

Environmental Consulting & Technology, Inc.

May 15, 2009

Sent Via FedEx

Ms. Trina Vielhauer Chief, Bureau of Air Regulation Florida Department of Environmental Protection Division of Air Resource Management 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

RECEIVED

MAY 18 2009

BUREAU OF AIR REGULATION

Re: Gainesville Regional Utilities

Deerhaven Generating Station

Title V Air Operation Permit Renewal Application

Permit No. 0010006-008-AV

Dear Ms. Vielhauer:

On behalf of the City of Gainesville, Gainesville Regional Utilities (GRU), two copies of an application package to renew the GRU Deerhaven Generating Station Title V Air Operation Permit No. 0010006-008-AV are enclosed for Department review. Pursuant to the requirements of Chapter 62-213.400, F.A.C., the application package contains the Department's Application for Air Permit – Long Form and all required supplemental facility and emission unit information.

Please contact Regina Embry at (352) 393-1299 or email at embryrg@gru.com if there are any questions regarding this application.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Thomas W. Davis, P.E.

Vice President

cc: Mr

Mr. Greg Strong

FDEP Northeast District

Enclosures

3701 Northwest 98th Street . Gainesville, FL 32606

> (352) 332-0444

FAX (352) 332-6722

DEERHAVEN GENERATING STATION

TITLE V OPERATION PERMIT RENEWAL APPLICATION

RECEIVED

MAY 18 2009

Prepared for:

BUREAU OF AIR REGULATION



Prepared by:



Environmental Consulting & Technology, Inc. 3701 Northwest 98th Street Gainesville, Florida 32606

ECT No. 090100-0100

INTRODUCTION

The City of Gainesville, Gainesville Regional Utilities (GRU) Deerhaven Generating Station (DGS) is located at 100001 Northwest 13th Street in Gainesville, Alachua County, Florida. The DGS is comprised of two fossil fuel-fired steam generating units (Units 1 and 2), three dual fuel simple-cycle combustion turbines (CT Units 1, 2, and 3), storage and handling facilities for coal, fly ash, bottom ash, brine salt, urea, and lime; fuel oil storage tanks; water and wastewater treatment facilities; and ancillary support equipment.

Unit 1 (EU ID 003) is a nominal 75 megawatt (MW) steam generating unit fired with natural gas, Nos. 1 and 2 distillate fuel oils, Nos. 4, 5, and 6 residual fuels oils, on-specification used oil, and propane (for ignition during startups). Unit 1 began commercial operation in 1972 and therefore is only subject to applicable Florida Department of Environmental Protection (FDEP) emission standards. Unit 1 is an affected emission unit under both the Acid Rain Program (ARP) and the Clean Air Interstate Rule (CAIR).

Unit 2 (EU ID 005) is a nominal 251 MW steam generating unit fired with coal, natural gas, and Nos. 1 and 2 distillate fuel oils. Unit 2 began commercial operation in 1981 and is subject to New Source Performance Standard (NSPS) Subpart D, Standards of Performance for Fossil Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971. Unit 2 is equipped with a hot-side electrostatic precipitator (ESP) for control of particulate matter (PM) emissions and is in the process of installing additional emission control equipment including selective catalytic reduction (SCR) technology, a circulating dry flue gas desulfurization (FGD) scrubber, and a fabric filter. Installation of the additional Unit 2 emission control systems is authorized by FDEP Air Construction Permit No. 0010006-005-AC issued on August 13, 2007. Unit 2 is an ARP and CAIR affected emission unit and is subject to Compliance Assurance Monitoring (CAM) requirements for PM. Unit 2 was licensed under the Florida Power Plant Siting Act (PPSA) and is subject to the Conditions of Certification (COC) of Case No. PA 74-04H last modified on August 17, 2007.

Simple-cycle CT Unit 3 (EU ID 006) is a nominal 74 MW unit fired with natural gas and Nos. 1 and 2 distillate fuel oils. CT Unit 3 began commercial operation in 1996 and is subject to NSPS Subpart GG, Standards of Performance for Stationary Gas Turbines which applies to gas turbines constructed after October 3, 1977. CT Unit 3 was also subject to Prevention of Significant Deterioration (PSD) review, including Best Available Control Technology (BACT). CT Unit 3 was also licensed under the Florida PPSA and is subject to the COC of Case No. PA 74-04H.CT Unit 3 is an ARP and CAIR affected emission unit.

Coal handling and storage facilities (EU ID 007) include railcar unloading equipment, storage piles, belt conveyors, crushing operations, and bunkers.

Simple-cycle CT Units 1 and 2 (EU IDs 001 and 002) each have a nominal general capacity of 20 MW and are classified as *unregulated* emission units (i.e., these units do not emit any emissions-limited pollutants and are not subject to any unit-specific work practice standards). Additional unregulated emission units (EU ID 008) located at the DGS include fly ash, bottom ash, soda ash, salt brine, urea, and lime storage and handling, and water and wastewater treatment systems.

Operation of DGS Unit 2 is currently authorized by FDEP Title V Air Operation Permit No. 0010006-008-AV. This permit was issued with a revision effective date of November 3, 2008, and an expiration date of December 31, 2009.

The FDEP Title V regulations are codified in Chapter 62-213, Florida Administrative Code (F.A.C.), Operation Permits for Major Sources of Air Pollution. With respect to Title V air operation permit renewal deadlines, Rule 62-213.420(1)(a)2., F.A.C., requires the permittee to apply for a permit renewal at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the DGS, which has a Title V air operation permit expiration date of December 31, 2009, this regulatory deadline results in the requirement to submit a Title V air operation permit renewal application no later than May 20, 2009.

This application package, consisting of the FDEP's Application for Air Permit—Long Form, Effective 3/16/08 and all required supplemental facility and emission unit information, constitutes GRU's Title V permit renewal application for the DGS and is submitted to satisfy the requirements of Chapter 62-213.400, F.A.C. The following attachments are included as referenced in the permit application:

ATTACHMENT A—Facility Location Map

ATTACHMENT B-1, B-2, B-3, B-4—Facility Plot Plans

ATTACHMENT C-1, C-2, C-3—Process Flow Diagrams

ATTACHMENT D-Precautions to Prevent Emissions of Unconfined Particulate Matter

ATTACHMENT E-List of Insignificant Activities

ATTACHMENT F—Identification of Applicable Requirements

ATTACHMENT G—Compliance Report

ATTACHMENT H-List of Equipment Regulated Under Title VI

ATTACHMENT I-Acid Rain Part

ATTACHMENT J-Clean Air Interstate Rule Part

ATTACHMENT K-Fuel Specifications

ATTACHMENT L—Detailed Description of Control Equipment

ATTACHMENT M—Procedures for Startup and Shutdown

ATTACHMENT N—Compliance Assurance Monitoring

ATTACHMENT O—Alternate Methods of Operation

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION FOR AIR PERMIT—LONG FORM



Department of RECEIVED Environmental Protection

MAY 18 2009

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM OF AIR REGULATION

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

Facility Owner/Company Name: City of Gainesville

Site Name: Dearhaven Congrating Station

To ensure accuracy, please see form instructions.

