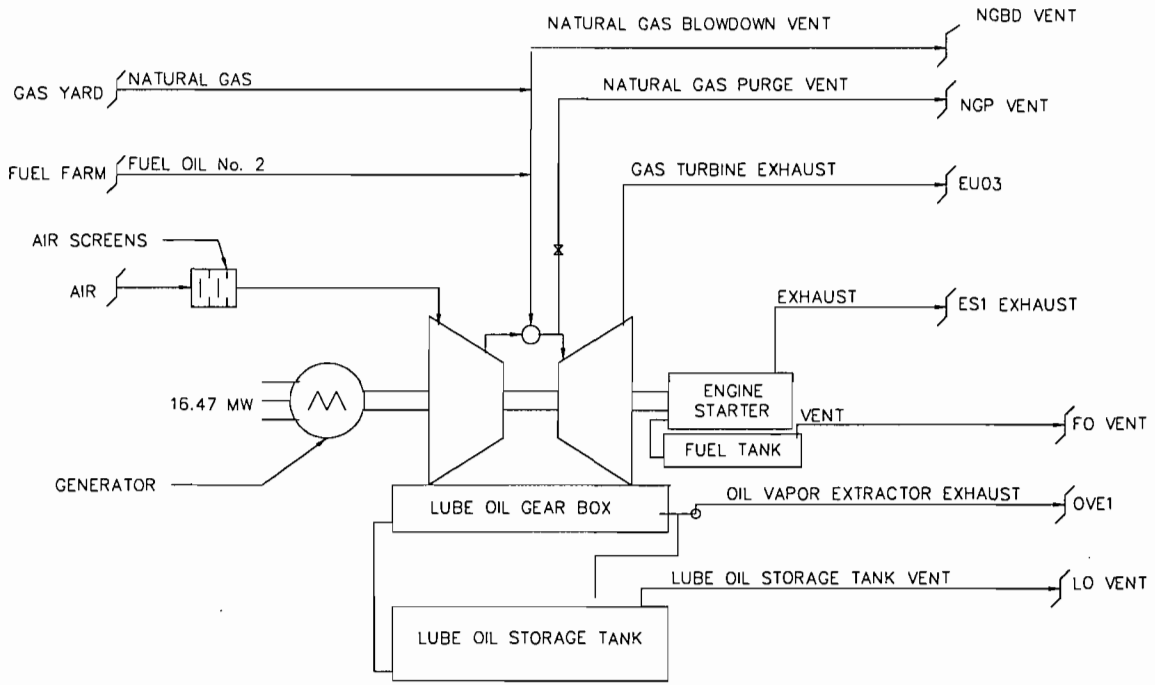
Emission Estimates - Segment No. 1 (Fuel Oil Firing)

Sulfur Dioxide (SO2) - Existing Operating Permit (Reference No. 1)

$$HSO2 := FOUR1 \cdot \frac{FOSC}{100} \cdot \frac{64}{32} \qquad HSO2 = 97.4$$

$$ASO2 := HSO2 \cdot \frac{AHOP}{2000} \cdot \qquad ASO2 = 413.6$$

ATTACHMENT EU03-02



CT1 – EXHAUST PARAMETERS
EXHAUST TEMP. –802.4 F FLOW RATE – 456,297.2 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	12,197

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

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 1

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE 04/30/96	BY: DJG CKD' BY:CJT REV. BY:CJT	CAD FILE NO. HCT1.DWG FIGURE NO. EU03-02

ATTACHMENT EU03-03

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU03, Combustion Turbine No.1. Maximum values could be higher. The fuels represented in the analyses are natural gas and #2 fuel oil.

TYPICAL ANALYSIS - NATURAL GAS

DATE: 05/13/96 ANALYSIS TIME: 225 STREAM SEQUENCE: 12
TIME: 08:09 CYCLE TIME: 240 STREAM#: 2
ANALYZER#: 362007 MODE: RUN CYCLE START TIME: 08:05

COMP NAME	COMP CODE	MOLE %	GAL/MCF**	B.T.U.*	REL DEN*
C 6 +	108	0.080	0.0357	4.23	0.0027
PROPANE	102	0.331	0.0912	8.35	0.0050
I-BUTANE	103	0.085	0.0278	2.77	0.0017
N-BUTANE	104	0.076	0.0240	2.49	0.0015
NEO C5	107	.000000	0.0000	0.00	0.0000
IPENTANE	105	0.039	0.0143	1.56	0.0010
NPENTANE	106	0.027	0.0098	1.08	0.0007
NITROGEN	114	0.424	0.0000	0.00	0.0041
METHANE	100	95.837	0.0000	970.16	0.5308
C O 2	117	0.728	0.0000	0.00	0.0111
ETHANE	101	2.373	0.6348	42.09	0.0246
TOTALS		100.000	0.8375	1032.73	0.5832

@ 14.730 PSIA & UNCORRECTED FOR COMPRESSIBILITY

* @ 14.730 & 60 DEG. F

PRESSIBILITY FACTOR (1/Z) = 1.0022
DRY B.T.U. @ 14.730 PSIA & 60 DEG. F CORRECTED FOR (1/Z) = 1035.0
REAL RELATIVE DENSITY = 0.5842
UNNORMALIZED TOTAL = 100.66
ANALOG INPUT CHANNEL 1 = H 2 S 140 = 1.5556
ANALOG INPUT CHANNEL 2 = WATER 144 = 2.7465

CTIVE ALARMS

ONE

United TESTING GROUP

United Testing Group, Inc., a subsidiary of Top Source Technologies, Inc.

TYPICAL ANALYSIS - #2 FUEL OIL

City of Tallahassee/Hopkins Station
Attn: Maintenance
Rt 4 Box 450 Geddie Rd.
Tallahassee, FL 32304

September 20, 1994
Sample No: 878
Id No: Not Identified
#1 tank.

****

Tank Cap:
Gallons:

Tank No:
Type Fuel: 2

****

A.P.I. GRAVITY @ 60 DEG/F	36.1
SPECIFIC GRAVITY @ 60 DEG/F	.844
FLASHPOINT DEG/C DEG/F	84/183.2
WATER PPM	44
SULFUR % BY WT.	0.31
ASH % BY WT.	<.01
WEIGHT/ML.	84.2
WEIGHT/GAL.	6.735
BTU/LB CALCULATED	19627.37
BTU/GAL CALCULATED	132197.949
CALCULATED CETANE	50.9

INHIBITOR RESPONSE (DUPONT), MAXIMUM ACCEPTABLE LEVEL (7):

INITIAL STABILITY	17
FINAL STABILITY	2

DISTILLATION:

IBP:	392	DEG/F
10%	435	DEG/F
50%	528	DEG/F
90%	596	DEG/F
END POINT	635	DEG/F

****

Sample meets the requirements for #2 diesel.
No algae contamination noted.
No contamination noted.
Recommend treating with fuel conditioner if fuel is to remain in storage.
Recommend treating at a rate of 1 to 200 gallons.
Recommend continual analysis to verify fuel quality.

Main Laboratory

1215 Kleppe Lane #9
Sparks, NV 89431
(702) 358-3869
(800) 524-7848
FAX (702) 358-3871

3121 Presidential Drive
Atlanta, GA 30340
(404) 454-8000
(800) 394-3669
FAX (404) 451-1500

1775 Cortland Court
Addison, IL 60101
(708) 691-8096
(800) 824-1461
FAX (708) 691-8156

ATTACHMENT EU03-04

There are no regulatory standards or applicable permit conditions that require periodic testing of Combustion Turbine No. 1 (EU03). The existing operating permit (A037-242824) contains only one compliance testing condition which requires the performance of visible emissions tests in the fiscal years during which the individual turbine operates more than 400 hours. Therefore, stack sampling facilities are not available on the combustion turbine units at the City of Tallahassee Hopkins Generating Station.

ATTACHMENT EU03-05

The City of Tallahassees follows best operational practices in the startup and shutdown of the gas turbines at the Hopkins 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 EU03-06

Combustion Turbine No. 1 (EU03) is used as a peaking and emergency reserve unit. It is fueled by natural gas or fuel oil with a maximum of 0.4% sulfur. 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 16.47 MW. The current AMOs include the following:

Natural Gas Firing - Maximum Rate of 228 mmBtu/hr

Fuel Oil Firing - Maximum Rate of 228 mmBtu/hr

Fuel Grade No. 2

ATTACHMENT EU03-07

The additional requirements are included within the attached current state operating permit (AO37-242824). Specific Conditions which have already been addressed have been crossed out. The attached requirements are contained in a State of Florida Operating Permit, which is not federally enforceable. These requirements are not subject to the definition of "applicable requirements".

Revision Requests

The City of Tallahassee requests the following revisions to the attached Specific Conditions be incorporated into the Title V Operating Permit:

1. **Specific Condition No. 2** - The condition requires that emissions testing be conducted at 95-100% of the permitted rated heat input based on the ambient air temperature during the test. Based on a guidance memo dated September 18, 1996 issued by the FDEP Division of Air Resources Management addressing rate of operation during compliance testing for combustion turbines, the City of Tallahassee requests that the portion of Specific Condition No. 2 which addresses the rate of operation during emissions testing be replaced by the following language:

   "Testing of emissions shall be conducted with the source operating at capacity (maximum heat input rate for the inlet air temperature to the CT during the test). Capacity is defined as 90-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input versus inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report".

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Power Plant

I.D. Number: 10TLH37000302,03
Permit/Certification Number: AO37-242824
Date of Issue: March 8, 1994
Modification Date: June 10, 1994
Expiration Date: December 31, 1998

SPECIFIC CONDITIONS:

1. The attached General Conditions are part of this permit.

2. The maximum allowable operating rate for Combustion Turbine 1 is 228 MMBtu/hour (LHV) heat input; for Combustion Turbine 2, 446 MMBtu/hour (LHV) corrected to ambient temperature of 80 degrees Fahrenheit. Testing of emissions shall be conducted at 95-100% of the permitted rated heat input based on the average ambient air temperature during the test. Data for correcting heat input rates (corrected for temperatures other than 80 degrees Fahrenheit) must be submitted with the compliance test report. If it is impracticable to test at capacity, then sources may be tested at less than capacity; if the source is tested at less than capacity subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacity is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit with prior notification to the Department.

3. The maximum hours of operation are 8491 hours/year for Combustion Turbine 1, and 7071 hours/year for Combustion Turbine 2. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation annually.

4. The maximum allowable emission rate for each pollutant is as follows:

Pollutant	FAC Rule	Allowable Emissions
VE	17-296.310(2)	less than 20% opacity

5. Emissions tests for the following pollutants shall be performed annually between July 1 and August 31, in accordance with the test methods and frequency indicated, with notification to the Department 15 days prior to testing. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. For good cause, the Permittee may request an extension of a compliance test due date. However, inadequate planning of testing does not constitute good cause for an extension of the compliance test due date. The test report documentation must be submitted to the Department within 45 days after completion of testing.

Pollutant	Frequency	Test Method
VE	Annually	DEP 9

However, with the following exception, the visible emissions test shall only be required during those federal fiscal years during which the individual turbines operated greater than 400 hours.

A VE test is required in 1998 while operating on fuel oil.

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Power Plant

I.D. Number: 10TLH37000302,03
Permit/Certification Number: AO37-242824
Date of Issue: March 8, 1994
Modification Date: June 10, 1994
Expiration Date: December 31, 1998

SPECIFIC CONDITIONS:

6. The maximum sulfur content of the fuel oil is limited to 0.4% sulfur by weight. The Permittee shall maintain logs available for Department inspection of the fuel oil sulfur content.

7. Satisfactory ladders, platforms, and other safety devices as well as necessary parts shall be provided, maintained, and made available as necessary to facilitate compliance inspections.

8. An annual operation report [DEP Form 17-210.900(4) attached] shall be submitted by March 1 each year. The attached form shall be reproduced by the Permittee and used for future annual submittals.

9. In accordance with F.A.C. Rule 17-213, a Major Air Pollution Source Annual Operation Fee Form [DEP Form 17-213.900(11) attached] must be completed and submitted with appropriate fee between January 15 and March 1 of each year. If the Department has not received the fee payment by March 1, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee, plus interest on such amount computed in accordance with s.220.807, Florida Statutes. The Department may revoke any major air pollution source operation permit if it finds that the permit holder has failed to pay timely and required annual operation license fee, penalty or interest. The attached form shall be reproduced by the Permittee and used for future annual submittals. The completed form and appropriate fees must be submitted to the Department of Environmental Protection, Title V (Facility I.D. Number), 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

10. An application to renew this permit shall be submitted prior to December 31, 1998.

11. The permanent source identification number for these point sources are:

10TLH37000302 - Combustion Turbine 2
10TLH37000303 - Combustion Turbine 3

Please cite these numbers on all test reports and other correspondence specific to these permitted point sources.

12. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8300, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 488-1320. For routine business, use telephone number (904) 488-3704 during normal working hours.

Expiration Date:

March 1, 1999

Issued this 10th day of June, 1994.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Bobby A. Cooley

BOBBY A. COOLEY
District Director

EU - 04

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[**X**] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Combustion Turbine (No. 2)**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **003**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **The maximum allowable operating rate is currently 446 mmBtu/hr (lower heating value) at an ambient temperature of 80 degrees fahrenheit when firing fuel oil or natural gas. The maximum hours of operation are 7071 hours per year. This unit pre-dates PSD regulations.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **Westinghouse**	Model Number **W251G**:
4. Generator Nameplate Rating: **26.8** MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **446** mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters): **The maximum heat input rate is based on the lower heating value at an ambient temperature of 80 degrees fahreneit.**		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	**7071** hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Rule 62-210.700(1),(4),(6) F.A.C.	
Rule 62-296.320(4)(b) F.A.C.	
Rule 62-297.310(2)(a) F.A.C.	
Rule 62-297.310(4)(a)2 (except a-c) F.A.C.	
Rule 62-297.310(7)(a)3,4a,8,9 F.A.C.	
Rule 62-297.310(8) F.A.C.	
40 CFR 72.6(b)(1)	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU04**
2. Emission Point Type Code: [**X**] 1 [ ] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emission point, EU04, represents the exhaust for Combustion Turbine No. 2.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [**X**] V [ ] W
6. Stack Height: **30** feet
7. Exit Diameter: **14.7** feet
8. Exit Temperature: **874.4** °F
9. Actual Volumetric Flow Rate: **707,144.2** acfm

Emissions Unit Information Section 4 of 6

10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates: Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural Gas**	
2. Source Classification Code (SCC): **20100201**	
3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.446**	5. Maximum Annual Rate: **3154**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.1 (grains/cf)**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 7071 hours per year operation.**	

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Fuel Oil No. 2**	
2. Source Classification Code (SCC): **20100101**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **3379**	5. Maximum Annual Rate: **2.38×10^7**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.4**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.132**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 7071 hours per year operation.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NOX			NS
PM			NS
PM10			NS
SO2			EL
VOC			NS
H095			NS
H106			NS
H107			NS
H133			NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **190.6** lb/hour, **674** tons/year

4. Synthetically Limited?
   [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:
   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor:
   Reference:

7. Emissions Method Code:
   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   Fuel Oil Sulfur Content: 0.4 % (wt)
   Fuel Oil Usage Rate: 2.38 x 10^4 lb/hr
   MW SO_2: 64, MW O_2: 32

   lb/hr =(2.38 x 10^4 lb/hr) x (0.4/100) x (64/32) = 190.6 lb/hr

   TPY = (190.4 lb/hr) x (7071 hrs/yr) x (ton/2000 lb) = 674 TPY

   See Attachment EU04-01

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   The current maximum permitted fuel sulfur content is 0.4 % and the maximum hours of operation are 7071 hours per year. Potential emissions are set equal to the equivalent allowable emissions.