Gainesville Regional Utilities (GRU)

Identification of Facility

	The Name. Decinated Generating Station					
3.	Facility Identification Number:-0010006					
4.	Facility Location:	Facility Location:				
	Street Address or Oth	ner Locator: 10001 NV	V 13 th Street			
	City: Gainesville	County: A	Machua	Zip Code: 33653		
5.	Relocatable Facility?		6. Existing Titl	le V Permitted Facility?		
	☐ Yes ☐ N	0	⊠ Yes	☐ No		
<u>A</u>	oplication Contact					
1.	. Application Contact Name: Regina Embry, Electric Utility Engineer					
2.	Application Contact Mailing Address					
	Organization/Firm: City of Gainesville, Gainesville Regional Utilities (GRU)					
	Street Address: P.O. Box 147117 (A136)					
	City: Gainesville State: Florida Zip Code: 32614-7117					
3.	3. Application Contact Telephone Numbers					
	Telephone: (352) 393-1299 ext. Fax: (352) 334-3151					
4.	Application Contact l	Email Address: embr	yrg@gru.com			
Ar	Application Processing Information (DEP Use)					
1.	1. Date of Receipt of Application: 5 - 2 3. PSD Number (if applicable):					

DEP Form No. 62-210.900(1) – Form

2. Project Number(s): 0010006

Effective: 3/16/08

4. Siting Number (if applicable):

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)
Air Construction Permit
☐ Air construction permit.
Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.
Air Operation Permit
☐ Initial Title V air operation permit.
☐ Title V air operation permit revision.
☐ Title V air operation permit renewal.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.
Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)
Air construction permit and Title V permit revision, incorporating the proposed project.
☐ Air construction permit and Title V permit renewal, incorporating the proposed project.
Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:
☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

GRU has been issued a Final Title V Operation Permit from the FDEP authorizing operation of the Deerhaven Generating Station. Final Title V Operation Permit Revision Number 0010006-008-AV was issued with an effective date of November 3, 2008 and an expiration date of December 31, 2008.

In accordance with Rule 62-213.420(1)(a)2., F.A.C., an application for a Title V permit renewal must be submitted at least 225 days prior to permit expiration for permits that expire on or after June 1, 2009. For the Deerhaven Generating Station, this regulatory deadline results in the submittal of a Title V permit renewal application no later than May 20, 2009. This application and supporting documents constitutes GRU's request for renewal of Final Title V Operation Permit Revision Number 0010006-008-AV per Rule 62-4.090, F.A.C.

DEP Form No. 62-210.900(1) – Form

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
003	Steam Boiler No. 1	N/A	N/A
005	Steam Boiler No. 2	N/A	N/A
006	Simple Cycle Combustion Turbine No. 3	N/A	N/A
007	Coal Handling and Storage Activities	N/A	N/A
001, 002, and 008	Miscellaneous Unregulated Emission Units and/or Activities	N/A	N/A

Application Processing Fee	
Check one: Attached - Amount: \$	Not Applicable

Note: The GRU Deerhaven Generating Station has been issued FINAL Title V Permit 0010006-008-AV. An application processing fee is not required pursuant to Rule 62-213.205(4), F.A.C.

DEP Form No. 62-210.900(1) – Form

Owner/Authorized Representative Statement NOT APPLICABLE Complete if applying for an air construction permit or an initial FESOP.

1.	Owner/Authorized Representative Name:			
2.	Owner/Authorized Representative Mailing Address Organization/Firm:			
	Street Address:			
	City:	State:	Zip Code:	
3.	Owner/Authorized Representative	e Telephone Number	r'S	
	Telephone: ()	ext. Fax: ())	
4.	Owner/Authorized Representativ	e Email Address:		
5.	Owner/Authorized Representative Statement:			
	I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.			
	Signature Date			

Application Responsible Official Certification

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

1.	Application Responsible Official Name: John W. Stanton, Assistant General Manager - Energy Supply				
2.	Application Responsible Official Qualification (Check one or more of the following				
	options, as applicable):				
	For a corporation, the president, secretary, treasurer, or vice-president of the corporation in				
	charge of a principal business function, or any other person who performs similar policy or				
	decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more				
	manufacturing, production, or operating facilities applying for or subject to a permit under				
	Chapter 62-213, F.A.C.				
	For a partnership or sole proprietorship, a general partner or the proprietor, respectively.				
	For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.				
	The designated representative at an Acid Rain source.				
3.	Application Responsible Official Mailing Address				
	Organization/Firm: City of Gainesville, Gainesville Regional Utilities (GRU)				
	Street Address: P.O. Box 147117 (A132)				
	City: Gainesville State: Florida Zip Code: 32614-7117				
4.	Application Responsible Official Telephone Numbers Telephone: (352) 393-1789 ext. Fax: (352) 334-2786				
5.	Application Responsible Official Email Address: stantonjw@gru.com				
6.	Application Responsible Official Certification:				
	I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.				
	Signature 5-13-09				
	Signature Date				

DEP Form No. 62-210.900(1) – Form

	Professional Engineer Certification				
1.	Professional Engineer Name: Thomas W. Davis				
	Registration Number: 36777				
2.	Professional Engineer Mailing Address				
	Organization/Firm: Environmental Consulting & Technology, Inc.				
	Street Address: 3701 Northwest 98th Street				
	City: Gainesville State: Florida Zip Code: 32606-5004				
3.	Professional Engineer Telephone Numbers				
	Telephone: (352) 332 - 0444 ext. Fax: (352) 332 - 6722				
4.	Professional Engineer Email Address: tdavis@ectinc.com				
5.	Professional Engineer Statement:				
	I, the undersigned, hereby certify, except as particularly noted herein*, that:				
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and				
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.				
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \int , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.				
	(4) If the purpose of this application is to obtain an air construction permit (check here, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.				
TO CORIO	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. Signature Date				
	2000 = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				

* Attach any exception to certification statement.

DEP Form No. 62-210.900(1) - Form Effective: 3/16/08

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1.	. Facility UTM Coordinates		2. Facility Latitude/Longitude		
	Zone 17 East (km) 365.70		Latitude (DD/MM/SS)		
	North (km) 3,292.60		Longitude (DD/MM/SS)		
3.	Governmental	4. Facility Status	5. Facility Major	6. Facility SIC(s):	
	Facility Code:	Code:	Group SIC Code:		
	4	A	49	4911	
7.	Facility Comment:				

Facility Contact

1.	Facility	Contact	Name:	Regina	Embry

2. Facility Contact Mailing Address...

Organization/Firm: City of Gainesville, GRU

City: Gainesville

Street Address: P.O. Box 147117 (A136)

3. Application Contact Telephone Numbers...

Telephone: (352) 393-1299 ext. Fax: (352) 334-3151

4. Application Contact Email Address: embryrg@gru.com

Facility Primary Responsible Official NOT APPLICABLE

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

State: Florida

1 44	emity primary responsible of	iliciai.		
1.	. Facility Primary Responsible Official Name:			
2.	2. Facility Primary Responsible Official Mailing Address Organization/Firm: Street Address			
	City:	State:	Zip Code:	
3.	Facility Primary Responsible	Official Telephone Numbers		
	Telephone: Fax:			
4.	Facility Primary Responsible Official E-mail Address:			

Zip Code: 32614-7117

Facility Regulatory Classifications

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

1. Small Business Stationary Source Unknown			
2. Synthetic Non-Title V Source			
3. Title V Source			
4. Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)			
5. Synthetic Minor Source of Air Pollutants, Other than HAPs			
6. Major Source of Hazardous Air Pollutants (HAPs)			
7. Synthetic Minor Source of HAPs			
8. One or More Emissions Units Subject to NSPS (40 CFR 60)			
9. One or More Emissions Units Subject to Emission Guidelines (40 CFR 60)			
10. One or More Emissions Units Subject to NESHAP (40 CFR 61 or Part 63)			
11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))			
12. Facility Regulatory Classifications Comment:			
- · · · · -			

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOX	A	N
SO2	A	N
PM	В	N
PM10	A	N
СО	A	N
Sulfuric Acid Mist (SAM)	В	N
Hydrochloric acid (H106)	A	N
Hydrofluoric acid (H107)	A	N
Total HAPs (HAPs)	A	N

DEP Form No. 62-210.900(1) – Form

B. EMISSIONS CAPS NOT APPLICABLE

Facility-Wide or Multi-Unit Emissions Caps

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

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

DEP Form No. 62-210.900(1) – Form

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the
	previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. B Previously Submitted, Date:
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. D Previously Submitted, Date:
Ac	Iditional Requirements for Air Construction Permit Applications NOT APPLICABLE
1.	Area Map Showing Facility Location: Attached, Document ID: Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): Attached, Document ID:
3.	Rule Applicability Analysis: Attached, Document ID:
4.	List of Exempt Emissions Units: Attached, Document ID: Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: Attached, Document ID: Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): Attached, Document ID: Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): Attached, Document ID: Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): Attached, Document ID: Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): Attached, Document ID: Not Applicable
10.	. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Attached, Document ID: Not Applicable

DEP Form No. 62-210.900(1) – Form

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications NOT APPLICABLE

1.	List of Exempt Emissions Units:							
	Attached, Document ID: Not Applicable (no exempt units at facility)							
<u>A</u>	Additional Requirements for Title V Air Operation Permit Applications							
1.	List of Insignificant Activities: (Required for initial/renewal applications only) Attached, Document ID: Attach. E Not Applicable							
2.	 Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought) Attached, Document ID: <u>Attach. F</u> 							
	☐ Not Applicable (revision application with no change in applicable requirements)							
3.	Compliance Report and Plan: (Required for all initial/revision/renewal applications) Attached, Document ID: Attach. G Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during							
	application processing.							
4.	List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only) Attached, Document ID: Attach. H							
	Equipment/Activities Onsite but Not Required to be Individually Listed							
	Not Applicable							
1	Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only) Attached, Document ID: Not Applicable							
6.	Requested Changes to Current Title V Air Operation Permit: Attached, Document ID: Not Applicable							

12

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

ı	Acid Rain Program Forms:	
	Acid Rain Part Application (DEP Form No.	62-210.900(1)(a)):
İ	Attached, Document ID: Attach. I	
	☐ Not Applicable (not an Acid Rain source	
	Phase II NO _X Averaging Plan (DEP Form N	
	Attached, Document ID:	Previously Submitted, Date:
	Not Applicable	
	New Unit Exemption (DEP Form No. 62-21	
		Previously Submitted, Date:
	Not Applicable	
2.	CAIR Part (DEP Form No. 62-210.900(1)(b	**
	Attached, Document ID: Attach. J	Previously Submitted, Date:
	☐ Not Applicable (not a CAIR source)	
L_		
3.	Hg Budget Part (DEP Form No. 62-210.900	
Ī	Attached Decument ID:	Duarrianaly Calamiteral Dates
	<u> </u>	Previously Submitted, Date:
	☐ Attached, Document ID:☐ Not Applicable (not a Hg Budget unit) -	
	<u> </u>	

DEP Form No. 62-210.900(1) – Form

EU 003

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)						
	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.						
	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.						
<u>En</u>	nissions Unit Desci	ription and Status					
1.	Type of Emissions	Unit Addressed in this	s Section: (Check one)				
			•	e emissions unit, a single			
	• •		, which produces one or	- 1			
			sion point (stack or vent)				
			_	e emissions unit, a group			
			ivities which has at least duce fugitive emissions.	one definable emission			
	• `	,	tion addresses, as a single	a amissians unit ana an			
	\		activities which produce	•			
2.	Description of Em	issions Unit Addressed	l in this Section: Steam I	Boiler Unit No.1			
3.	Emissions Unit Ide	entification Number: 00	03				
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit			
	Status Code:	Construction	Date:	Major Group			
	A	Date: N/A	N/A	SIC Code: 49			
0	Fodoral Program A	pplicability: (Check a	ll that apply)				
ο.	Acid Rain Unit	•	ii tiiat appry)				
	CAIR Unit						
	Hg Budget Uni	it					
0	Package Unit:		Model Number:	· · · · · · · · · · · · · · · · · · ·			
	nufacturer:		Model Number.				
	Generator Namep	late Rating: 75 MW					
11.	Emissions Unit Co	mment:					
	Field 10 is based of	on:					
	00.0051374	10	Les May & A As				
	88,235 kVA @	1.0 power factor, and	l 75 MW @ 0.85 power	factor.			