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **OTHER**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.4 % sulfur (wt)**
4. Equivalent Allowable Emissions: **190.6** lb/hour **674** tons/year
5. Method of Compliance (limit to 60 characters): **Records of fuel oil sulfur content as received by vendor are maintained and kept available for Department Inspections.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitation entered in Field 1 is Specific Condition No. 6 in current operating Permit No. AO37-242824. This condition requires that the sulfur content of the oil shall not exceed 0.4% sulfur by weight.**

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

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

1. Visible Emissions Subtype: **VE20**
2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested 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 (limit to 200 characters): **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.**

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[**X**] Unknown
SO2	[ ] C	[ ] E	[**X**] Unknown
NO2	[ ] C	[ ] E	[**X**] Unknown
4. Baseline Emissions:			
PM		lb/hour	tons/year
SO2		lb/hour	tons/year
NO2			tons/year
5. PSD Comment (limit to 200 characters): **This unit pre-dates the PSD regulations and, as such, is not considered an increment consuming unit.**			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [**X**] Attached, Document ID: **EU04-02** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU04-03** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU04-04** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [**X**] Previously submitted, Date: **December 17, 1993** [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU04-05** [**X**] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU04-06** [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU04-07** [ ] Not Applicable

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT EU04-01

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Rv'd: 04/25/96

Client: City of Tallahassee
OFS No: 1000.4015.0027

Sheet No.: 1 of 2
Calc. No.: 960425DH02

Emission Unit Description:
The emissions unit is a Westinghouse combustion turbine designated CT 2. The unit is currently operating under a nonfederally enforceable permit (AO37-242824) issued by the FDEP. The unit pre-dates the PSD regulations but could still consume increment actuals as of baselind date in baseline. The unit is capable of firing No. 2 fuel oil or natural gas. The unit is currently rated for a maximum heat input rate of 446 mmBtu/hr when firing fuel oil or natural gas and a nominal production capacity of 26.8 MW. The unit operates as a peaking or emergency unit in a simple cycle mode. The existing permit limits visible emissions (VE) and the sulfur content of the fuel oil (0.4% by weight). The federally enforceable operating and emission limitations established through the SIP allow continuous operation and limit VE to less than20%.

References:
No. 1 - FDEP Permit No. AO37-242824, Spec. Condition Nos. 2,3,4, and 6.
No. 2 -FDEP Rule 62-296.320(4)(6)1

Operating Parameters

Annual Hours Of Operation (hrs/yr)	AHOP := 7071
Maximum Heat Input Rate on fuel oil (mmBtu/hr) (lower heating value)	MHR1 := 446
Maximum Heat Input Rate on Natural Gas (mmBtu/hr) (lower heating value)	MHR2 := 446
Fuel Oil Heat Content (Btu/Gal)	FOHC := 132000
Fuel Oil Density (lb/gal)	FOD := 7.05
Natural Gas Heat Content (Btu/CF)	NGHC := 1000
Fuel Oil Sulfur Content (%)	FOSC := 0.4

Calculated Fuel Oil Usage Rate (lb/hr)

$$FOUR1 := MHR1 \cdot \frac{10^6}{FOHC} \cdot FOD \qquad FOUR1 = 2.38 \cdot 10^4$$

Calculated Fuel Oil Usage Rate (kgal/hr)

$$FOUR2 := \frac{FOUR1}{FOD \cdot 1000} \qquad FOUR2 = 3.379$$

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Client: City of Tallahassee
OFS No: 1000.4015.0027

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Sheet No.: 2 of 2
Calc. No.: 960425DH02

Rv'd: 04/25/96

Emission Estimates

The following emission estimates are provided as required by Rules 62-213.420(3)(c) F.A.C. The emission estimates are based on allowable emission limitations as specified by Rule or permit condition. The emission estimates provide hourly rates (lbs/hr) denoted with a "H" and annual emission rates (tons/year) denoted with an "A".

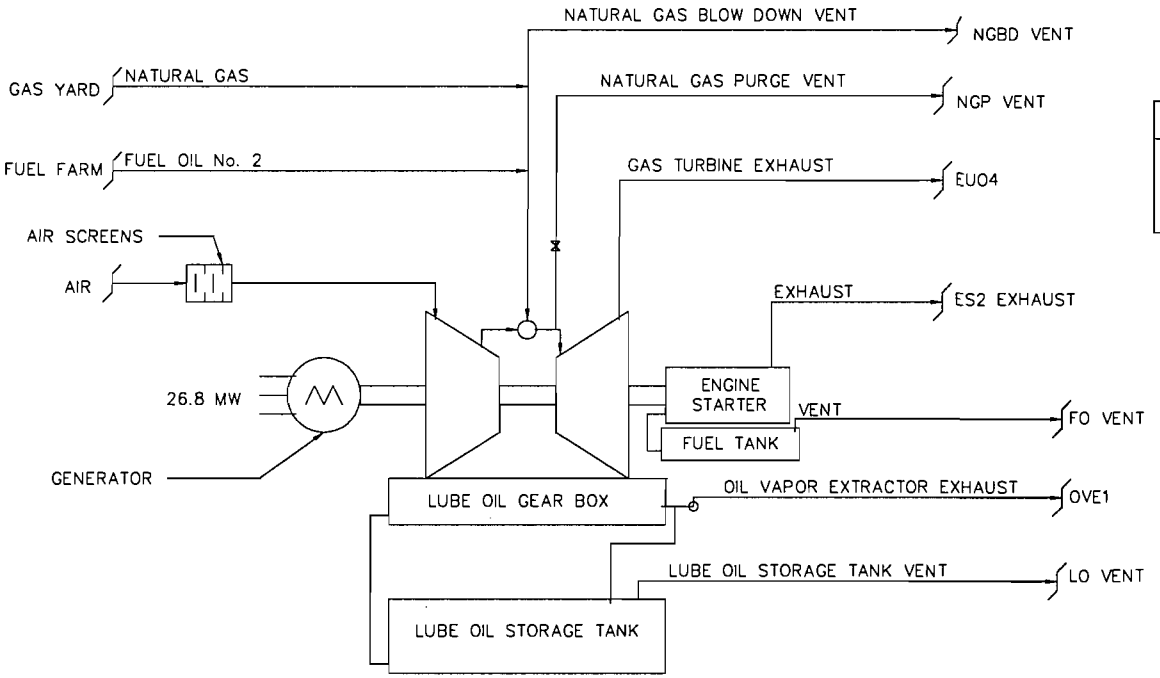
Emission Estimates - Segment No. 1 (Fuel Oil Firing)

Sulfur Dioxide (SO2) - Existing Operating Permit (Reference No. 1)

$$HSO2 := FOUR1 \cdot \frac{FOSC}{100} \cdot \frac{64}{32} \qquad HSO2 = 190.6$$

$$ASO2 := HSO2 \cdot \frac{AHOP}{2000} \qquad ASO2 = 674$$

ATTACHMENT EU04-02



CT2 – EXHAUST PARAMETERS
EXHAUST TEMP. – 874.4 F FLOW RATE – 707,144.2 ACFM SO2 EMISSIONS – 190.6 LBS/HR OPACITY – 20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 2 FUEL OIL
HEAT RATE (MMBTU/HR)	446	446
FEED RATE (MMCF/HR)	0.446	N/A
FEED RATE (KGAL/HR)	N/A	3.4
FEED RATE (LB/HR)	N/A	23,970

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

SIMPLIFIED PROCESS FLOW DIAGRAM
COMBUSTION TURBINE NO. 2

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE 04/30/96	BY: DJG CKD' BY: CJT REV. BY: CJT	CAD FILE NO. HCT2.DWG FIGURE NO. EU04-02

ATTACHMENT EU04-03

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU04, Combustion Turbine No.2. Maximum values could be higher. The fuels represented in the analyses are natural gas and #2 fuel oil.

United TESTING GROUP

United Testing Group, Inc., a subsidiary of Top Source Technologies, Inc.

TYPICAL ANALYSIS - #2 FUEL OIL

City of Tallahassee/Hopkins Station
Attn: Maintenance
Rt 4 Box 450 Geddie Rd.
Tallahassee, FL 32304

September 20, 1994
Sample No: 878
Id No: Not Identified
#1 tank.

****

Tank Cap:
Gallons:

Tank No:
Type Fuel: 2

****

A.P.I. GRAVITY @ 60 DEG/F	36.1
SPECIFIC GRAVITY @ 60 DEG/F	.844
FLASHPOINT DEG/C DEG/F	84/183.2
WATER PPM	44
SULFUR % BY WT.	0.31
ASH % BY WT.	<.01
WEIGHT/ML.	84.2
WEIGHT/GAL.	6.735
BTU/LB CALCULATED	19627.37
BTU/GAL CALCULATED	132197.949
CALCULATED CETANE	50.9

INHIBITOR RESPONSE (DUPONT), MAXIMUM ACCEPTABLE LEVEL (7):

INITIAL STABILITY	17
FINAL STABILITY	2

DISTILLATION:

IBP:	392	DEG/F
10%	435	DEG/F
50%	528	DEG/F
90%	596	DEG/F
END POINT	635	DEG/F

****

Sample meets the requirements for #2 diesel.
No algae contamination noted.
No contamination noted.
Recommend treating with fuel conditioner if fuel is to remain in storage.
Recommend treating at a rate of 1 to 200 gallons.
Recommend continual analysis to verify fuel quality.

Main Laboratory

1215 Kleppe Lane #9
Sparks, NV 89431
(702) 358-3869
(800) 524-7848
FAX (702) 358-3871

3121 Presidential Drive
Atlanta, GA 30340
(404) 454-8000
(800) 394-3669
FAX (404) 451-1500

1775 Cortland Court
Addison, IL 60101
(708) 691-8096
(800) 824-1461
FAX (708) 691-8156

TYPICAL ANALYSIS - NATURAL GAS

DATE: 05/13/96 ANALYSIS TIME: 225 STREAM SEQUENCE: 12
TIME: 08:09 CYCLE TIME: 240 STREAM#: 2
ANALYZER#: 382007 MODE: RUN CYCLE START TIME: 08:05

COMP NAME	COMP CODE	MOLE %	GAL/MCF**	B.T.U.*	REL DEN*
C 6 +	108	0.080	0.0357	4.23	0.0027
PROPANE	102	0.331	0.0912	8.35	0.0050
I-BUTANE	103	0.085	0.0278	2.77	0.0017
N-BUTANE	104	0.076	0.0240	2.49	0.0015
NEO C5	107	.000000	0.0000	0.00	0.0000
IPENTANE	105	0.039	0.0143	1.56	0.0010
NPENTANE	106	0.027	0.0098	1.08	0.0007
NITROGEN	114	0.424	0.0000	0.00	0.0041
METHANE	100	95.837	0.0000	970.16	0.5308
C O 2	117	0.728	0.0000	0.00	0.0111
ETHANE	101	2.373	0.6348	42.09	0.0246
TOTALS		100.000	0.8375	1032.73	0.5832

* @ 14.730 PSIA & UNCORRECTED FOR COMPRESSIBILITY

** 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z) = 1.0022
DRY B.T.U. @ 14.730 PSIA & 60 DEG. F CORRECTED FOR (1/Z) = 1035.0
REAL RELATIVE DENSITY = 0.5842
UNNORMALIZED TOTAL = 100.66
ANALOG INPUT CHANNEL 1 = H 2 S 140 = 1.5556
ANALOG INPUT CHANNEL 2 = WATER 144 = 2.7465

ACTIVE ALARMS

NONE

ATTACHMENT EU04-04

There are no regulatory standards or applicable permit conditions that require periodic testing of Combustion Turbine No. 2 (EU04). The existing operating permit (A037-242824) contains only one compliance testing condition which requires the performance of visible emissions tests in the fiscal years during which the individual turbine operates more than 400 hours. Therefore, stack sampling facilities are not available on the combustion turbine units at the City of Tallahassee Hopkins Generating Station.

ATTACHMENT EU04-05

The City of Tallahassees follows best operational practices in the startup and shutdown of the gas turbines at the Hopkins 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 EU04-06

Combustion Turbine No. 2 (EU04) is used as a peaking and emergency reserve unit. It is fueled by natural gas or fuel oil with a maximum of 0.4% sulfur. 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 26.8 MW. The current AMOs include the following:

Natural Gas Firing - Maximum Rate of 446 mmBtu/hr

Fuel Oil Firing - Maximum Rate of 446 mmBtu/hr

Fuel Grade No. 2

ATTACHMENT EU04-07

The additional requirements are included within the attached current state operating permit (AO37-242824). Specific Conditions which have already been addressed have been crossed out. The attached requirements are contained in a State of Florida Operating Permit, which is not federally enforceable. These requirements are not subject to the definition of "applicable requirements".

Revision Requests

The City of Tallahassee requests the following revisions to the attached Specific Conditions be incorporated into the Title V Operating Permit:

1. **Specific Condition No. 2** - The condition requires that emissions testing be conducted at 95-100% of the permitted rated heat input based on the ambient air temperature during the test. Based on a guidance memo dated September 18, 1996 issued by the FDEP Division of Air Resources Management addressing rate of operation during compliance testing for combustion turbines, the City of Tallahassee requests that the portion of Specific Condition No. 2 which addresses the rate of operation during emissions testing be replaced by the following language:

   "Testing of emissions shall be conducted with the source operating at capacity (maximum heat input rate for the inlet air temperature to the CT during the test). Capacity is defined as 90-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input versus inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report".

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Power Plant

I.D. Number: 10TLH37000302,03
Permit/Certification Number: AO37-242824
Date of Issue: March 8, 1994
Modification Date: June 10, 1994
Expiration Date: December 31, 1998

SPECIFIC CONDITIONS:

1. The attached General Conditions are part of this permit.

2. The maximum allowable operating rate for Combustion Turbine 1 is 228 MMBtu/hour (LHV) heat input; for Combustion Turbine 2, 446 MMBtu/hour (LHV) corrected to ambient temperature of 80 degrees Fahrenheit. Testing of emissions shall be conducted at 95-100% of the permitted rated heat input based on the average ambient air temperature during the test. Data for correcting heat input rates (corrected for temperatures other than 80 degrees Fahrenheit) must be submitted with the compliance test report. If it is impracticable to test at capacity, then sources may be tested at less than capacity; if the source is tested at less than capacity subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacity is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit with prior notification to the Department.

3. The maximum hours of operation are 8491 hours/year for Combustion Turbine 1, and 7071 hours/year for Combustion Turbine 2. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation annually.

4. The maximum allowable emission rate for each pollutant is as follows:

Pollutant	FAC Rule	Allowable Emissions
VE	17-296.310(2)	less than 20% opacity

5. Emissions tests for the following pollutants shall be performed annually between July 1 and August 31, in accordance with the test methods and frequency indicated, with notification to the Department 15 days prior to testing. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. For good cause, the Permittee may request an extension of a compliance test due date. However, inadequate planning of testing does not constitute good cause for an extension of the compliance test due date. The test report documentation must be submitted to the Department within 45 days after completion of testing.

Pollutant	Frequency	Test Method
VE	Annually	DEP 9

However, with the following exception, the visible emissions test shall only be required during those federal fiscal years during which the individual turbines operated greater than 400 hours.

A VE test is required in 1998 while operating on fuel oil.

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Power Plant

I.D. Number: 10TLH37000302,03
Permit/Certification Number: AO37-242824
Date of Issue: March 8, 1994
Modification Date: June 10, 1994
Expiration Date: December 31, 1998

SPECIFIC CONDITIONS:

6. The maximum sulfur content of the fuel oil is limited to 0.4% sulfur by weight. The Permittee shall maintain logs available for Department inspection of the fuel oil sulfur content.

7. Satisfactory ladders, platforms, and other safety devices as well as necessary parts shall be provided, maintained, and made available as necessary to facilitate compliance inspections.

8. An annual operation report [DEP Form 17-210.900(4) attached] shall be submitted by March 1 each year. The attached form shall be reproduced by the Permittee and used for future annual submittals.

9. In accordance with F.A.C. Rule 17-213, a Major Air Pollution Source Annual Operation Fee Form [DEP Form 17-213.900(11) attached] must be completed and submitted with appropriate fee between January 15 and March 1 of each year. If the Department has not received the fee payment by March 1, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee, plus interest on such amount computed in accordance with s.220.807, Florida Statutes. The Department may revoke any major air pollution source operation permit if it finds that the permit holder has failed to pay timely and required annual operation license fee, penalty or interest. The attached form shall be reproduced by the Permittee and used for future annual submittals. The completed form and appropriate fees must be submitted to the Department of Environmental Protection, Title V (Facility I.D. Number), 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

10. An application to renew this permit shall be submitted prior to December 31, 1998.

11. The permanent source identification number for these point sources are:

10TLH37000302 - Combustion Turbine 2
10TLH37000303 - Combustion Turbine 3

Please cite these numbers on all test reports and other correspondence specific to these permitted point sources.

12. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8300, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 488-1320. For routine business, use telephone number (904) 488-3704 during normal working hours.

Expiration Date:

March 1, 1999

Issued this 10th day of June, 1994.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

BOBBY A. COOLEY
District Director

EU - 05

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[**X**] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Boiler No. 1**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **001**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [**X**] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **The maximum allowable heat input is currently 903 mmBtu/hr. The maximum hours of operation are 8760 hours per year. This unit pre-dates PSD regulations.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **Foster Wheeler Corporation**	Model Number: **SF-5**
4. Generator Nameplate Rating: **75** MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **903** mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters):		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:			
24	hours/day	**7**	days/week
52	weeks/year	**8760**	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Emissions Unit Information Section 5 of 6

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Rule 62-210.700(1),(2),(3),(4),(6) F.A.C.	40 CFR 72.23
Rule 62-214.300 F.A.C.	40 CFR 72.30(a),(c),(d)
Rule 62-214.350(2),(3),(5),(6) F.A.C.	40 CFR 72.32
Rule 62-214.430(1) F.A.C.	40 CFR 72.40(a)(c)(d)
Rule 62-296.405(1)(a),(b),(c)1,h, F.A.C.	40 CFR 72.51
Rule 62-296.405(1)(f)1,b,(e)1,2,3;(f)1a(i)	40 CFR 72.90
Rule 62-297.310(1) F.A.C.	40 CFR 73.33(c)(d)(e)
Rule 62-297.310(2)(b) F.A.C.	40 CFR 73.35(c)(1)
Rule 62-297.310(3) F.A.C.	40 CFR 75.4
Rule 62-297.310(4) F.A.C.	40 CFR 75.5
Rule 62-297.310(5) F.A.C.	40CFR 75.10(a)(1),(a)(2),(a)(3)(ii)(b)-(d),(f),(g)
Rule 62-297.310(6)(a),(c)-(g) F.A.C.	40 CFR 75.11(d)(2)
Rule 62-297.310(7)(a)2,3,4,5,9,(c) F.A.C.	40 CFR 75.12(a),(b)
Rule 62-297.310(8) F.A.C.	40 CFR 75.13(a),(b)
40 CFR 72.9(a),(b),(c)(1)-(3)(iii),(d)-(g)	40 CFR 75.14(c)
40 CFR 72.20(a)-(c)	40 CFR 75.20(a)(5),(b),(c),(d),(g)
40 CFR 72.21	40 CFR 75.21(a),(c)
40 CFR 72.22	

Emissions Unit Information Section 5 of 6

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 75.22	40 CFR 75.64
40 CFR 75.24	40 CFR 75, Appendix A
40 CFR 75.30(a)(3),(d)(2)	40 CFR 75, Appendix B
40 CFR 75.31	40 CFR 75, Appendix C
40 CFR 75.32	40 CFR 75, Appendix D
40 CFR 75.33(a),(c)	40 CFR 75, Appendix G(2),(4)
40 CFR 75.53	40 CFR 75, Appendix H
40 CFR 75.54 [except (f)]	40 CFR 77.3
40 CFR 75.55(c)	40 CFR 77.5(b)
40 CFR 75.56	40 CFR 77.6
40 CFR 75.60	
40 CFR 75.61	
40 CFR 75.62	
40 CFR 75.63	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU05**
2. Emission Point Type Code: [**X**] 1 [ ] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emission point, EU05, represents the exhaust for Boiler No. 1.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [**X**] V [ ] W
6. Stack Height: **200** feet
7. Exit Diameter: **11.0** feet
8. Exit Temperature: **260.6** F
9. Actual Volumetric Flow Rate: **223,755** acfm

10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters):	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment **1** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural Gas**	
2. Source Classification Code (SCC): **10100601**	
3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **0.903**	5. Maximum Annual Rate: **7.9 x 10^3**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **No. 6 Fuel Oil**	
2. Source Classification Code (SCC): **10100401**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **6020**	5. Maximum Annual Rate: **52.7 x 10^6**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment **3** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **On-Spec Used Oil**	
2. Source Classification Code (SCC): **10100401**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **6020**	5. Maximum Annual Rate: **10,000**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates are based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Emissions Unit Information Section 5 of 6

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate Fuel Oils**	
2. Source Classification Code (SCC): **10100501**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **6841**	5. Maximum Annual Rate: **5.99 x 10^7**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.132**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment **5** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Any mixture of Fuel Oil No.6 (Residual Oil) ,On-Spec Used Oil, Distillate Fuel Oil, or Natural Gas**	
2. Source Classification Code (SCC):	
3. SCC Units: **Gallons/mmSCF**	
4. Maximum Hourly Rate: **6020/0.903**	5. Max. Annual Rate: **$5.27 \times 10^{7} / 7.9 \times 10^{3}$**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15 / 1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation and operating usages for Fuel Oil No. 6. The purpose of this segment is to indicate the potential to co-fire multiple fuels. In order to provide maximum hourly rates for the co-firing of a liquid and gaseous fuel, the maximum of each fuel is provided.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			**NS**
NOX			**NS**
PM			**EL**
PM10			**NS**
SO2			**EL**
VOC			**NS**
PB			**NS**
H027			**NS**
H095			**NS**
H106			**NS**
H107			**NS**
H133			**NS**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant **1** of **2**

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **677.25** lb/hour, **2966** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year
6. Emission Factor: **0.75 lb/mmBtu** Reference: **FDEP Operating Permit No. A037-242825**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Allowable Emission Rate: 0.75 lb/mmBtu** **Max Heat Input Rate: 903 mmBtu/hr** **lb/hr =(0.75 lb/mmBtu) x (903 mmBtu/hr) = 677.25 lb/hr** **TPY = (677.25 lb/hr) x (8760 hrs/yr) x (ton/2000 lb) = 2966 TPY** **See Attachment EU05-01**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **The current maximum allowable emission rate is 0.75 lb/mmBtu and the maximum heat input rate is 903 mmBtu/hr. Potential SO2 emissions are estimated utilizing these allowable rates and the maximum annual operating schedule of 8760 hours.**

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **OTHER**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.75 lb/mmBtu**
4. Equivalent Allowable Emissions: **677.25** lb/hour **2966** tons/year
5. Method of Compliance (limit to 60 characters): **Records of fuel oil sulfur content as received by vendor are maintained and kept available for Department Inspections.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitation entered in Field 3 reflects the maximum allowable emission rate listed in Specific Condition No. 4 in current operating Permit No. AO65-242831. The federally enforceable limitation established through the SIP is 1.87 lb/mmBtu.**

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Emissions Unit Information Section 5 of 6

Pollutant Detail Information: Pollutant 2 of 2

1. Pollutant Emitted: **PM**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **90.3** lb/hour, **494.4** tons/year

4. Synthetically Limited?
   [ ] Yes [**X**] No

5. Range of Estimated Fugitive/Other Emissions:
   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor: **0.1 lb/mmBtu (0.3 lb/mmBtu during Excess Emissions)**
   Reference: **62-296.405(1)(b) and 62-210.700, F.A.C**

7. Emissions Method Code:
   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):
Allowable Emission Rate: 0.1 lb/mmBtu and 0.3 lb/mmBtu during excess Emissions
Max Heat Input Rate = 621 mmBtu/hr
Estimated 12.5% Excess Emissions

lb/hr (annual average)=(1-.125)x(903 mmBtu/hr x 0.1lb/mmBtu)+(.125)x(903 mmBtu/hr x 0.3 lb/mmBtu)
lb/hr = 112.88

TPY = (112.88 lb/hr) x (8760 hrs/yr) x (ton/2000 lb) = 494.4 TPY

See Attachment EU05-01

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

The current 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 903 mmBtu/hr. Annual Potential PM emissions are estimated utilizing these allowable rates, the maximum annual operating schedule of 8760 hours, and an estimated occurance of excess emissions of 12.5%.

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/mmBtu**
4. Equivalent Allowable Emissions: **90.3** lb/hour **494.4** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Methods 1,2,3,5, or 17 in any fiscal year in which the fossil fuel system generator burns more than 400 hrs of fuel oil other than startup.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitations entered in Field 3 reflect the maximum allowable emission rates listed in Specific Condition No. 4 in current operating Permit No. AO37-242825. These requirements are found in 62-296.405(1)(b) and 62-210.700(3), F.A.C.**

B.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.3 lb/mmBtu**
4. Equivalent Allowable Emissions: **270.9 lb/hr**
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Excess Emissions Rule 62-210.700(3), F.A.C**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

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

1. Visible Emissions Subtype: **VE20**
2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: **40 %** Maximum Period of Excess Opacity Allowed: **2** 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 (limit to 200 characters):

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

1. Visible Emissions Subtype: **VE60**
2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **60 %** Exceptional Conditions:**100 %** Maximum Period of Excess Opacity Allowed: ***See Field 5**
4. Method of Compliance
5. Visible Emissions Comment (limit to 200 characters): **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**

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code:	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: **Daniel** Model Number: **Flange Neck**	Serial Number: **94060041**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **12-16-94**	
7. Continuous Monitor Comment (limit to 200 characters): **Orifice Meter. Installed in accordance with Rule 62-214.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code:	2. Pollutant(s): **Oil Fuel Flow Monitor (2)**
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: **MicroMotion** Model Number: **DS300S157SU**	Serial Number: **175266 & 174173**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **12-16-94**	
7. Continuous Monitor Comment (limit to 200 characters): **Coriolis Type Meter. Installed in accordance with Rule 62-214.320, F.A.C., Rule 62- 214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

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

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Teco** Model Number: **42D**	Serial Number: **42D44256271**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **5-25-95 (certification date)**	
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 62-214.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

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

1. Parameter Code: **CO2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Teco** Model Number: **41H**	Serial Number: **41H48615281**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **12-16-94**	
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 214.320, F.A.C., Rule 214.330, F.A.C., and 40 CFR Part 75.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[**X**] Unknown
SO2	[ ] C	[ ] E	[**X**] Unknown
NO2	[ ] C	[ ] E	[**X**] Unknown
4. Baseline Emissions:			
PM		lb/hour	tons/year
SO2		lb/hour	tons/year
NO2			tons/year
5. PSD Comment (limit to 200 characters):			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [**X**] Attached, Document ID: **EU05-02** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU05-03** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU05-04** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [**X**] Previously submitted, Date: **August 24, 1995** [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU05-05** [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation
[**X**] Attached, Document ID: **EU05-06** [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Identification of Additional Applicable Requirements
[**X**] Attached, Document ID: **EU05-07** [ ] Not Applicable

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[**X**] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **EU05-08**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT EU05-01

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Rv'd: 04/25/96

Client: City of Tallahassee
OFS No: 1000.4015.0027

Sheet No.: 1 of 2
Calc. No.: 960425DH03

Emission Unit Description:
The emissions unit is a Foster-Wheeler Corporation steam generator designated Boiler No. 1. The unit is currently operating under a nonfederally enforceable operating permit issued by the FDEP. The unit has been assigned the tracking number 10TLH37000301. The unit pre-dates the PSD regulations. The unit is capable of firing residual fuel oil, on-spec used oil, natural gas, any of the lighter fuel oils (i.e., fuel oil Nos. 5, 4, ..) or any combination of these fuels. The unit is currently rated for a maximum heat input rate of 903 mmBtu/hr when firing fuel oil or natural gas and a nominal 75 MW and 750,00 0 lbs/hr of steam. The existing operating permit allows continuous operation with restrictions on VE (20% & excess emissions), PM (0.1lb/mmBtu - normal operation & 0.3 lb/mmBtu - soot blowing), and SO2 (0.75 lb/mmBtu & sulfur content of 0.7% by wt). The federally enforceable emission limitations established through the SIP are the same as those in the permit with the exception of SO2 which is set at 1.87 lbs/mmBtu.

References:
No. 1 - FDEP Permit No. AO37-242825, Spec. Condition Nos. 3, 4 & 6
No. 2 -FDEP Rules 62-210.700(1),(2), & (3), 62-296.405(1)(a),(b),(c),1.h

Operating Parameters

Annual Hours Of Operation (hrs/yr)	AHOP := 8760
Maximum Heat Input Rate (mmBtu/hr) (lower heating value)	MHR1 := 903
Fuel Oil Heat Content (Btu/Gal)	FOHC := 150000
Fuel Oil Sulfur Content (%wt)	FOSC := 0.7
Natural Gas Heat Content (Btu/CF)	NGHC := 1000

Calculated Fuel Oil Usage Rate (kgal/hr)

$$FOUR := MHR1 \cdot \frac{10^6}{FOHC \cdot 1000} \qquad FOUR = 6.02$$

Calculated Natural Gas Usage Rate (mmCF/hr)

$$NGUR := MHR1 \cdot \frac{10^6}{NGHC \cdot 10^6} \qquad NGUR = 0.903$$

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Client: City of Tallahassee
OFS No: 1000.4015.0027

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Sheet No.: 2 of 2
Calc. No.: 960425DH03

Rv'd: 04/25/96

Emission Estimates

The following emission estimates are provided as required by Rules 62-213.420(3)(c)1, 2, 3 and 4, FAC. The emission estimates are based on allowable emission limitations as specified by Rule or permit condition. The emission estimates provide hourly rates (lbs/hr) denoted with a "H" and annual emission rates (tons/year) denoted with an "A". Allowable emission rates are expressed in units of lb/mmBtu and designated ER (eg., ERSO2 = 0.75 lb/mmBtu).

Emission Estimates - Segment No. 1 (Fuel Oil Firing)

Sulfur Dioxide (SO2) - Existing Operating Permit (Reference No. 1)

$ERSO2 := 0.75$

$HSO2 := ERSO2 \cdot MHR1$ $\quad HSO2 = 677.25$

$ASO2 := HSO2 \cdot \frac{AHOP}{2000}$ $\quad ASO2 = 2.966 \cdot 10^{3}$

Particulate Matter (PM) - (References No. 1 & 2) based on 12.5% excess emissions

$ER1PM := 0.1$

$ER2PM := 0.3$

$H1PM := MHR1 \cdot ER1PM$ $\quad H1PM = 90.3$ Allowable Emissions

$H2PM := MHR1 \cdot ER2PM$ $\quad H2PM = 270.9$ Excess Emissions

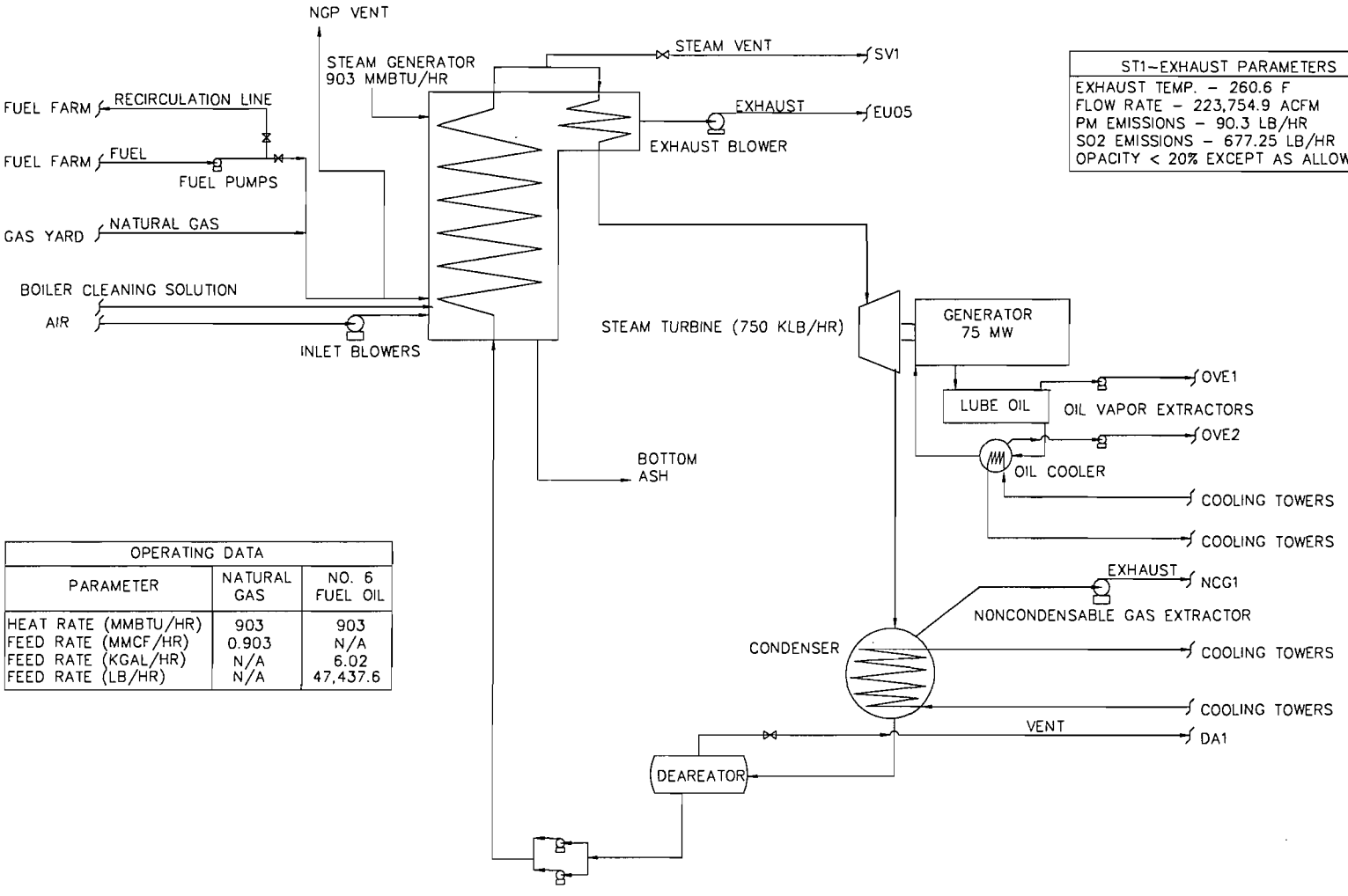
$HPM := (1 - .125) \cdot H1PM + .125 \cdot H2PM$ Annual Average