DEP Form No. 62-210.900(1) – Form

Emissions Unit Control Equipment/Method: Control of NOT APPLICABLE
1. Control Equipment/Method Description:
2. Control Device or Method Code:
2. Control Device of Method Code.
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
2. Control Device of Method Code.
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
2. Control Device of Method Code.
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2 Control Device or Method Code:

Section [1] **of** [5]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

	missions ome operating cap			
1.	Maximum Process or Throu	ghput Rate:		
2.	Maximum Production Rate:			
3.	Maximum Heat Input Rate:	960 million Btu/hr		
4.	Maximum Incineration Rate	: pounds/hr		
		tons/day		
5.	Requested Maximum Operation	ting Schedule:		
		24 hours/day	7	days/week
		52 weeks/year	8,760	hours/year
6.	Operating Capacity/Schedule		6 1 9 (3)	1015
6.		d 3) is applicable for natural g	as, fuel oils (No	os 1, 2, 4, 5, or
6.	Maximum heat input (Field	d 3) is applicable for natural g	as, fuel oils (No	os 1, 2, 4, 5, or
6.	Maximum heat input (Field	d 3) is applicable for natural g	as, fuel oils (No	os 1, 2, 4, 5, or

DEP Form No. 62-210.900(1) – Form

Section [1] **of** [5]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

Identification of Point on Flow Diagram: DH-1	Plot Plan or	2. Emission Point 7	Type Code: 1	
 3. Descriptions of Emission N/A 4. ID Numbers or Description N/A 		·		
5. Discharge Type Code: V	6. Stack Height 300 feet	:	7. Exit Diameter: 11.0 feet	
8. Exit Temperature: 285 °F	9. Actual Volum 342,700 acfm	metric Flow Rate:	10. Water Vapor: N/A %	
11. Maximum Dry Standard FN/A dscfm	low Rate:	12. Nonstack Emission Point Height: N/A feet		
13. Emission Point UTM Coo Zone: East (km): North (km)		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS): Longitude (DD/MM/SS):		
15. Emission Point Comment:				

DEP Form No. 62-210.900(1) - Form

Section [1] **of** [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1.	Segment Description (Process/Fuel Type):						
	External Combustion Boilers, Electric Generation, Natural gas						
	Boilers > 100 MMBtu/hr						
2.	Source Classification Code (SCC): 3. SCC Units:						
	1-01-006-01 Million Cubic Feet Burned						
4.	Maximum Hourly Rate: 0.92	5. Maximum	Annual Rate: 3,086	6. Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 1,040			
10.	Segment Comment:						
	Unit 1 can co-fire natural gas, fuel oils including residual fuel oils (Nos. 4-6), on-specification used oil, and distillate fuel oils (Nos. 1-2), and propane (for ignition). Maximum hourly rate in Field 4 is based on 960 MMBtu/hr and a nominal natural gas heat content of 1,040 Btu/ft ³ . Natural gas may also be supplemented with up to 50						
	gpm of non-hazardous boiler chemical cleaning waste.						

Segment Description and Rate: Segment 2 of 4

1.	Segment Description (Process/Fuel Type):					
	External Combustion Boilers, Electric Generation, Residual Oil					Oil
	Grade No. 6 Oil: Normal Firing					
	Grade No. o On. Norman	rning				
2.	Source Classification Code	e (SCC):	3. \$	SCC Units:		
	1-01-004-03	1	7	Thousands	Ga	llons Burned
4.	Maximum Hourly Rate:	5. Maximum	Annu	al Rate:	6.	Estimated Annual Activity
	6.40	5	6,064	,		Factor:
7.	Maximum % Sulfur:	8. Maximum % Ash:		h:	9.	Million Btu per SCC Unit:
	2.5		0.1			150
10.	Segment Comment:	Care a				

Unit 1 can co-fire natural gas, fuel oils including residual fuel oils (Nos. 4-6), on-specification used oil, and distillate fuel oils (Nos. 1-2), and propane (for ignition). Maximum hourly rate in Field 4 is based on 960 MMBtu/hr and a nominal residual fuel oil heat content of 150,000 Btu/gal. Residual fuel oil may also be supplemented with up to 50 gpm of non-hazardous boiler chemical cleaning waste.

DEP Form No. 62-210.900(1) – Form

Section [1] **of** [5]

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

Segment Description and Rate: Segment 3 of 4

1.	Segment Description (Process/Fuel Type):					
	External Combustion Boilers, Electric Generation, Distillate Oil					
	Grades 1 and 2 Oil					
2.	Source Classification Code (SCC): 3. SCC Units:					
	1-01-005-0	1	Thousand Gallons Burned			
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity		
	6.86	6	0,069	Factor:		
7.	Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:		
	0.5		0.1	140		
10	Comment Comments		-			

10. Segment Comment:

Unit 1 can co-fire natural gas, fuel oils including residual fuel oils (Nos. 4-6), on-specification used oil, and distillate fuel oils (Nos. 1-2), and propane (for ignition). Maximum hourly rate in Field 4 is based on 960 MMBtu/hr and a nominal distillate fuel oil heat content of 140,000 Btu/gal. Distillate fuel oil may also be supplemented with up to 50 gpm of non-hazardous boiler chemical cleaning waste.

Segment Description and Rate: Segment 4 of 4

1.	Segment Description (Process/Fuel Type):					
	External Combustion Boilers, Electric Generation,					
	On-Specification Used Oil					
	-					
2	Source Classification Cod	~ (SCC):	3. SCC Units			
2.	Source Classification Cod	, ,				
	1-01-013-02	2	Thousand	Gallons Burned		
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity		
	6.40	1,500		Factor:		
7.	Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:		
	2.5		0.1	150		
		•		•		

10. Segment Comment:

Maximum hourly rate in Field 4 is based on 960 MMBtu/hr and a nominal onspecification used oil heat content of 150,000 Btu/gal.

Specifications: Arsenic - 5 ppm(max.), Cadmium - 2 ppm(max.), Chromium - 10 ppm(max.), Lead - 100 ppm(max.), Total Halogens - 1,000 ppm(max.), Flash Point 100°F (min.), PCB < 50 ppm.

DEP Form No. 62-210.900(1) - Form

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1 Dellistant Funited 1 2 Deinam Central 2 Case dem Central 4 Dellistant				
1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant	
	Device Code	Device Code	Regulatory Code	
NOX			NS	
SO2			EL	
PM			EL	
PM10			NS	
СО			NS	
voc			NS	
H106 (HCl)			NS	
H107 (HF)			NS	
HAPS			NS	

POLLUTANT DETAIL INFORMATION
Page [1] of [18]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1 otential, Estimated 1 agitive, and Duseime e				
1. Pollutant Emitted: 2. Total Percent Efficiency of Control:			ency of Control:	
NOX N			A	
3. Potential Emissions:		4. Syntl	netically Limited?	
300.8 lb/hour 1,317.5	tons/year	Y	es 🖄 No	
5. Range of Estimated Fugitive Emissions (as	s applicable): N	I/A		
To tons/year				
6. Emission Factor: 47 lb/10 ³ gal			7. Emissions	
Reference: Table 1.3-1, AP-42			Method Code:	
			3	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A	
Tons/year N/A	From:	7	Γo:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:	
Tons/year N/A	☐ 5 years	☐ 10 ye	years N/A	
10. Calculation of Emissions:				
Hourly Rate:				
$NOX = (47 \text{ lb/}10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 300.8 \text{ lb/hr}$				
Annual Rate:				
$NOX = (47 \text{ lb}/10^3 \text{ gal}) \times (56,064 \times 10^3 \text{ ga})$	al/yr) x (1 ton/2	2,000 lb) =	= 1,317.5 ton/yr	
_			·	
11. Potential, Fugitive, and Actual Emissions Comment:				
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).				