$HPM = 112.9$

$APM := HPM \cdot \frac{AHOP}{2000}$

$APM = 494.4$

ATTACHMENT EU05-02



ST1–EXHAUST PARAMETERS
EXHAUST TEMP. – 260.6 F
FLOW RATE – 223,754.9 ACFM
PM EMISSIONS – 90.3 LB/HR
SO2 EMISSIONS – 677.25 LB/HR
OPACITY < 20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 6 FUEL OIL
HEAT RATE (MMBTU/HR)	903	903
FEED RATE (MMCF/HR)	0.903	N/A
FEED RATE (KGAL/HR)	N/A	6.02
FEED RATE (LB/HR)	N/A	47,437.6

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

SIMPLIFIED PROCESS FLOW DIAGRAM
STEAM GENERATOR NO. 1

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 04/30/96	BY: DJG CKD' BY: CJT REV. BY: CJT	CAD FILE NO. HSG1.DWG FIGURE NO. EU05–02

ATTACHMENT EU05-03

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU05, Boiler No.1. Maximum values could be higher. The fuels represented in the analyses are natural gas, fuel oil, and on-spec waste oil..

.AW ENVIRONMENTAL

TYPICAL ANALYSIS - FUEL OIL

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

7/95

--- Project Information ---

U 1

Ronnie Griffin
City of Tallahassee Env. Office
Route 4, Box 448 - Geddie Road
Tallahassee, FL 32304

Page 1
Project Name: CRM2
Project #473384

--- Sample Information ---

Station ID: HP 8/2/95 #3 08:04
Lab ID: AA76396
Collector: KELLEY

Date Sampled: 08/02/95
Time Sampled: 08:04
Log In Date: 08/09/95
Log In Time: 11:32

--- Test Information ---

Parameter	Units	Method	Det Lim	Result	Analysis Date	Tech
521-D240 Heat Content	BTU/l	ASTM D240	100	18159	08/14/95	
520-ASTM D 129-91 Sulfur	%	ASTM D129-91	0.10	1.07	08/14/95	

Remarks:

Signed: _____

James M.G. Tucci
Laboratory Manager

TYPICAL ANALYSIS - NATURAL GAS

DATE: 05/13/96 ANALYSIS TIME: 225 STREAM SEQUENCE: 12
TIME: 08:09 CYCLE TIME: 240 STREAM#: 2
ANALYZER#: 362007 MODE: RUN CYCLE START TIME: 08:05

COMP NAME	COMP CODE	MOLE %	GAL/MCF**	B.T.U.*	REL DEN*
C 6 +	108	0.080	0.0357	4.23	0.0027
PROPANE	102	0.331	0.0912	8.35	0.0050
I-BUTANE	103	0.085	0.0278	2.77	0.0017
N-BUTANE	104	0.076	0.0240	2.49	0.0015
NEO C5	107	.000000	0.0000	0.00	0.0000
IPENTANE	105	0.039	0.0143	1.56	0.0010
NPENTANE	106	0.027	0.0098	1.08	0.0007
NITROGEN	114	0.424	0.0000	0.00	0.0041
METHANE	100	95.837	0.0000	970.16	0.5308
C O 2	117	0.728	0.0000	0.00	0.0111
ETHANE	101	2.373	0.6348	42.09	0.0246
TOTALS		100.000	0.8375	1032.73	0.5832

@ 14.730 PSIA & UNCORRECTED FOR COMPRESSIBILITY

* 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z) = 1.0022
DRY B.T.U. @ 14.730 PSIA & 60 DEG. F CORRECTED FOR (1/Z) = 1035.0
REAL RELATIVE DENSITY = 0.5842
UNNORMALIZED TOTAL = 100.66
ANALOG INPUT CHANNEL 1 = H 2 S 140 = 1.5556
ANALOG INPUT CHANNEL 2 = WATER 144 = 2.7465

CTIVE ALARMS

ONE

TYPICAL ANALYSIS - USED OIL

Telephone
(904) 725-2040
FAX
(904) 727-9720

SOUTHEASTERN CHEMISTS' LABORATORIES
P.O. Box 8917
Jacksonville, FL 32239

Report Date: October 1, 1992

Laboratory Marks: Job # 34937 Date Sampled:

Sample of: Waste Oil Date Received: September 18, 1992

Client: City of Tallahassee, Hopkins Power Plant Rt. 4 Box 450 Geddie Road, Tallahassee, FL 32304
Sample Marks: Hopkins Power Plant

CERTIFICATE OF ANALYSIS

Parameters	Method	Results		Analyst	Date/Time
Total Organic Halogens (as chlorine) % by weight	ASTM D808	<0.1	%	FAR	9-21-92/1300
Flashpoint	ASTM D93	>140	F	FAR	9-21-92/1100
Arsenic	SW 7060	<0.010	mg/kg	DDA	9-23-92/1000
Cadmium	SW 7130	0.05	mg/kg	MAZ	10-1-92/1100
Chromium	SW 7190	<0.50	mg/kg	MAZ	10-1-92/1200
Lead	SW 7420	3.53	mg/kg	MAZ	9-25-92/1100

All samples analyzed in accordance with EPA, ASTM, or other approved methods.

Respectfully submitted,

Joseph W. Newton, President
EPA Accreditation #4352 DER #900384G
NIOSH Accreditation #32211 HRS #E82253
EPA Inspector #I153, 381 HRS #82366
EPA Management #M123, 352
NIST/NAVLAP Accreditation #1632

JWN/pa

ATTACHMENT EU05-04

Unit1 at the Arvah B. Hopkins Generating Station (EU05) requires stack sampling on an annual basis. As such, permanent stack testing facilities have been installed on the unit's exhaust stack. All test facilities are in accordance with Rule 297.310(6), Florida Administrative Code (F.A.C.). These facilities also meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E. Testing equipment which is not permanently mounted, such as safety harnesses and electrical outlets are made available for use by sampling personnel during each sampling event. Detailed drawings are attached.

ATTACHMENT EU05-05

The City of Tallahassees follows best operational practices in the startup and shutdown of the boilers at the Hopkins 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 EU05-06

Boiler No. 1 (EU05) has a rated capacity of 903 mmBtu/hr heat input and is fueled by natural gas and/or fuel oil. The alternative methods of operation (AMO) associated with the boiler are related to the type of fuel being fired and load. The boiler produces nominally 750,000 pounds of steam per hour to run a nominal 75 MW turbine generator. The current AMOs include the following:

Natural Gas Firing - Up To Maximum Rate of 903 mmBtu/hr

Fuel Oil Firing -Up To Maximum Rate of 903 mmBtu/hr

Fuel Grade No. 6
On-Spec Used Oil
Distillate Fuel Oils
Co-firing any combination of Fuel Oil No. 6, Distillate Fuel Oils, On-Spec Used Oil, or Natural Gas up to 903 mmBtu/hr

ATTACHMENT EU05-07

The additional requirements are included within the attached current state operating permit (AO37-242825). Specific Conditions which have already been addressed have been crossed out. The attached requirements are contained in a State of Florida Operating Permit, which is not federally enforceable. These requirements are not subject to the definition of "applicable requirements".

Revision Requests

The City of Tallahassee requests the following revisions to the attached Specific Conditions be incorporated into the Title V Operating Permit as federally enforceable requirements:

1. **Specific Condition No. 6 - The condition specifies that, if firing 100% fuel oil, the sulfur content shall not exceed 0.7% by weight. A sulfur dioxide limit of 0.75 lb/mmBtu is already specified in Specific Condition No. 4. This limit is approximately equal to the 0.7% limit specified in Specific Condition No. 6. The City of Tallahassee requests that this redundancy be eliminated by removing the conditions contained in Specific Condition No. 6.**

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Plant

I.D. Number: 10TLH37000301
Permit/Certification Number: AO37-242825
Date of Issue: March 8, 1994
Expiration Date: March 1, 1999

SPECIFIC CONDITIONS:

1. The attached General Conditions are part of this permit.

2. The maximum allowable heat input rate is 903 MMBtu/hour. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90 to 100% of the maximum allowable heat input rate for the fuel or mix of fuels being burned. If it is impracticable to test at capacity, then sources may be tested at less than capacity; if the source is tested at less than capacity subsequent source operation is limited to 110% of the test capacity until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department.

3. The maximum hours of operation are 24 hours/day, 7 days/week, and 52 weeks/year. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation annually.

4. The maximum allowable emission rate for each pollutant is as follows:

Pollutant	FAC Rule	Allowable Emissions
VE	17-296.405 17-210.700	20% opacity* 60% during Excess Emissions
PM	17-296.405 17-210.700	0.10 lb/MMBtu** 0.30 lb/MMBtu during Excess Emissions**
SO_2	17-296.300	0.75 lb/MMBtu

* except for one two-minute period per hour of not more than 40% opacity

** PM emissions shall not exceed 0.1 (normal operations) and 0.3 (during excess emissions) lbs/MMBtu heat input when firing fuel oil. The PM limit shall apply when firing natural gas.

The excess emissions provision of F.A.C. Rule 17-210.700 shall apply during periods of startup, shutdown and malfunctions.

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Plant

I.D. Number: 10TLH37000301
Permit/Certification Number: AO37-242825
Date of Issue: March 8, 1994
Expiration Date: March 1, 1999

SPECIFIC CONDITIONS:

5. Emissions tests for the following pollutants shall be performed annually between August 1 and September 30, in accordance with the test methods and frequency indicated below, with notification to the Department 15 days prior to testing. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. For good cause, the Permittee may request an extension of a compliance test due date. However, inadequate planning of testing does not constitute good cause for an extension of the compliance test due date. The test report documentation must be submitted to the Department within 45 days after completion of testing.

Pollutant	Frequency	Test Method
VE*	Annually, during normal operations	DEP 9
	Annually, during excess emissions, when applicable	DEP 9 → Soot Blowing
PM*,*1	Annually	EPA 1, 2, 3 and 5 or 17
	Annually, during excess emissions, when applicable	EPA 1, 2, 3, and 5 or 17

* Shall be conducted using the maximum fuel oil to gas ratio in use during the current test year.

*1 No particulate emissions test shall be required in any federal fiscal year in which the fossil fuel system generator did not burn fuel oil for more than 400 hours other than during startup.

The VE test shall be conducted during one of the P.M. test runs. Test reports shall comply with F.A.C. Rule 17-297.570, Test Reports. The Department can require special compliance tests in accordance with F.A.C. Rule 17-297.340(2).

6. If fueled 100% by oil the sulfur content of the oil shall not exceed 0.7% by weight. Records of fuel oil sulfur content shall be kept and made available for Department inspections.

7. Satisfactory ladders, platforms, and other safety devices as well as necessary parts shall be provided, maintained, and made available as necessary to facilitate compliance inspections. [ ] Applicable Regulations

8. An annual operation report [DEP Form 17-210.900(4) attached] shall be submitted by March 1 each year. The attached form shall be reproduced by the Permittee and used for future annual submittals. [Febr. 24, 1994]

PERMITTEE:

City of Tallahassee
Arvah B. Hopkins Plant

I.D. Number: 10TLH37000301
Permit/Certification Number: AO37-242825
Date of Issue: March 8, 1994
Expiration Date: March 1, 1999

SPECIFIC CONDITIONS:

9. In accordance with F.A.C. Rule 17-213, a Major Air Pollution Source Annual Operation Fee Form [DEP Form 17-213.900(11) attached] must be completed and submitted with appropriate fee between January 15 and March 1 of each year. If the Department has not received the fee payment by March 1, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee, plus interest on such amount computed in accordance with s. 220.807, Florida Statutes. The Department may revoke any major air pollution source operation permit if it finds that the permit holder has failed to pay timely and required annual operation license fee, penalty or interest. The attached form shall be reproduced by the Permittee and used for future annual submittals. The completed form and appropriate fees must be submitted to the Department of Environmental Protection, Title V (Facility I.D. Number), 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

10. An application to renew this permit shall be submitted prior to December 31, 1998.

11. The permanent source identification number for this point source is 10TLH37000301. Please cite this number on all test reports and other correspondence specific to this permitted point source.

12. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8300, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 488-1320. For routine business, use telephone number (904) 444-8300 during normal working hours.

Expiration Date:

March 1, 1999

Issued this 8th day of March, 1994.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

BOBBY A. COOLEY
District Director

ATTACHMENT EU03-08

Phase II Permit 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: X New ☐ Revised

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

Arvah B. Hopkins	FL	688
Plant Name	State	ORIS Code

STEP 2
Enter the boiler ID# from NADB for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

		Compliance Plan			
a	b	c	d	e	
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units	New Units	
			Commence Operation Date	Monitor Certification Deadline	
1	Yes	No			
2	Yes	No			
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ - For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

Arvah B. Hopkins

Plant Name (from Step 1)

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard Requirements

Permit 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, 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 permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
(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 permitting authority; 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)) 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)(i) 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 permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 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 Administrator or permitting authority:
(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;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Arvah B. Hopkins

Plant Name (from Step 1)

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 a written 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 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, 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 a written exemption under 40 CFR 72.7 or 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.

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	**Rob E. McGarrah, Production Superintendent**	
Signature		Date **December 15, 1995**

EP 5 (optional)
er the source AIRS
nd FINDS identification
numbers, if known

AIRS
FINDS

EU - 06

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[**X**] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[**X**] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Boiler No. 2**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **004**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [**X**] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **The maximum heat input rate, 2500 mmBtu/hr, although not explicitly identified in the Site Certification for Boiler No.2, is the heat input rate required to achieve the maximum production capacity of the boiler. This heat input rate applies to the firing of natural gas and any mixture of natural gas with other fuel oils. The maximum heat input rate when firing 100 % fuel oil is 2325 mmBtu/hr , and is based on sulfur dioxide AAQS and PSD modeling analyses completed by the City of Tallahassee in August, 1992 that correspond with the 1.4 mmBtu/hr limit indicated in the Site Certification. The maximum hours of operation are 8760 hours per year. This unit does consume PSD increment.**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

B.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **Babcock & Wilcox**	Model Number: **RB-533**
4. Generator Nameplate Rating: **238** MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **2500** mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters): **The maximum heat input rate, 2500 mmBtu/hr, although not explicitly identified in the Site Certification for Boiler No.2, is the heat input rate required to achieve the maximum production capacity of the boiler. No physical change or change in the method of operation of boiler No. 2 have occurred to this boiler since initiation of operation.**		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:			
24	hours/day	**7**	days/week
52	weeks/year	**8760**	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Emissions Unit Information Section 6 of 6

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Rule 62-210.700(1),(4),(6) F.A.C.	40 CFR 72.23
Rule 62-214.300 F.A.C.	40 CFR 72.30(a),(c),(d)
Rule 62-214.350(2),(3),(5),(6) F.A.C.	40 CFR 72.32
Rule 62-214.430(1) F.A.C.	40 CFR 72.40(a)(c)(d)
Rule 62-296.405(1)(a),(b),(c)1h F.A.C.	40 CFR 72.51
Rule 62-296.405(1),(d)3,(f)1,b,(c)1,2,3,4;(f)1a(i)	40 CFR 72.90
Rule 62-297.310(1) F.A.C.	40 CFR 73.33(c)(d)(e)
Rule 62-297.310(2)(b) F.A.C.	40 CFR 73.35(c)(1)
Rule 62-297.310(3) F.A.C.	40 CFR 75.4
Rule 62-297.310(4) F.A.C.	40 CFR 75.5
Rule 62-297.310(5) F.A.C.	40CFR 75.10(a)(1),(a)(2),(a)(3)(ii)(b)-(d),(f),(g)
Rule 62-297.310(6)(a),(c)-(g) F.A.C.	40 CFR 75.11(d)(2)
Rule 62-297.310(7)(a)2,3,4,5,9,(c) F.A.C.	40 CFR 75.12(a),(b)
Rule 62-297.310(8) F.A.C.	40 CFR 75.13(a),(b)
40 CFR 72.9(a),(b),(c)(1)-(3)(iii),(d)-(g)	40 CFR 75.14(c)
40 CFR 72.20(a)-(c)	40 CFR 75.20(a)(5),(b),(c),(d),(g)
40 CFR 72.21	40 CFR 75.21(a),(c)
40 CFR 72.22	

Emissions Unit Information Section 6 of 6

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 75.22	40 CFR 75.64
40 CFR 75.24	40 CFR 75, Appendix A
40 CFR 75.30(a)(3),(d)(2)	40 CFR 75, Appendix B
40 CFR 75.31	40 CFR 75, Appendix C
40 CFR 75.32	40 CFR 75, Appendix D
40 CFR 75.33(a),(c)	40 CFR 75, Appendix G(2),(4)
40 CFR 75.53	40 CFR 75, Appendix H
40 CFR 75.54 [except (f)]	40 CFR 77.3
40 CFR 75.55(c)	40 CFR 77.5(b)
40 CFR 75.56	40 CFR 77.6
40 CFR 75.60	
40 CFR 75.61	
40 CFR 75.62	
40 CFR 75.63	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU06**
2. Emission Point Type Code: [**X**] 1 [ ] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This emission point, EU06, represents the exhaust for Boiler No. 2.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [**X**] V [ ] W
6. Stack Height: **250** feet
7. Exit Diameter: **14.0** feet
8. Exit Temperature: **260.6** F

9. Actual Volumetric Flow Rate: **636,706**	
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters):	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural Gas**	
2. Source Classification Code (SCC): **10100601**	
3. SCC Units: **mmSCF**	
4. Maximum Hourly Rate: **2.5**	5. Maximum Annual Rate: **2.19x 10^4**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **No. 6 Fuel Oil**	
2. Source Classification Code (SCC): **10100401**	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **15500**	5. Maximum Annual Rate: **135.7 x 10^6**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment **3** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **On-Spec Used Oil**	
2. Source Classification Code (SCC):	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **15500**	5. Maximum Annual Rate: **10,000**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates are based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Segment Description and Rate: Segment **4** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate Fuel Oils**	
2. Source Classification Code (SCC):	
3. SCC Units: **Gallons**	
4. Maximum Hourly Rate: **17,614**	5. Maximum Annual Rate: **1.54×10^8**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.132**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

Emissions Unit Information Section 6 of 6

Segment Description and Rate: Segment **5** of **5**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Any mixture of Fuel Oil No.6 (Residual Oil) ,On-Spec Used Oil, Distillate Fuel Oil, or Natural Gas**	
2. Source Classification Code (SCC):	
3. SCC Units: **Gallons/mmSCF**	
4. Maximum Hourly Rate: **15,500 / 2.5**	5. Max. Annual Rate:**1.36 x 10^8 / 2.19 x 10^4**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: ***See Field 10**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **0.15/1000**	
10. Segment Comment (limit to 200 characters): **Maximum Hourly and Annual Rates based on 8760 hours per year operation and operating usages for Fuel Oil No.6. The purpose of this segment is to indicate the potential to co-fire multiple fuels. In order to provide maximum hourly rates for the co-firing of a liquid and gaseous fuel, the maximum of each fuel is provided.** ***This unit is operated in accordance with allowable limits contained in its operating permit. No limitation applies to maximum percent sulfur. Upon receipt of information pertaining to the sulfur content of fuels, the City of Tallahassee co-fires fuels as necessary to meet the sulfur dioxide emissions limitation. Thus, the City of Tallahassee maintains no expectation regarding the maximum percent sulfur in any single fuel.**	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			**NS**
NOX			**EL**
PM			**EL**
PM10			**NS**
SO2			**EL**
VOC			**NS**
PB			**NS**
H015			**NS**
H027			**NS**
H046			**NS**
H047			**NS**
H095			**NS**
H106			**NS**
H107			**NS**
H113			**NS**
H133			**NS**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information: Pollutant **1** of **3**

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **3.26×10^3** lb/hour, **1.43×10^4** tons/year

4. Synthetically Limited?
   [ ] Yes [X] No

5. Range of Estimated Fugitive/Other Emissions:
   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor: **1.4 lb/mmBtu**
   Reference: **Site Certification Unit 2 (PA 74-03D)**

7. Emissions Method Code:
   [X] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   Allowable Emission Rate: 1.4 lb/mmBtu
   Max Heat Input Rate: 2325 mmBtu/hr

   lb/hr =(1.4 lb/mmBtu) x (2325mmBtu/hr) = 3.26×10^3 lb/hr

   TPY = (3.26×10^3 lb/hr) x (8760 hrs/yr) x (ton/2000 lb) = 1.43×10^4 TPY

   See Attachment EU06-01

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):
   The Hopkins Conditions of Certification (PA 74-03D) - Special Condition 1(A) limits emissions of sulfur dioxide to 1.4 lb/mmBtu and the maximum fuel oil heat input rate is 2325 mmBtu/hr. Potential SO2 emissions are estimated utilizing these allowable rates and the maximum annual operating schedule of 8760 hours.

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **1.4 lb/mmBtu**
4. Equivalent Allowable Emissions: **3.26 x10^{3}** lb/hour **1.43 x10^{4}** tons/year
5. Method of Compliance (limit to 60 characters): **Records of fuel oil sulfur content as received from the vendor are maintained and kept available for Department Inspections.**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitation entered in Field 3 reflects the emissions limitation contained in the Hopkins Conditions of Certification (PA 74-03D). The federally enforceable limitation established through the SIP is 1.87 lb/mmBtu.**

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Emissions Unit Information Section 6 of 6

Pollutant Detail Information: Pollutant 2 of 3

1. Pollutant Emitted: **PM**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **232.5**/hour, **1.02 x10^3** tons/year

4. Synthetically Limited?
   [ ] Yes [**X**] No

5. Range of Estimated Fugitive/Other Emissions:
   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year

6. Emission Factor: **0.1 lb/mmBtu**
   Reference: **62-296.405(1)(b), F.A.C.**

7. Emissions Method Code:
   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

Allowable Emission Rate: 0.1 lb/mmBtu
Max Heat Input Rate = 2325 mmBtu/hr

lb/hr = (2325 mmBtu/hr x 0.1lb/mmBtu) = 232.5 lb/hr

TPY = (232.5 lb/hr) x (8760 hrs/yr) x (ton/2000 lb) = 1.02x 10^3 TPY

See Attachment EU06-01

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

The current maximum allowable emission rate is 0.1 lb/mmBtu. These limits apply when firing fuel oil which has a maximum heat input rate of 2325 mmBtu/hr. Potential PM emissions are estimated utilizing these allowable rates, the maximum annual operating schedule of 8760 hours.

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **RULE**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/mmBtu for oil firing only**
4. Equivalent Allowable Emissions: **232.5** lb/hour **1.02x 10^3** tons/year
5. Method of Compliance (limit to 60 characters): **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. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitations entered in Field 3 reflect the maximum allowable emission rates listed in Specific Condition No. 1(A) in PA 74-03D. These requirement s are found in 62-296.405(1)(b). Excess emissions are allowed for up to two hours for startup, shutdown, and malfunction in accordance with Rule 62-210.700(1), F.A.C.**

B.

1. Basis for Allowable Emissions Code
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Emissions Unit Information Section 6 of 6

Pollutant Detail Information: Pollutant 3 of 3

1. Pollutant Emitted: **NOX**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **750** lb/hour, **3.29 x10^3** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year
6. Emission Factor: **0.3 lb/mmBtu** Reference: **62-296.405(1)(d)3, F.A.C.**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Allowable Emission Rate: 0.3 lb/mmBtu** **Max Heat Input Rate = 2500 mmBtu/hr** **lb/hr = (2500 mmBtu/hr x 0.3 lb/mmBtu)** **lb/hr = 750** **TPY = (750 lb/hr) x (8760 hrs/yr) x (ton/2000 lb) = 3.29 x 10^3 TPY** **See Attachment EU06-01**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **The current maximum allowable emission rate is 0.3 lb/mmBtu and the maximum heat input rate is 2500 mmBtu/hr.. Potential NOX emissions are estimated utilizing this allowable rate and the maximum annual operating schedule of 8760 hours.**

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **RULE**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.3 lb/mmBtu**	
4. Equivalent Allowable Emissions: **750** lb/hour	**3.29 x 10^3** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 7**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Emissions limitations entered in Field 3 reflect the maximum allowable emission rate specified by Rule 62-296.405(1)(d)3, F.A.C.**	

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

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

1. Visible Emissions Subtype: **VE20**
2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **40** % Maximum Period of Excess Opacity Allowed: **2** min/hour
4. Method of Compliance: **Annual testing in accordance with EPA Method 9**
5. Visible Emissions Comment (limit to 200 characters): **In accordance with 62-210.700(1), F.A.C., excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided the duration of excess emissions does not exceed 2 hours in any one 24-hour period.**

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance
5. Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

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

1. Parameter Code:	2. Pollutant(s): **Gas Fuel Flow**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Daniel** Model Number: **Flange Neck**	Serial Number: **93340191**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **12-16-94**	
7. Continuous Monitor Comment (limit to 200 characters): **Orifice Meter. Installed in accordance with Rule 62-214.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75Appendix D, Section 2.1..** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

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

1. Parameter Code:	2. Pollutant(s): **Oil Fuel Flow Monitor (2)**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **MicroMotion** Model Number: **DS300S157SU**	Serial Number: **195358 & 197391**
5. Installation Date: **3-4-96**	
6. Performance Specification Test Date: **3-4-96**	
7. Continuous Monitor Comment (limit to 200 characters): **Coriolis Type Meter. Installed in accordance with Rule 62-214.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

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

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Teco** Model Number: **42D**	Serial Number: **42D44089270**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **5-25-95 (certification date)**	
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 62-214.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

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

1. Parameter Code: **CO2**	2. Pollutant(s): **Carbon Dioxide**
3. CMS Requirement:	[**X**] Rule [ ] Other
4. Monitor Information: Manufacturer: **Teco** Model Number: **41H**	Serial Number: **41H48554281**
5. Installation Date: **12-16-94**	
6. Performance Specification Test Date: **12-16-94**	
7. Continuous Monitor Comment (limit to 200 characters): **Installed in accordance with Rule 62-14.320, F.A.C., Rule 62-214.330, F.A.C., and 40 CFR Part 75 Appendix D, Section 2.1.** **Note: The serial numbers are correct as of June 15, 1996, but are subject to change.**	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [**X**] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[**X**] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[**X**] C	[ ] E	[ ] Unknown
SO2	[**X**] C	[ ] E	[ ] Unknown
NO2	[ ] C	[ ] E	[**X**] Unknown
4. Baseline Emissions:			
PM		lb/hour	tons/year
SO2		lb/hour	tons/year
NO2			tons/year
5. PSD Comment (limit to 200 characters): **This unit consumes PSD increment, but was not required to obtain a PSD permit for construction/operation.**			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [**X**] Attached, Document ID: **EU06-02** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [**X**] Attached, Document ID: **EU06-03** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [**X**] Attached, Document ID: **EU06-04** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [**X**] Previously submitted, Date: **September 1, 1995** [ ] Not Applicable
6. Procedures for Startup and Shutdown [**X**] Attached, Document ID: **EU06-05** [ ] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation
[X] Attached, Document ID: **EU06-06** [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Identification of Additional Applicable Requirements
[X] Attached, Document ID: **EU06-07** [ ] Not Applicable

13. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Acid Rain Application (Hard-copy Required)

[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **EU06-08**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT EU06-01

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Client: City of Tallahassee
OFS No: 1000.4015.0027

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Sheet No.: 1 of 2
Calc. No.: 960425DH04

Rv'd: 04/25/96

Emission Unit Description:

The emissions unit is a Babcock & Wilcox steam generator designated Boiler No. 2. The unit is currently operating under Conditions of Certification (PA74-03D) issued by the FDEP. Construction of the unit pre-dated the PSD regulations but is still considered as an increment consuming unit. The unit is capable of firing residual fuel oil, on-spec used oil, natural gas, any of the lighter fuel oils (i.e., fuel oil Nos. 5, 4, ..)or any combination of these fuels. The maximum heat input rate required to meet maximum production of the boiler is 2500 mmBtu/hr. This heat input rate applies to the firing of natural gas and any mixture of natural gas with other fuels. The maximum heat input rate when firing 100% fuel oil is 2325 mmBtu/hr based on SO2 AAQS and PSD modeling analyses completed by the City of Tallahassee in August, 1992 that correspond with the 1.4 mmBtu/hr limit indicated in the Site Ceritification. The unit is currently rated for a nominal 238 MW. The modified conditions of certification allow continuous operation with restrictions on PM (0.1 lb/mmBtu), and SO2 (1.4 lb/mmBtu). The federally enforceable emission limitations established through the SIP are the same for PM but different for SO2 which is set at 1.87 lbs/mmBtu, and include VE limits (20% & excess emissions), and a nitrogen oxide emission limitation (0.3 lb/mmBtu).

References:

No. 1 - Conditions of Certification PA74-03D
No. 2 -FDEP Rules 62-210.700(1), 62-296.405(1)(a),(b),(c),1h(d)3

Operating Parameters

Annual Hours Of Operation (hrs/yr)	AHOP := 8760
Maximum Heat Input Rate - Nat.Gas (& mixtures) (mmBtu/hr) (lower heating value)	MHR1 := 2500
Maximum Heat Input Rate - Fuel Oil (mmBtu/hr) (lower heating value)	MHR2 := 2325
Fuel Oil Heat Content (Btu/Gal)	FOHC := 150000
Fuel Oil Sulfur Content (%wt)	FOSC := 1.4
Natural Gas Heat Content (Btu/CF)	NGHC := 1000

Calculated Fuel Oil Usage Rate (kgal/hr)

$$FOUR := MHR2 \cdot \frac{10^6}{FOHC \cdot 1000} \qquad FOUR = 15.5$$

Calculated Natural Gas Usage Rate (mmCF/hr)

$$NGUR := MHR1 \cdot \frac{10^6}{NGHC \cdot 10^6} \qquad NGUR = 2.5$$

FOSTER WHEELER ENVIRONMENTAL CORPORATION
CALCULATION SHEET - MATHCAD 5.0+

By: D. Hackel
Date: 08/19/94

Client: City of Tallahassee
OFS No: 1000.4015.0027

Ck'd By: D. Graziani, P.E.
Date: 08/26/94

Sheet No.: 2 of 2
Calc. No.: 960425DH04

Rv'd: 04/25/96

Emission Estimates

The following emission estimates are provided as required by Rules 62-213.420(3)(c)1, 2, 3 and 4, FAC. The emission estimates are based on allowable emission limitations as specified by Rule or permit condition. The emission estimates provide hourly rates (lbs/hr) denoted with a "H" and annual emission rates (tons/year) denoted with an "A". Allowable emission rates are expressed in units of lb/mmBtu and designated ER (eg., ERSO2 = 1.4 lb/mmBtu).