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:

POLLUTANT DETAIL INFORMATION Page [2] of [18]

2. Future Effective Date of Allowable

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

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

DEP Form No. 62-210.900(1) – Form

POLLUTANT DETAIL INFORMATION
Page [3] of [18]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Pollutant Emitted:	2. Total Perc	ent Efficie	ncy of Control:	
SO2		N/A		
3. Potential Emissions:		4. Synthe	4. Synthetically Limited?	
2,640 lb/hour 11,563 ton	s/year	Y∈	_ <u></u>	
5. Range of Estimated Fugitive Emissions (as	applicable): N	I/A		
To tons/year			7 5	
6. Emission Factor: N/A Reference:			7. Emissions Method Code:	
Reference.			0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A	
Tons/year N/A	From:	T	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitorin	ng Period:	
Tons/year N/A	5-years	☐ 10 yea	ars N/A	
10. Calculation of Emissions:				
Hourly Rate:				
$SO2 = (2.75 \text{ lb/MMBtu}) \times (960 \text{ MMBtu/hr}) = 2,640 \text{ lb/hr}$				
Annual Rate:				
$SO2 = (2,640 \text{ lb/hr}) \times (8,760 \text{ hr/s})$	yr) / (2,000 lb/1	ton) = 11,5	663 tons/yr	
(2,010 10,111) 11 (0,1,00 111,11), (2,000 10,1011)				
11. Potential, Fugitive, and Actual Emissions Comment:				
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).				

POLLUTANT DETAIL INFORMATION Page [4] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 2

1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable
	RULE		Emissions: N/A
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
	2.75 lb/MMBtu		2,640 lb/hour 11,563 tons/year
5.	Method of Compliance:		
	EPA Reference Method 6, 6A, 6B, or 6C.		
6.	Allowable Emissions Comment (Description	of (Operating Method):
	Rule 62-296.405(1)(c)1.j,F.A.C.		
	Title V Permit 0010006-003-AV, Condition	ı A.	9.
Al	lowable Emissions Allowable Emissions 2 or	f <u>2</u>	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable
	OTHER		Emissions: N/A
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
	2.5 weight % sulfur fuel oil		2,640 lb/hour 11,563 tons/year
5.	Method of Compliance:		
	Fuel analysis using approved ASTM or eq	uiva	alent methods; each delivery
6.	Allowable Emissions Comment (Description	of 0	Operating Method):
ļ	Rule 62-296.405(1)(e)3,F.A.C.		
	Title V Permit 0010006-003-AV, Condition	1 A.	10.
Al	lowable Emissions Allowable Emissions	of	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
			lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):

DEP Form No. 62-210.900(1) – Form

POLLUTANT DETAIL INFORMATION
Page [5] of [18]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Pero	ent Efficie	ency of Control:
PM		N/A	
3. Potential Emissions:			netically Limited?
288 lb/hour 520	tons/year	☐ Y	es 🛛 No
5. Range of Estimated Fugitive Emissions (as To tons/year	applicable): N	N/A	
6. Emission Factor: N/A			7. Emissions
Reference:			Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:		To:
9.a. Projected Actual Emissions (if required):	9.b. Projected		
Tons/year N/A	5 years		ears N/A
	3 years	10 ye	tals IV/A
10. Calculation of Emissions:			
Hourly Rate:			
Soot Blowing: PM = (0.3 lb/MMBtu) x (960 MMBtu/hr) = 288 lb/hr Normal: PM = (0.1 lb/MMBtu) x (960 MMBtu/hr) = 96 lb/hr			
Annual Rate: Average Permit Limit for normal (0.1 lb/MMBtu @ 21 hrs/dy) and soot blowing (0.3 lb/MMBtu @ 3 hrs/dy) operations.			
$PM = (0.125 \text{ lb/MMBtu}) \times (960 \text{ MMBtu/hr}) \times (8,760 \text{ hr/yr}) \times (1 \text{ ton/2,000 lb}) = 525.6 \text{ tons/yr}$			
11. Potential, Fugitive, and Actual Emissions Co	omment:	***	
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).			

POLLUTANT DETAIL INFORMATION
Page [6] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 2

 Basis for Allowable Emissions Code: RULE 	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.3 lb/MMBtu	4. Equivalent Allowable Emissions: 288 lb/hour 158 tons/year			
5. Method of Compliance: Annual stack test using EPA Reference Method 5, 5B, 5F, or 17.				
6. Allowable Emissions Comment (Description of Operating Method): Allowable emission rate applicable during soot-blowing and load change for 3 hours per 24-hour period, per Rule 62-210.700(3), F.A.C. and Title V Permit 0010006-003-AV, Condition A.7. Compliance test only required if fuel oil is burned more than 400 hours per federal fiscal year, other than during startups, per Rule 62-297.310(7)(a)5, F.A.C.				

Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 96 lb/hour 421 tons/year			
5. Method of Compliance: Annual compliance test using EPA Reference Method 5, 5B, 5F, or 17.				
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.405(1)(b), F.A.C. and Title V Permit 0010006-003-AV, Condition A.8. Compliance test only required if fuel oil is burned for more than 400 hours per federal fiscal year, other than during startups, per Rule 62-297.310(7)(a)5, F.A.C.				