Emission Estimates - Segment No. 1 (Natural Gas Firing)

Nitroge Oxides (NOX) - (Reference No. 2)

$ERNOX := 0.3$

$HNOX := MHR1 \cdot ERNOX$ $\quad HNOX = 750$

$ANOX := HNOX \cdot \frac{AHOP}{2000}$ $\quad ANOX = 3.29 \cdot 10^3$

Emission Estimates - Segment No. 2 (Fuel Oil Firing)

Particulate Matter (PM) - (References No. 1)

$ERPM := 0.1$

$HPM := MHR2 \cdot ERPM$ $\quad HPM = 232.5$

$APM := HPM \cdot \frac{AHOP}{2000}$ $\quad APM = 1.02 \cdot 10^3$

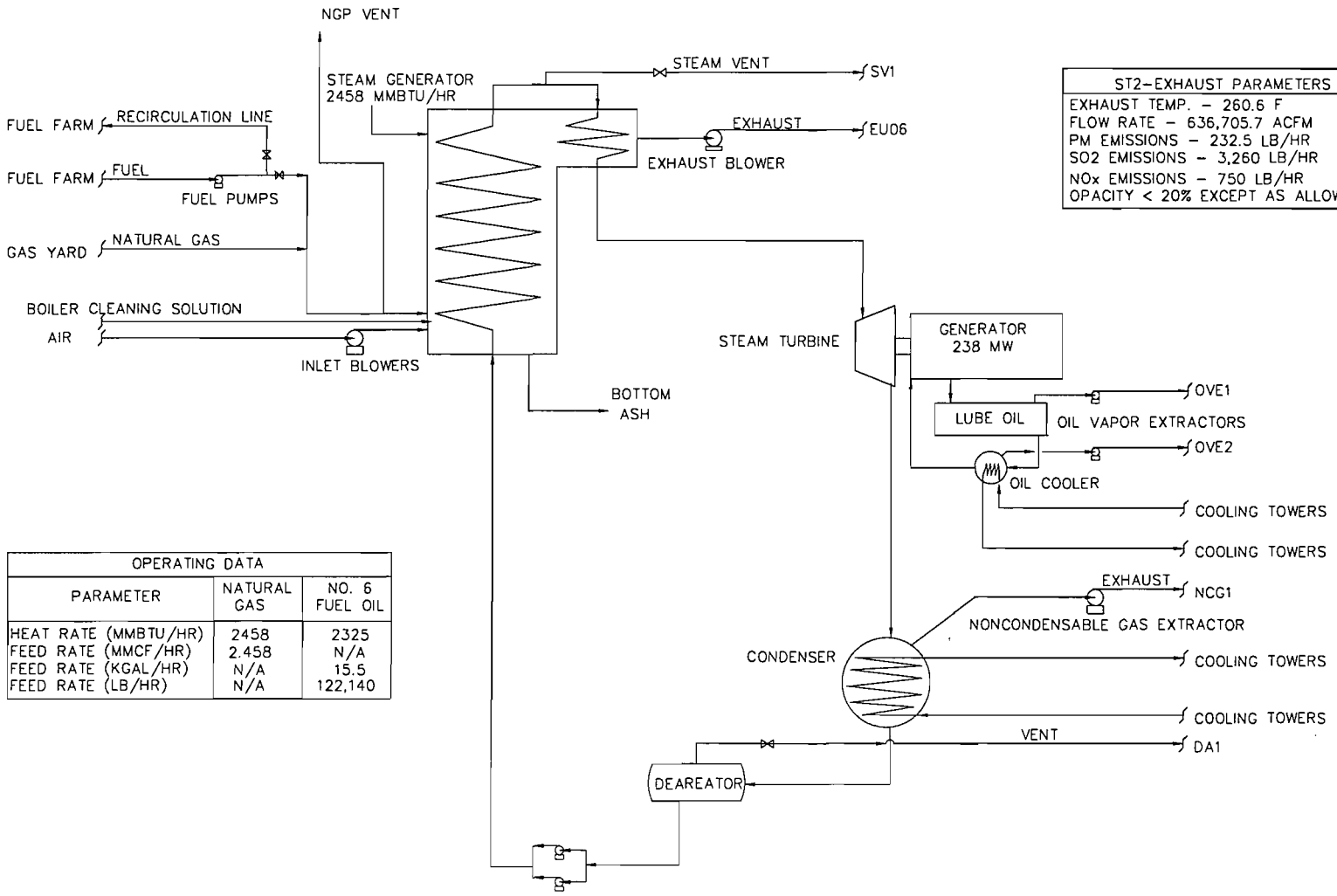
Sulfur Dioxide (SO2) - Existing Operating Permit (Reference No. 1)

$ERSO2 := 1.4$

$HSO2 := ERSO2 \cdot MHR2$ $\quad HSO2 = 3.3 \cdot 10^3$

$ASO2 := HSO2 \cdot \frac{AHOP}{2000}$ $\quad ASO2 = 1.43 \cdot 10^4$

ATTACHMENT EU06-02



ST2-EXHAUST PARAMETERS
EXHAUST TEMP. - 260.6 F
FLOW RATE - 636,705.7 ACFM
PM EMISSIONS - 232.5 LB/HR
SO2 EMISSIONS - 3,260 LB/HR
NOx EMISSIONS - 750 LB/HR
OPACITY < 20% EXCEPT AS ALLOWED

OPERATING DATA		
PARAMETER	NATURAL GAS	NO. 6 FUEL OIL
HEAT RATE (MMBTU/HR)	2458	2325
FEED RATE (MMCF/HR)	2.458	N/A
FEED RATE (KGAL/HR)	N/A	15.5
FEED RATE (LB/HR)	N/A	122,140

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

SIMPLIFIED PROCESS FLOW DIAGRAM
STEAM GENERATOR NO. 2

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A DATE: 04/30/96	BY: DJG CKD' BY: CJT REV. BY: CJT	CAD FILE NO. HSG2.DWG FIGURE NO. EU06-02

ATTACHMENT EU06-03

The attached fuel sample analyses represent "typical" characterizations for the fuels combusted in EU06, Boiler No.2. Maximum values could be higher. The fuels represented in the analyses are natural gas, fuel oil, and on-spec waste oil..

TYPICAL ANALYSIS - FUEL OIL

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

u2

--- Project Information ---

Annie Griffin
City of Tallahassee Env. Office
Route 4, Box 448 - Geddie Road
Tallahassee, FL. 32304

Page 1
Project Name: CUM2
Project #473384

--- Sample Information ---

Station ID: HP 8/2/95 #3 12:30
Lab ID: AA76397
Collector: KELLEY

Date Sampled: 08/02/95
Time Sampled: 12:30
Log In Date: 08/09/95
Log In Time: 11:32

--- Test Information ---

Parameter	Units	Method	Det Lim	Result	Analysis Date	Tech
521-D240 Heat Content	BTU/l	ASTM D240	100	18180	08/16/95	
520-ASTM D 129-91 Sulfur	%	ASTM D129-91	0.10	1.08	08/14/95	

Remarks:

Signed:

James M.G. Tucci
Laboratory Manager

TYPICAL ANALYSIS - NATURAL GAS

DATE: 05/13/96 ANALYSIS TIME: 225 STREAM SEQUENCE: 12
TIME: 08:09 CYCLE TIME: 240 STREAM#: 2
ANALYZER#: 362007 MODE: RUN CYCLE START TIME: 08:05

COMP NAME	COMP CODE	MOLE %	GAL/MCF**	B.T.U.*	REL DEN*
C 6 +	108	0.080	0.0357	4.23	0.0027
PROPANE	102	0.331	0.0912	8.35	0.0050
I-BUTANE	103	0.085	0.0278	2.77	0.0017
N-BUTANE	104	0.076	0.0240	2.49	0.0015
NEO C5	107	.000000	0.0000	0.00	0.0000
IPENTANE	105	0.039	0.0143	1.56	0.0010
NPENTANE	106	0.027	0.0098	1.08	0.0007
NITROGEN	114	0.424	0.0000	0.00	0.0041
METHANE	100	95.837	0.0000	970.16	0.5308
C O 2	117	0.728	0.0000	0.00	0.0111
ETHANE	101	2.373	0.6348	42.09	0.0246
TOTALS		100.000	0.8375	1032.73	0.5832

@ 14.730 PSIA & UNCORRECTED FOR COMPRESSIBILITY

% @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z) = 1.0022
DRY B.T.U. @ 14.730 PSIA & 60 DEG. F CORRECTED FOR (1/Z) = 1035.0
REAL RELATIVE DENSITY = 0.5842
UNNORMALIZED TOTAL = 100.66
ANALOG INPUT CHANNEL 1 = H 2 S 140 = 1.5556
ANALOG INPUT CHANNEL 2 = WATER 144 = 2.7465

CTIVE ALARMS

ONE

TYPICAL ANALYSIS - USED OIL

Telephone
(904) 725-2040
FAX
(904) 727-9720

SOUTHEASTERN CHEMISTS' LABORATORIES
P.O. Box 8917
Jacksonville, FL 32239

Report Date: October 1, 1992

Laboratory Marks: Job # 34937 Date Sampled:

Sample of: Waste Oil Date Received: September 18, 1992

Client: City of Tallahassee, Hopkins Power Plant Rt. 4 Box 450 Geddie Road, Tallahassee, FL 32304
Sample Marks: Hopkins Power Plant

CERTIFICATE OF ANALYSIS

Parameters	Method	Results		Analyst	Date/Time
Total Organic Halogens (as chlorine) % by weight	ASTM D808	<0.1	%	FAR	9-21-92/1300
Flashpoint	ASTM D93	>140	F	FAR	9-21-92/1100
Arsenic	SW 7060	<0.010	mg/kg	DDA	9-23-92/1000
Cadmium	SW 7130	0.05	mg/kg	MAZ	10-1-92/1100
Chromium	SW 7190	<0.50	mg/kg	MAZ	10-1-92/1200
Lead	SW 7420	3.53	mg/kg	MAZ	9-25-92/1100

All samples analyzed in accordance with EPA, ASTM, or other approved methods.

Respectfully submitted,

Joseph W. Newton, President
EPA Accreditation #4352 DER #900384G
NIOSH Accreditation #32211 HRS #E82253
EPA Inspector #I153, 381 HRS #82366
EPA Management #M123, 352
NIST/NAVLAP Accreditation #1632

N/pa

ATTACHMENT EU06-04

Unit 2 at the Arvah B. Hopkins Generating Station (EU06) requires stack sampling on an annual basis. As such, permanent stack testing facilities have been installed on the unit's exhaust stack. All test facilities are in accordance with Rule 297.310(6), Florida Administrative Code (F.A.C.). These facilities also meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E. Testing equipment which is not permanently mounted, such as safety harnesses and electrical outlets are made available for use by sampling personnel during each sampling event. Detailed drawings are attached.

ATTACHMENT EU06-05

The City of Tallahassees follows best operational practices in the startup and shutdown of the boilers at the Hopkins 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 EU06-06

Boiler No. 2 (EU06) has a maximum heat input rate of 2500 mmBtu/hr heat input. This heat input rate applies to the firing of natural gas and any mixture of natural gas with other fuel oils. The maximum fuel oil heat input rate is 2325 mmBtu/hr. The alternative methods of operation (AMO) associated with the boiler are related to the type of fuel being fired and load. The boiler is currently rated a nominal 238 MW. The current AMOs include the following:

Natural Gas Firing - Up To Maximum Rate of 2500 mmBtu/hr

Fuel Oil Firing - Maximum Rate of 2325 mmBtu/hr

Fuel Grade No. 6
On-Spec Waste Oil
Distillate Fuel Oils
Co-firing any combination of Fuel Oil No. 6, Distillate Fuel Oils, and/or On-Spec Used Oil, with Natural Gas up to 2500 mmBtu/hr

ATTACHMENT EU06-07

The additional requirements are included within the attached Hopkins Conditions of Certification PA-74D. Specific Conditions which have already been addressed have been crossed out[1]. The attached requirements are contained in a Site Certification, which is not federally enforceable. These requirements are not subject to the definition of "applicable requirements".

Revision Requests

The City of Tallahassee requests that Specific Condition A be revised as follows and incorporated in the Title V Operating Permit as a federally enforceable requirement:

Specific Condition A - This condition states that emissions of sulfur dioxide from Unit 2 shall not exceed 1.4 pounds per million Btu (mmBtu) heat input. The City of Tallahassee requests that this language be modified to reflect that this condition applies only to the firing of fuel oil.

The City of Tallahassee requests the following language/revisions be added to Specific Condition C and incorporated in the Title V Operating Permit as a federally enforceable requirement:

Specific Condition C - The maximum allowable heat input rate for boiler operations is 2500 mmBtu/hr when firing natural gas or any mixture of natural gas with other fuel oils. The maximum allowable fuel oil heat input rate is 2325 mmBtu/hr. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum allowable heat input rate for the fuel or mix of fuels being burned. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regain the permitted capacity.

The City of Tallahassee bases the heat input rate request of 2325 mmBtu/hr for fuel oils on SO2 AAQS and PSD modeling analyses completed in August, 1992 that correspond with the 1.4 mmBtu/hr limit indicated in the Site Certification. The 2500 mmBtu/hr heat input rate request is based on the maximum production capacity of the boiler.

[1] In a letter dated September 13, 1997, USEPA Region IV Regional Administrator, John C. White, indicated that 40 CFR Part 60, Subpart D, is not an applicable requirement for Hopkins Boiler #2.

Florida Department of Environmental Protection
City of Tallahassee
Arvah B. Hopkins Power Plant Site Certification Unit 2
Case No. PA 74-03D
Conditions of Certification modified May 18, 1994

Special

1. Air - Arvah Hopkins Unit No. 2 shall be operated in accordance with Chapters 17-210, 17-212, 17-213, 17-296 and 17-297, F.A.C.

A. Stack Emissions - Emissions shall be controlled so as not to exceed the appropriate standards specified in Chapter 17-296, F.A.C, and any subsequent amendments, unless excepted by a variance. Emissions of sulfur dioxide from Unit No. 2 shall not exceed 1.4 pounds per million Btu (mmBtu) heat input. Emissions of particulate matter from Unit No. 2 shall not exceed 0.1 pounds per mmBtu heat input when firing fuel oil. No particulate limit shall apply when firing natural gas. The provisions of section 17-210.700, F.A.C., regarding excess emissions are applicable to Unit No. 2.

B. Stack Height - The stack serving Unit No. 2 shall be not less than 250 feet high.

C. Conditions for Stack Testing - Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by this certification. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity; in this

case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regain the permitted capacity in the conditions of certification.

D. Stack Sampling - A suitably installed and accessible stack sampling platform as approved by the Department of Environmental Protection will be provided on the Unit No. 2 stack. Stack Sampling tests for particulates shall be performed annually before the end of the federal fiscal year (September 30th) in conformance with Chapter 17-297, F.A.C, and in conformance with DEP methods or EPA methods 1, 2, 3, and 5 or 17 or as otherwise approved by the Department. In accordance with Rule 17-297.340(1)(c)2., F.A.C., no particulate or visible emission tests shall be required in any federal fiscal year in which the fossil fuel steam generator did not burn fuel oil for more than 400 hours other than during startup. Results of the stack tests shall be submitted to the Northwest District Office of the Department within 45 days after completion of the tests. The City of Tallahassee shall notify the Department at least 15 days prior to the stack test to allow witnessing, whenever possible, of the test. The Department may waive the 15-day notice requirement on a case-by-case basis.