A 11		n	A 11 1 1 1 TO 1 1	•
Allawa	hle	Hmiccione	Allowable Emissions	ΩŤ

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

DEP Form No. 62-210.900(1) - Form

Effective: 3/16/08 26 Y:\GDP-09\GRU\DGS\TITLVREN-FDEPAPP.DOC—051509

POLLUTANT DETAIL INFORMATION
Page [7] of [18]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

. Pollutant Emitted: 2. Total Percent Efficiency of Control:			ency of Control:
PM10	N/A		
3. Potential Emissions:			netically Limited?
119.7 lb/hour 524	3 tons/year	Y	'es 🔲 No
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A	
To tons/year		·	
6. Emission Factor: 18.70 lb/10 ³ gal			7. Emissions
Reference: Table 1.3-4, AP-42			Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24 month	Pariod: N/A
Tons/year N/A			
	From:		To:
9.a. Projected Actual Emissions (if required):	9.b. Projected		
	Tons/year N/A 5 years 10 years N/A		
10. Calculation of Emissions:			
Hourly Rate: (Based on 2.5% S fuel oil, n	ormal operation	ons)	
$PM10 = (18.70 \text{ lb}/10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 119.7 \text{ lb/hr}$			
Annual Rate: (Based on 2.5% S fuel oil, normal operations)			
$PM10 = (18.70 \text{ lb}/10^3 \text{ gal}) \text{ x } (56,064 \text{ x } 10^3 \text{ gal/yr}) \text{ x } (1 \text{ ton/2,000 lb}) = 524.3 \text{ ton/yr}$			
11. Potential, Fugitive, and Actual Emissions C	omment:		
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).			
i otential emissions based on combustion of two of fuel on (worst case fuel).			

POLLUTANT DETAIL INFORMATION
Page [8] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

DEP Form No. 62-210.900(1) – Form

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:			
CO	N/A			
3. Potential Emissions:		4. Synth	netically Limited?	
32.0 lb/hour 140.2	tons/year Yes No		es 🛛 No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A				
To tons/year				
6. Emission Factor: 5 lb/10 ³ gal			7. Emissions	
Reference: Table 1.3-1, AP-42		Method Code:		
			3	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period: N/A From: To:			
Tons/year N/A				
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
Tons/year N/A 5 years		☐ 10 ye	☐ 10 years N/A	
10. Calculation of Emissions:				
Hourly Rate:				
$CO = (5 \text{ lb/}10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 32.0 \text{ lb/hr}$				
Annual Rate:				
$CO = (5 \text{ lb}/10^3 \text{ gal}) \times (56,064 \times 10^3 \text{ gal/yr}) \times (1 \text{ ton/2,000 lb}) = 140.2 \text{ ton/yr}$				
11. Potential, Fugitive, and Actual Emissions Comment:				
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).				
A vectorial emissions bused on combustion of two of fuel on (worst case fuel).				

EMISSIONS UNIT INFORMATION Section [1] **of** [5]

POLLUTANT DETAIL INFORMATION Page [10] of [18]

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc		ency of Control:
VOC		N/.	
3. Potential Emissions:		-	netical <u>ly</u> Limited?
4.9 lb/hour 21. 3	3 tons/year		'es 🛛 No
5. Range of Estimated Fugitive Emissions (as	applicable): N	Ī/A	
To tons/year			
6. Emission Factor: 0.76 lb/10 ³ gal			7. Emissions
Reference: Table 1.3-3, AP-42			Method Code:
			3
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	7	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
$VOC = (0.76 \text{ lb/}10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 4.9 \text{ lb/hr}$			
Annual Rate:			
$VOC = (0.76 \text{ lb/}10^3 \text{ gal}) \times (56,064 \times 10^3 \text{ gal})$	gal/yr) x (1 to	n/2,000 lb	o) = 21.3 ton/yr
11. Potential, Fugitive, and Actual Emissions Co	omment:		
Potential emissions based on combustion	of No. 6 fuel oi	l (worst c	ase fuel)
1 occident chilosions pascu on compustion	or 140. o raci di	ı (muist C	ast luti).

EMISSIONS UNIT INFORMATION Section [1] of [5]

POLLUTANT DETAIL INFORMATION Page [12] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

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

DEP Form No. 62-210.900(1) - Form

Effective: 3/16/08

EMISSIONS UNIT INFORMATION Section [1] of [5]

POLLUTANT DETAIL INFORMATION
Page [13] of [18]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc	ent Efficie	ency of Control:
H106 (HCl)		N/	A
3. Potential Emissions:			netically Limited?
7.2 lb/hour 31.	7 tons/year	☐ Y	es 🛛 No
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A	
To tons/year		1400	
6. Emission Factor: 1.13 lb/10 ³ gal No. 6 Fue	l Oil		7. Emissions
(131.8 mg/l Cl)	4' D.4		Method Code:
Reference: EPA Boiler MACT Supp			5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline		
Tons/year N/A	From:		To:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	☐ 5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
$HCl = (1.13 \text{ lb/}10^3 \text{ gal}) \text{ x } (6.40 \text{ x } 10^3 \text{ gal/hr}) = 7.2 \text{ lb/hr}$			
Annual Rate:			
$HCl = (1.13 \text{ lb/}10^3 \text{ gal}) \text{ x } (56,064 \text{ x } 10^3 \text{ gal/yr}) \text{ x } (1 \text{ ton/}2,000 \text{ lb}) = 31.7 \text{ ton/yr}$			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).			

EMISSIONS UNIT INFORMATION Section [1] of [5]

POLLUTANT DETAIL INFORMATION Page [14] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

EMISSIONS UNIT INFORMATION Section [1] of [5]

POLLUTANT DETAIL INFORMATION
Page [15] of [18]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc		ency of Control:
H107 (HF)		N/.	A
3. Potential Emissions:		4. Synth	netically Limited?
0.91 lb/hour 4.0	tons/year		es 🛛 No
5. Range of Estimated Fugitive Emissions (as	applicable): N	I/A	
To tons/year			
6. Emission Factor: 0.143 lb/10 ³ gal No. 6 Fu	el Oil		7. Emissions
(17.5 ppmw F)			Method Code:
Reference: EPA Utility HAP Study			5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	7	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A		☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
HF = $(0.143 \text{ lb/}10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 0.91 \text{ lb/hr}$			
Annual Rate:			
HF = $(0.143/10^3 \text{ gal}) \times (56,064 \times 10^3 \text{ gal/yr}) \times (1 \text{ ton/2,000 lb}) = 4.0 \text{ ton/yr}$			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
Potential emissions based on combustion	Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).		

EMISSIONS UNIT INFORMATION Section [1] of [5]

POLLUTANT DETAIL INFORMATION
Page [16] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

Allowable Emissions Allowable Emissions of

1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year	
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	of (Operating Method):	
	· · · · · · · · · · · · · · · · · · ·		1.64	

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

(Optional for unregulated emissions units.)

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

Totelliai, Estimated Tugitive, and Busenite of	e i i ojecica Ac	tuai Liiiis	310113
1. Pollutant Emitted:	2. Total Perc		ency of Control:
HAPS N/.		A	
3. Potential Emissions:			netically Limited?
9.1 lb/hour 40.0	tons/year	□ Y	es 🛛 No
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A	•
To tons/year			
6. Emission Factor: 1.43 lb/10 ³ gal (composite			7. Emissions
Reference: Tables 1.3-9 & 1.3-11, Al	P-42		Method Code:
EPA Boiler MACT Supp	orting Data		3 and 5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	7	Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
HAPS = $(1.43 \text{ lb/}10^3 \text{ gal}) \times (6.40 \times 10^3 \text{ gal/hr}) = 9.1 \text{ lb/hr}$			
Annual Rate:			
HAPS= $(1.43 \text{ lb}/10^3 \text{ gal}) \times (56,064 \times 10^3 \text{ gal})$	gal/yr) x (1 to	n/2,000 lb	o) = 40.0 ton/yr
11. Potential, Fugitive, and Actual Emissions Comment:			
Potential emissions based on combustion of No. 6 fuel oil (worst case fuel).			

EMISSIONS UNIT INFORMATION Section [1] of [5]

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [18] of [18]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

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

Section [1] **of** [5]

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: 20 % Ex Maximum Period of Excess Opacity Allower	acceptional Conditions: 40 % ed: 2 min/hour
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Rule 62-296.405(1)(a), F.A.C. Title V Permit 0010006-003AV, Condition A. Annual or permit renewal compliance testing than during startups, for more than 400 hour	g is only required if fuel oil is burned, other
Visible Emissions Limitation: Visible Emission	ons Limitation 2 of 4
1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	ceptional Conditions: 60 % 60 min/hour
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Rule 62-210.700(3), F.A.C. allows visible emision any 24-hour period during soot blowing an	-

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

39

Section [1] **of** [5]

G. VISIBLE EMISSIONS INFORMATION (cont'd)

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

Visible Emissions Limitation: Visible Emissions Limitation 3 of 4

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:			
N/A	Rule Other			
3. Allowable Opacity:				
Normal Conditions: % Ex	sceptional Conditions: 100 %			
Maximum Period of Excess Opacity Allowe	ed: 24 min/hour			
4. Method of Compliance: DEP Method 9				
5. Visible Emissions Comment:				
Rule 62-210.700(3), F.A.C. allows visible emi	ssions above 60% for no more than 4, 6-min			
periods during a 3-hr excess emissions period				
Title V Permit 0010006-003AV, Condition A	.6			
Visible Emissions Limitation: Visible Emissi	ons Limitation 4 of 4			
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:			
N/A	Rule Other			
3. Allowable Opacity:				
	cceptional Conditions: 100 %			
Maximum Period of Excess Opacity Allowe	ed: 60 min/hour			
4. Method of Compliance: DEP Method 9				
·				
5. Visible Emissions Comment:				
Rule 62-210.700(1), F.A.C. allows excess visible emissions resulting from malfunctions				
for up to 2 hours in any 24-hour period. Rule 62-210.700(2), F.A.C. allows excess visible				
emissions during startups and shutdowns.				
Title V Permit 0010006-003AV, Condition A	.12 and A.13			

Section [1] **of** [5]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 3

1.	Parameter Code:	2. Pollutant(s):			
	VE	N/A			
3.	CMS Requirement:	☐ Rule ☐ Other			
4.	Monitor Information Manufacturer: Spectrum				
	Model Number: Spectrum 41	Serial Number: 0445-8072			
5.	Installation Date: 03/18/1994	6. Performance Specification Test Date: 01/01/1995			
7.	Continuous Monitor Comment:				
	Although exempted from continuous opacity monitoring as a gas-fired unit based on 40 CFR Part 75.14(c), GRU elected to install COMS in the event the unit becomes subject to 40 CFR Part 75.10(a) in the future.				
<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor $\underline{2}$ of $\underline{3}$			
1.	Parameter Code: CO2	2. Pollutant(s): N/A			
3.	CMS Requirement:	⊠ Rule ☐ Other			
4.	Monitor Information Manufacturer: Siemens				
	Model Number: Ultramat 6E	Serial Number: N1-SN-0860			
5.	Installation Date: 03/18/1994	6. Performance Specification Test Date: 01/01/1995			
7.	Continuous Monitor Comment:				
	40 CFR Part 75.				

Section [1] **of** [5]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 3 of 3

1.	Parameter Code:	2.	Pollutant(s):
	EM		NOX
3.	CMS Requirement:	\boxtimes	Rule Other
4.	Monitor Information Manufacturer: TECO		
	Model Number: 42C		Serial Number: 0436610037
5.	Installation Date: 03/18/1994	6.	Performance Specification Test Date: 01/01/1995
7.	Continuous Monitor Comment:		
	40 CFR Part 75.		
Coi	ntinuous Monitoring System: Continuous	Mor	nitor 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:		-

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. M Previously Submitted, Date:
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Not Applicable
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. M Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: 07/30/2008 Test Date(s)/Pollutant(s) Tested: 06/19-20/2008/PM and VE To be Submitted, Date (if known): Test Date(s)/Pollutant(s) Tested:
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

EMISSIONS UNIT INFORMATION Section [1] of [5]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

<u>Ac</u>	dditional Requirements for Air Construction Permit Applications NOT APPLICABLE						
1.	1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),						
	F.A.C.; 40 CFR 63.43(d) and (e)):						
	Attached, Document ID: Not Applicable						
2.	Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-						
	212.500(4)(f), F.A.C.):						
	Attached, Document ID: Not Applicable						
3.							
	only)						
	Attached, Document ID: Not Applicable						
Ac	dditional Requirements for Title V Air Operation Permit Applications						
1.	Identification of Applicable Requirements:						
<u> </u>	Attached, Document ID: Attachment F						
2.	Compliance Assurance Monitoring:						
	Attached, Document ID: Not Applicable						
3.	Alternative Methods of Operation:						
	Attached, Document ID: Attachment O Not Applicable						
4.	Alternative Modes of Operation (Emissions Trading):						
	Attached, Document ID: Not Applicable						
Ad	dditional Requirements Comment						

EU 005

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

or renewal Title V	Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)				
	The emissions unit addressed in this Emissions Unit Information Section is a regulated				
emissions uni The emissions		Emissions Unit Informa	tion Section is an		
unregulated er	nissions unit.				
Emissions Unit Desc	ription and Status				
1. Type of Emission	s Unit Addressed in thi	s Section: (Check one)			
1 ——		_	le emissions unit, a single		
· · · · · · · · · · · · · · · · · · ·	-	y, which produces one of sion point (stack or vent	r more air pollutants and		
☐ This Emission	s Unit Information Sec	tion addresses, as a sing	le emissions unit, a group		
<u> </u>			t one definable emission		
point (stack or	vent) but may also pro	duce fugitive emissions	•		
. _			le emissions unit, one or e fugitive emissions only.		
2. Description of En	nissions Unit Addressed	l in this Section: Steam	Boiler Unit No.2		
3. Emissions Unit Id	lentification Number: (005			
4. Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit		
Status Code:	Construction	Date:	Major Group		
A	Date: N/A	N/A	SIC Code: 49		
8. Federal Program A	Applicability: (Check a	ıll that apply)			
🛛 Acid Rain Un	it				
☐ Hg Budget Ur	nit				
9. Package Unit:	Model No	ımber:			
Manufacturer: 10. Generator Nameplate Rating: 251 MW					
11. Emissions Unit	Comment: Dry Botton	i, wan-iired boner			
Field 10 is base					
	VA @ 1.0 power facto W @ 0.85 power facto				