E. Equipment - Major equipment changes that will affect air emissions or which may have a substantial environmental impact shall be approved by the Department prior to the placing of orders for equipment or the start of construction. Where deemed necessary, an environmental assessment on the effect of the change shall be prepared. (An example of a major change is the installation of flue-gas desulfurization equipment, or conversion of facilities to the use of coal). This condition supplements Standard Condition 1.

F. Fuel Oil - The sulfur content of fuel oils consumed shall be analyzed and records of such analyses shall be maintained for inspection by the Department.

G. Annual Reporting - An annual operation report shall be submitted by the City by March 1 of each year utilizing DEP Form 17-210.900(4), F.A.C.

2. Water

A. Effluent Standards - Wastewater discharged from the site shall meet the standards set forth in Chapter 17-302, F.A.C., and any subsequent amendments, unless excepted by variance. In addition to other treatment processes, the City of Tallahassee may use up to three treatment ponds to meet the standards set forth in Chapter 17-302, F.A.C. The following specific limits are identified:

a) pH shall be in accord with Chapter 17-302, F.A.C.

ATTACHMENT EU03-08

Phase II Permit 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: X New ☐ Revised

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

Arvah B. Hopkins	FL	688
Plant Name	State	ORIS Code

STEP 2
Enter the boiler ID# from NADB for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

		Compliance Plan			
a	b	c	d	e	
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units	New Units	
			Commence Operation Date	Monitor Certification Deadline	
1	Yes	No			
2	Yes	No			
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				
	Yes				

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

☐ - For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

Arvah B. Hopkins

Plant Name (from Step 1)

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard Requirements

Permit 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, 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 permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
(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 permitting authority; 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)) 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)(i) 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 permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 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 Administrator or permitting authority:
(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;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Arvah B. Hopkins

Plant Name (from Step 1)

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.

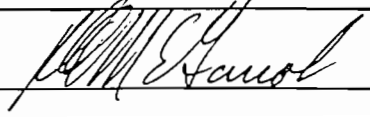
(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject 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 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, 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 a written exemption under 40 CFR 72.7 or 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.

Certification

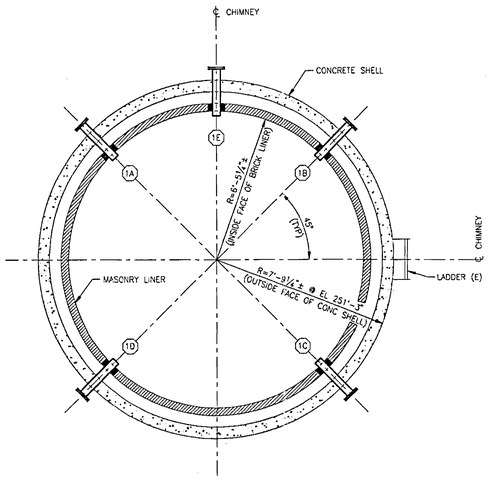
I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and 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	Rob E. McGarrah, Production Superintendent	
Signature		Date December 15, 1995

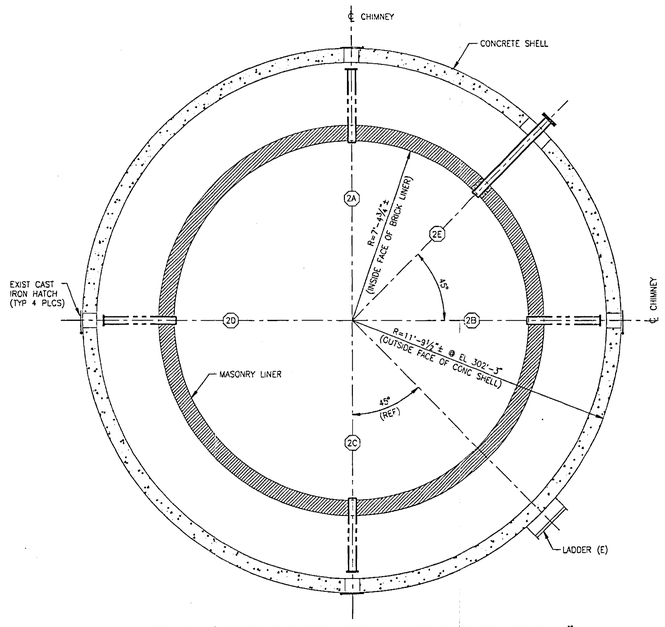
STEP 5 (optional)
Enter the source AIRS and FINDS identification numbers, if known

AIRS
FINDS

CTAL-HPKO-C-M-00001



PLAN – UNIT 1 PORT ARRANGEMENT AT EL 251'-3"
TOP OF CHIMNEY FOUNDATION EL 136'-0"



PLAN – UNIT 2 PORT ARRANGEMENT AT EL 302'-3"
TOP OF CHIMNEY FOUNDATION EL 136'-0"

CONTINUOUS EMISSIONS MONITORING (CEM) PORT SCHEDULE

	PORT IDENTIFICATION	NOMINAL DIAMETER	ELEVATION (COLD POSITION)	CEM FUNCTION	PORT DETAIL	REMARKS
UNIT 1	1A	4"	251'-3"	EPA SAMPLING	A	NEW PORT
	1B	4"	251'-3"	EPA SAMPLING	A	NEW PORT
	1C	4"	251'-3"	EPA SAMPLING	A	NEW PORT
	1D	4"	251'-3"	EPA SAMPLING	A	NEW PORT
	1E	4"	252'-0"	GAS PROBE	A	NEW PORT
UNIT 2	2A	4"	303'-0"	EPA SAMPLING	——	EXISTING PORT SEE NOTE 14
	2B	4"	303'-0"	EPA SAMPLING	——	EXISTING PORT SEE NOTE 14
	2C	4"	303'-0"	EPA SAMPLING	——	EXISTING PORT SEE NOTE 14
	2D	4"	303'-0"	EPA SAMPLING	——	EXISTING PORT SEE NOTE 14
	2E	4"	302'-3"	GAS PROBE	B	NEW PORT

REV NO	DATE	REVISION	DR	CH	APPROVED	
1	1-5-94	REVISED: U1 EPA SAMPLE PORT ELEV'S.	LW	JJS	FK	M.SOUSA
2	8-5-94	REVISED PER CONSTRUCTION DOCUMENTS ADDED:(M3,M13)STN STL PORT COLLAR. REVISED:(G18)NOTE 10; (L12,M3,M5)CORE DRILL SIZE; (M3,M13)BOOT DETAIL;(M11)DIM.	TN			

0730003-001 AV (1)

NOTES:

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH EBASCO SPECIFICATION CTAL-2416-C-01.
2. STEEL SHALL BE IN ACCORDANCE WITH ASTM A36, UNLESS NOTED OTHERWISE.
3. STAINLESS STEEL (SS) PIPE SHALL BE IN ACCORDANCE WITH ASTM A312, TYPE 316L. STAINLESS STEEL (SS) PLATES SHALL BE IN ACCORDANCE WITH ASTM A182, TYPE 316L.
4. STAINLESS STEEL (SS) PIPE FLANGES SHALL BE ANSI CLASS 150 LB AND SHALL BE IN ACCORDANCE WITH ASTM A182, TYPE 316L.
5. FOR WELDING OF STAINLESS STEEL TO STAINLESS STEEL, ELECTRODES SHALL BE ANSI/AWS A5.9, CLASS ER316L OR A5.4, CLASS E316L. FOR WELDING OF STAINLESS STEEL TO CARBON STEEL (CS), ELECTRODES SHALL BE ANSI/AWS A5.9, CLASS ER309 OR A5.4, CLASS E309.
6. STAINLESS STEEL (SS) MACHINE BOLTS SHALL BE IN ACCORDANCE WITH ASTM A320, GRADE B8. NUTS SHALL BE IN ACCORDANCE WITH ASTM A194, GRADE 8.
7. ALL ADHESIVE ANCHORS SHALL BE HILTI HIT C-100 WITH HAS SS RODS AS MANUFACTURED BY HILTI, INC., OR APPROVED ALTERNATE. ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ADHESIVE ANCHORS SHALL BE PROVIDED WITH 1 HEAVY HEX SS NUT AND 1 STANDARD SS WASHER.
8. ALL GALVANIZED CARBON STEEL SURFACES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
9. ALL ELEVATIONS LOCATING PORTS ARE BASED ON THE BRICK LINER IN THE "COLD POSITION".
10. GROUT FOR PORT OPENINGS SHALL BE SECAR 41 AS MANUFACTURED BY LEFARGE CALCIUM ALUMINATES, OR APPROVED ALTERNATE, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
11. PRIOR TO INSTALLATION OF THE UNIT 2 GAS PROBE PORT, CONTRACTOR SHALL VERIFY THE ELEVATIONS OF THE EXISTING BRICK STEEL LINER BANDS IN THE VICINITY OF THE NEW UNIT 2 GAS PROBE PORT. ANY DISCREPENCIES WITH THE ELEVATIONS OF THE BANDS AS SHOWN IN DETAIL B WHICH MAY CAUSE INTERFERENCES WITH THE PORT SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO CORE DRILLING OPENINGS.
12. CONTRACTOR MAY SHIFT THE ELEVATION OF THE 5x5 ANGLE SHOWN IN DETAIL B DOWN AS REQUIRED TO AVOID INTERFERENCE WITH THE EXISTING STEEL LINER BANDS. THE LOCATION OF THE PORT TO BRACKET CONNECTION WORK POINT SHOULD BE SHIFTED SUCH THAT THE BRACKET ANGLE REMAINS APPROXIMATELY 45°. THE 2x2 ANGLE BRACKET SHALL BE FIELD CUT TO FIT. CONTRACTOR SHALL DOCUMENT FINAL LOCATION OF ANGLE SO THAT DRAWINGS MAY BE REVISED TO REFLECT AS-BUILT CONDITION.
13. (E) DENOTES EXISTING.
14. EXISTING UNIT 2 EPA SAMPLING PORTS REQUIRE NO MODIFICATIONS.
15. UPON COMPLETION OF CONSTRUCTION, ANY TEMPORARY LUGS WELDED TO EXISTING STEEL SHALL BE REMOVED AND THE EXISTING STEEL SURFACE GROUND SMOOTH AND REPAINTED WITH ZINC-RICH ORGANIC PRIMER AND A FINAL COAT TO MATCH THE EXISTING PAINT.
16. ANY SURFACE AREA OF THE CHIMNEY WITH DAMAGED PAINT FINISH DUE TO CONSTRUCTION SHALL BE REPAINTED BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY 10 GALLONS OF PAINT FOR TOUCH-UP REPAIRS, COLOR AND TYPE OF PAINT SHALL BE SUBMITTED TO THE PLANT ENGINEER FOR APPROVAL PRIOR TO PURCHASE.

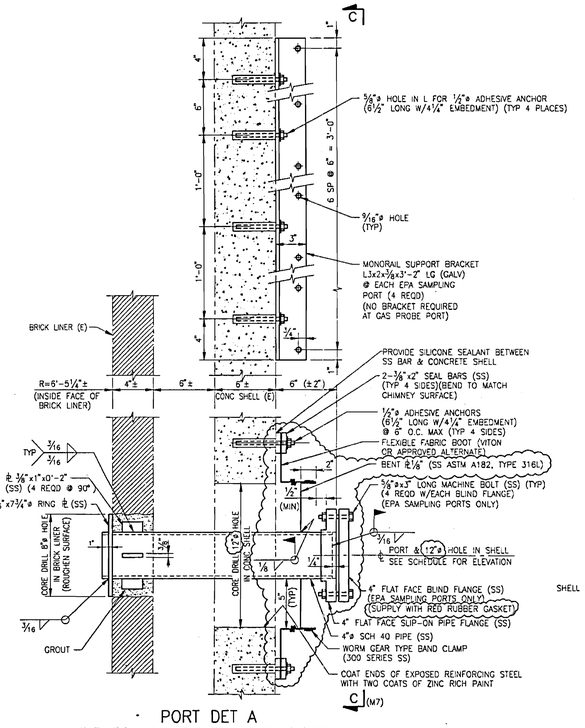
REFERENCE DRAWINGS:

CONTINENTAL-HEINE CHIMNEY COMPANY: (UNIT 1)

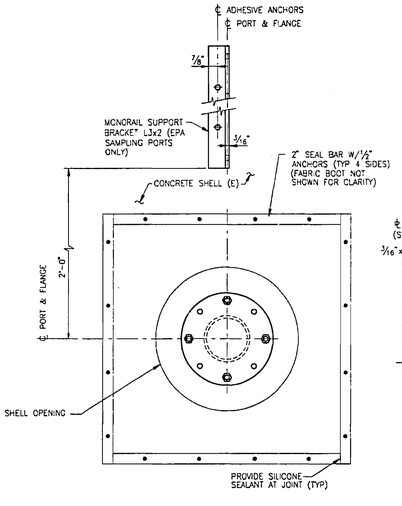
200'-0"x11'-0" ID REINFORCED CONCRETE CHIMNEY OUTLINE DRAWING	4664-1

CUSTODIS: (UNIT 2)

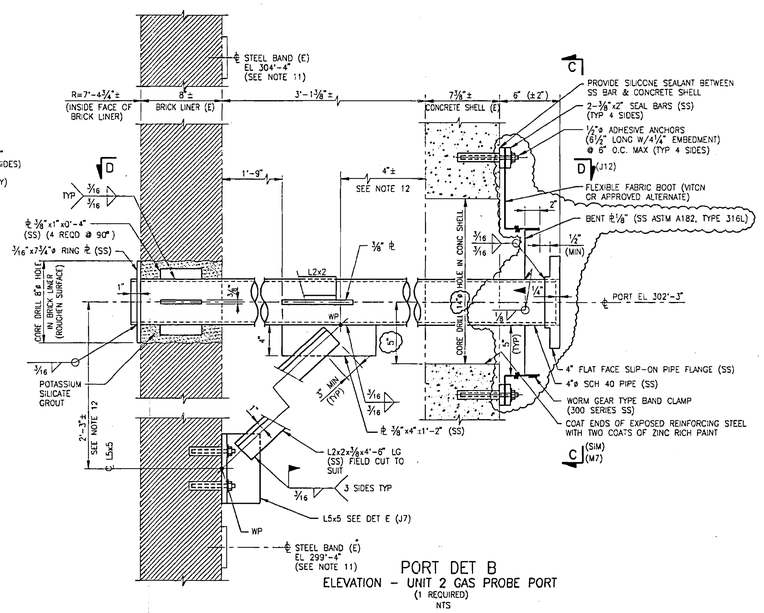
MAIN COLUMN	C1-1-818-A
OPENING DETAILS	C1-1-818-B
ORIENTATIONS	C1-1-818-C



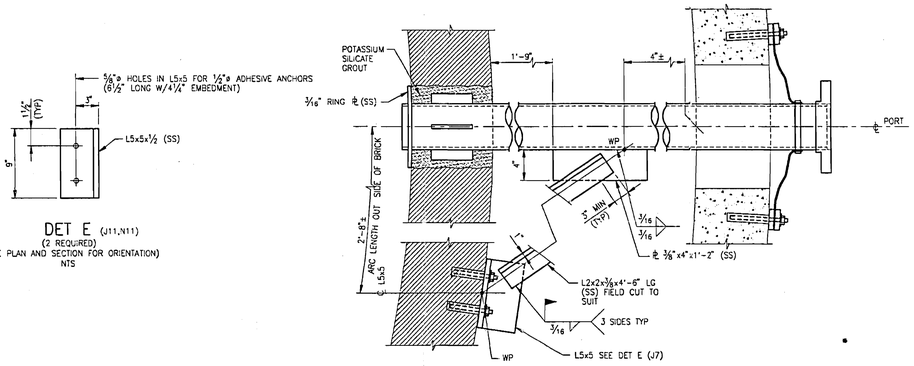
PORT DET A
ELEVATION – UNIT 1 EPA SAMPLING PORT
(4 REQUIRED)
ELEVATION – UNIT 1 GAS PROBE PORT
(1 REQUIRED)
NTS



SECT C (N4,N13)
NTS



PORT DET B
ELEVATION – UNIT 2 GAS PROBE PORT
(1 REQUIRED)
NTS



SECT D (L13)
PLAN – UNIT 2 GAS PROBE PORT
(FOR INFORMATION NOT SHOWN SEE PORT DETAIL B)
NTS

DET E (J11,N11)
(2 REQUIRED)
(SEE PLAN AND SECTION FOR ORIENTATION)
NTS

GEORGIA REGISTERED NO. 19481 PROFESSIONAL ENGINEER MARK HOLLISTER SOUSA

MARK H SOUSA CERTIFICATE No. PE 0044912 STATE OF FLORIDA REGISTERED ENGINEER

Mark H Sousa

AUG 5, 1994

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

CITY OF TALLAHASSEE
ARVAH B. HOPKINS GENERATING STATION
CONTINUOUS EMISSIONS MONITORING

UNITS 1 AND 2 CHIMNEY PORTS ARRANGEMENTS AND DETAILS

EBASCO SERVICES INCORPORATED

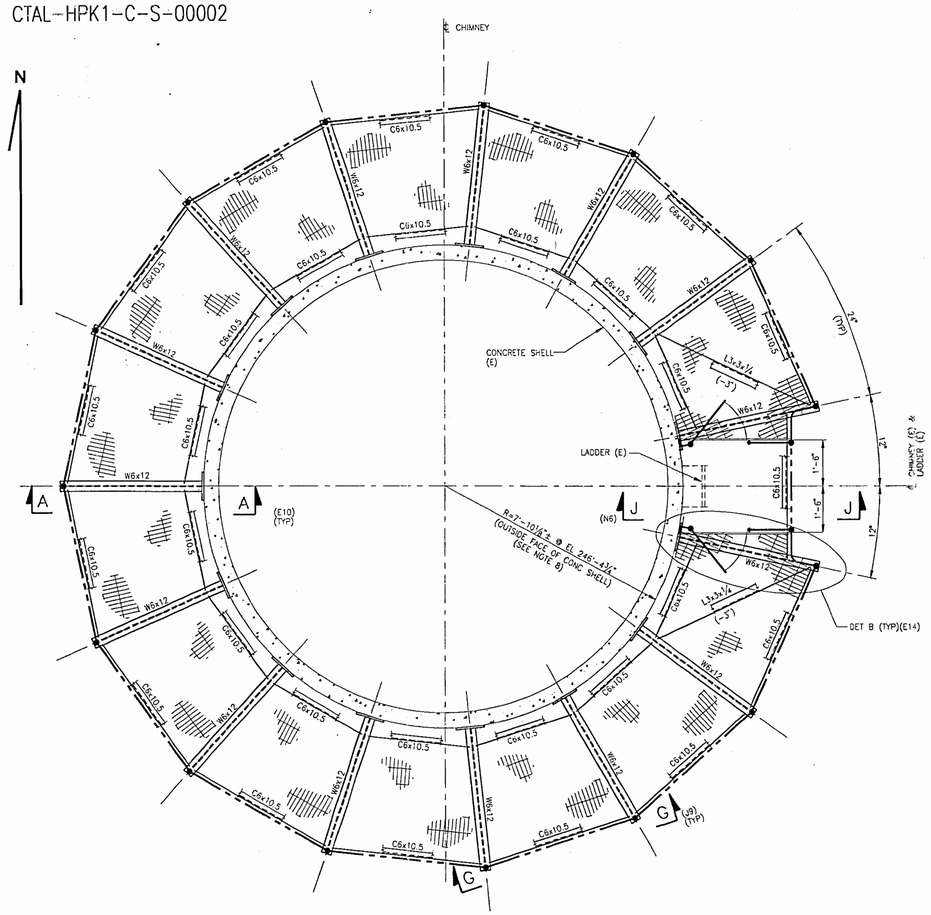
SCALE 3/8"=1'-0" UN	APPROVED	DATE JULY 22, 1993
DEPT. CIVIL		CTAL-HPKO-C-M-00001 2
DR. T.NORRIS	MARK H SOUSA	
CH. J.SMITH	F KLEBAN	

I:\CTAL\PC\CIVIL\STRUCT\HPKO-001.DWG Wed, 8/3/94, 8:03:12, NORRIS, C3083, 5414,123, 1837 2JX19

CTAL-HPK1-C-S-00002

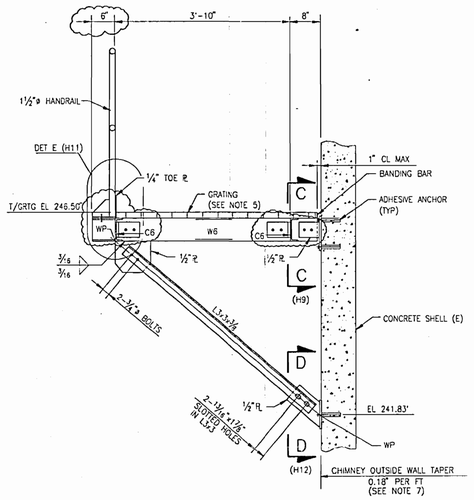
REV NO	DATE	REVISION	DR	CH	APPROVED
1	8-5-94	REVISED PER CONSTRUCTION DOCUMENTS REVISED:(A9,B9,B10,F9,G13)CONN DETAIL.	TN		

(2)

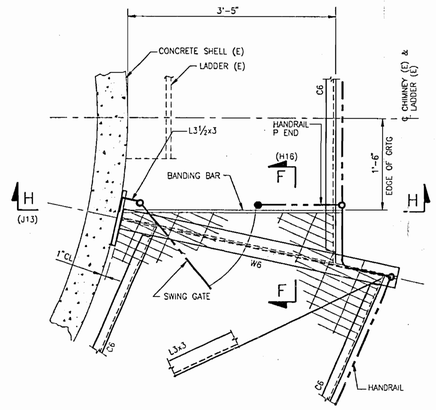


PLAN – PLATFORM AT EL 246.50'

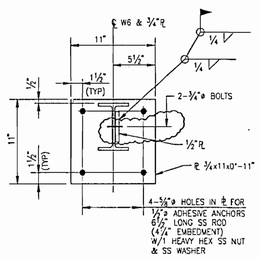
DESIGN LIVE LOAD=150 PSF
(TOS -1 1/4" TYP UN)



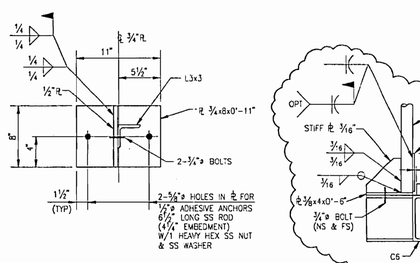
SECT A (E2)
¾"=1'-0"



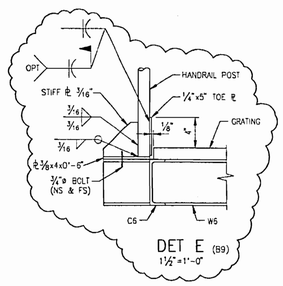
DET B (F7)
1"=1'-0"



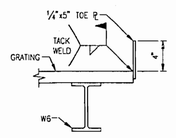
SECT C (D10)
1½"=1'-0"



SECT D (E10)
1½"=1'-0"



DET E (B9)
1½"=1'-0"



SECT F (C14)
NTS

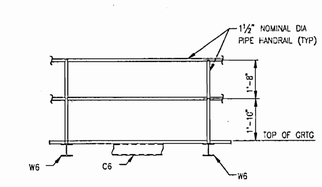
NOTES:

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH EBASCO SPECIFICATION CTAL-4015-C-01.
2. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ASTM A36, UNLESS NOTED OTHERWISE.
3. (E) DENOTES EXISTING.
4. ——— DENOTES HANDRAIL.
5. ALL BOLTED CONNECTIONS SHALL BE ¾"ø A325 BOLTS UNLESS NOTED.
6. ALL GRATING SHALL BE GALVANIZED AND HAVE 1¼" DEEP BEARING BARS.
7. AFTER FABRICATION, ALL STEEL SURFACES (EXCEPT STAINLESS STEEL SURFACES) SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH SPECIFICATION CTAL-4015-C-01. AFTER ERECTION, ALL DAMAGED GALVANIZED SURFACES SHALL BE PREPARED AND TOUCHED-UP BY ERECTOR IN ACCORDANCE WITH SPECIFICATION CTAL-4015-C-01. ERECTOR SHALL FURNISH THE SHERWIN-WILLIAMS ZINC CLAD S, B69A45 PAINT REQUIRED FOR FIELD TOUCH-UP OF GALVANIZED SURFACES.
8. ADHESIVE ANCHORS SHALL BE HILTI HVA ADHESIVE ANCHORS WITH COMPONENTS AND DIMENSIONS AS SHOWN. ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
8. CONTRACTOR SHALL CONFIRM DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND INSTALLATION. IF DEVIATIONS ARE FOUND, NECESSARY ADJUSTMENT SHALL BE MADE. AFTER NOTIFYING OWNER.
9. ANY SURFACE AREA OF THE CHIMNEY WITH DAMAGED PAINT FINISH DUE TO CONSTRUCTION SHALL BE REPAINTED BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY TO GALLONS OF PAINT FOR TOUCH-UP REPAIRS, COLOR AND TYPE OF PAINT SHALL BE SUBMITTED PLANT ENGINEER FOR APPROVAL PRIOR TO PURCHASE.

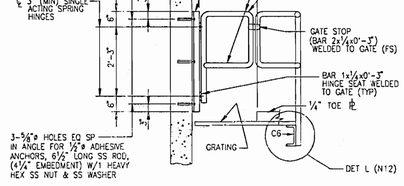
REFERENCE DRAWINGS:

CONTINENTAL CHIMNEY COMPANY:

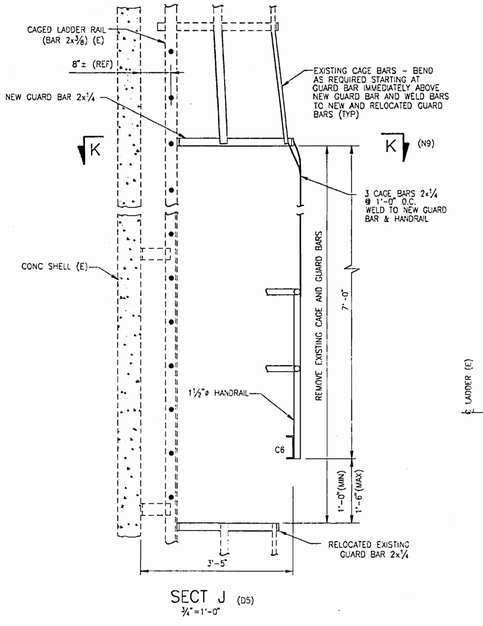
200'x11' I.D. REINFORCED CONCRETE CHIMNEY – OUTLINE DWG	4664-1
CHIMNEY DETAILS OF BALCONY, LADDER, AND CAST IRON CAP	4664-2



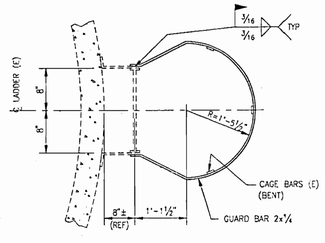
SECT G (H5)
NTS



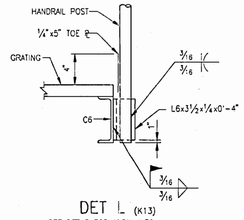
SECT H (C12)



SECT J (D5)
¾"=1'-0"



SECT K (J6)
¾"=1'-0"



DET L (K13)
SEE DET E FOR ADD'L INFO
NTS

GEORGIA REGISTERED NO. 16481 PROFESSIONAL ENGINEER MARK HOLLISTER POWELL

MARK H. SOUSA CERTIFICATE No. PE 0044912 STATE OF FLORIDA REGISTERED ENGINEER

Mark H Sousa
AUG 5, 1994

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

CITY OF TALLAHASSEE
ARVAH B. HOPKINS GENERATING STATION
CONTINUOUS EMISSIONS MONITORING

UNIT 1 CHIMNEY PLATFORM PLAN, SECTIONS AND DETAILS

EBASCO SERVICES INCORPORATED
145 TECHNOLOGY PARK, NORCROSS, GA. 30092-2979

SCALE ½"=1'-0" UN	APPROVED	DATE 12-29-93
DEPT. CIVIL		CTAL-HPK1-C-S-00002 1
DR. G. FRANK	MARK H. SOUSA	
CH. J. SMITH	FK	

BEST AVAILABLE COPY

FIELD NOTE: TEMPORARY LIGHTNING PROTECTION ... CONSTRUCTION ... PROJECTING ... LIGHTNING PROTECTION.

APPROVED
REYNOLDS, SMITH AND HILLS
ATTENTION
THIS APPROVAL IS LIMITED TO THE REQUIREMENTS OF THE CONTRACT CONDITIONS FOR ARCHITECT/ ENGINEER ACTION ON SHOP DRAWINGS AND SAMPLES.
JAN 6 1976

LAP CHART	
BAR SIZE	LAP LENGTH
#3	1'-7"
#4	1'-6"
#5	1'-11"
#6	2'-3"
#7	2'-8"
#8	3'-0"
#9	3'-5"

REFERENCE DRAWINGS CI-1-818			
A	MAIN COLUMN	I	INSERTS
B	OPENINGS		
C	ORIENTATIONS	Y	BREECHING THIMBLE
D1&D2	MISC. FABRICATION	Z	LIGHTING DETAILS
E	LADDER		
F	PLATFORMS		
G	LPS		
H1&H2	BANDS & BUCKSTAYS		

NOTES

- CONCRETE COLUMN: CONCRETE: ENTIRE 249'-4" REQ'D. 480.3 CU.YDS. OF 4000 PSI @ 25 DAYS.
- REINFORCING: A.S.T.M. A-615, GRADE 60
- PAINTING (2): The entire exterior of the concrete column shall be painted with acid resistant vinyl base paint as follows:
  A. A 1.25 mil coat of Glidden #4368E08-150 Lt. Grey
  B. A 5 mil coat of Glidden #5514 Double Build Vinyl

  The top 12'-0" of the column shall then be given a 1.25 mil finish coat of Glidden #4551 Glide Guard (black).

  The remaining 238'-0" of the column shall be given two, 2 mil. each, finish coats of Glidden Guard Alkyd Industrial Enamel, 4500 Series, applied in (4) bands, 34'-0" high alternated with (3) bands, 34'-0" high, which shall be left with just the Double Build Vinyl coating.

NOTES

- MORTAR: No.65 BY SAUEREISEN CEMENT COMPANY. SUGGESTED MIX RATIO: PART BY WT. #65 FILLER POWDER: 5 1/4; SILICA SAND: 1 3/4; #65 BINDER: 2 3/4
- ALL LAPS FOR CIRCUMFERENTIAL REINFORCING STEEL SHALL BE STAGGERED NOT LESS THAN 5'-0"
- BRICK LINING: BRICK: HARD BURNED SO. SHALE BRICK A.S.T.M. C-279 TYPE 'H'

DO NOT SCALE DRAWINGS—REPORT DISCREPANCIES TO DRAFTING DEPT.

NO	REVISION	DATE	BY	CKD.	NO	REVISION	DATE	BY	CKD.
0	SUBMITTED FOR APPROVAL	9/26/75		RAB					
1	REVISED CONST OPNG SIZE & RE-BAR @ BOTT. 50'-0". APPROVED FOR CONSTRUCTION	11/19/75		RAB					
2	REV.D. PAINTING NOTE	12/3/75	LOPEZ						

OWNER: CITY OF TALLAHASSEE
LOCATION: ARVAH B HOPKINS GENERATING STATION UNIT No.2 TALLAHASSEE FLORIDA
ENGINEER: REYNOLDS, SMITH AND HILLS

Custodis CONSTRUCTION COMPANY
CHICAGO, ILL. — BOUND BROOK, N. J.
A DIVISION OF Research-Cottrell, Inc.

MAIN COLUMN

DWN	CKD	DSGN	APPVD	OWNER APPROVAL	FILE NO.	DRAWING NO.	REVISION
DATE	DATE	DATE	DATE		2-8668	C-1-88-1	2