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

Section [2] **of** [5]

Emissions	<u>Unit</u>	Control	Equipme	ent/Method:	Control	1	of	1

1. Control Equipment/Method Description:
Electrostatic Precipitator (Research-Cottrell)
2. Control Device or Method Code: 010
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:

Section [2]

of [5]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:					
2. Maximum Production Rate:					
3. Maximum Heat Input Rate: 2,428 million Btu/	hr				
4. Maximum Incineration Rate: pounds/hr	Maximum Incineration Rate: pounds/hr				
tons/day					
5. Requested Maximum Operating Schedule:					
24 hours/day	7 days/week				
52 weeks/yea	r 8,760 hours/year				
6 Operating Canacity/Schedule Comment:					

6. Operating Capacity/Schedule Comment:

Maximum heat input (Field 3) is based on coal-firing. Maximum heat input is 900 MMBtu/hr for No. 1 or 2 fuel oil-firing, and 591 MMBtu/hr for natural gas-firing.

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

Identification of Point on Flow Diagram: DH-2	Plot Plan or	2. Emission Point ' 1	Type Code:		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A					
4. ID Numbers or Description N/A	ns of Emission Ui	nits with this Emissio	n Point in Common:		
5. Discharge Type Code: V	6. Stack Height	:: 350 feet	7. Exit Diameter: 18.5 feet		
8. Exit Temperature: 352°F	760	metric Flow Rate: 6,500 acfm	10. Water Vapor: N/A %		
11. Maximum Dry Standard F N/A dscfm	Flow Rate:	12. Nonstack Emission Point Height: N/A feet			
13. Emission Point UTM Coordinates Zone: East (km): North (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS): Longitude (DD/MM/SS):			

Section [2]

of [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type):

External Combustion Boilers, Electric Generation, Bituminous/Subbituminous Coal,

Pulverized Coal: Dry Bottom (Bituminous Coal)

2. Source Classification Code (SCC):

3. SCC Units:

1-01-002-02

Tons Burned

4. Maximum Hourly Rate: 93.4

5. Maximum Annual Rate: **818.049**

6. Estimated Annual Activity

Factor: N/A

7. Maximum % Sulfur: **0.8**

8. Maximum % Ash: **10.0**

9. Million Btu per SCC Unit:

26

10. Segment Comment:

Unit can co-fire coal, natural gas, and Nos. 1 and 2 fuel oil. Maximum hourly rate in Field 4 is based on 2,428 MMBtu/hr and a nominal coal heat content of 13,000 Btu/lb

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type):

External Combustion Boilers, Electric Generation, Natural Gas, Tangentially Fired Units

2. Source Classification Code (SCC): 1-01-006-04

3. SCC Units:

Million Cubic Feet Burned

4. Maximum Hourly Rate:

5. Maximum Annual Rate: 4.978

6. Estimated Annual Activity Factor: N/A

7. Maximum % Sulfur:

8. Maximum % Ash:

9. Million Btu per SCC Unit:

N/A

N/A

1.040

10. Segment Comment:

Unit can co-fire coal, natural gas, and Nos. 1 and 2 fuel oil. Maximum hourly rate in Field 4 is based on 591 MMBtu/hr and a nominal natural gas heat content of 1,040 Btu/ft³.

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

Section [2] **of** [5]

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

Segment Description and Rate: Segment 3 of 3

1.	Segment Description (Process/Fuel Type):						
	External Combustion Boilers, Electric Generation, Distillate Oil, Grades 1 and 2 Oil						
	Distinate On, Grades Fand 2 On						
2.	Source Classification Code 1-01-005-01	e (SCC):	3. SCC Units Thousand		lons Burned		
4.	Maximum Hourly Rate: 6.43	5. Maximum . 56 ,	Annual Rate: 314	6.	Estimated Annual Activity Factor: N/A		
7.	Maximum % Sulfur: 0.5	8. Maximum 0	% Ash: .1	9.	Million Btu per SCC Unit: 140		
10.	Segment Comment: Unit can co-fire coal, nat rate in Field 4 is based or of 140,000 Btu/gal.	_			Maximum hourly tillate fuel oil heat content		
Se	gment Description and Ra	ite: Segment	_ of				
1.	Segment Description (Proc	cess/Fuel Type):					
2.	Source Classification Code	e (SCC):	3. SCC Units	:			
4.	. Maximum Hourly Rate: 5. Maximum Annual Rate: 6. Estimated Annual Activity Factor:						
7.	Maximum % Sulfur:	m % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Unit:					
10.	Segment Comment:						

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

	List of Pollutants Emitted by Emissions Unit							
1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code					
NOX			EL					
SO2			EL					
PM	010		EL					
PM10	010		NS					
СО			NS					
voc			NS					
H106			NS					
H107			NS					
HAPS			NS					

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:				
NOX	N/A				
3. Potential Emissions:	4. Synthetically Limited?				
1,699.6 lb/hour 4,891. 9	tons/year	Y	res 🛛 No		
5. Range of Estimated Fugitive Emissions (as To tons/year	s applicable): N	N/A			
6. Emission Factor: 0.70 and 0.46 lb/10 ⁶ Btu			7. Emissions		
Reference: Condition B.7.(3), TV Pe	rmit 0010006-	003-AV	Method Code:		
Acid Rain Program – Ph	ase II		0		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A		
Tons/year N/A	From:	7	Го:		
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:		
Tons/year N/A	☐ 5 years	☐ 10 ye	ears N/A		
10. Calculation of Emissions:					
Hourly Rate:					
$NOX = (0.70 \text{ lb}/10^6 \text{ Btu}) \times (2,42)$	28 x 10 ⁶ Btu/hr	·) = 1,699.	6 lb/hr		
Annual Rate:					
NOX = $(0.46 \text{ lb}/10^6 \text{ Btu}) \times (21,269,280 \times 10^6 \text{ m})$	⁶ Btu/yr) x (1 t	on/2,000 l	(b) = 4,891.9 ton/yr		
11. Potential, Fugitive, and Actual Emissions Comment:					
Potential emissions based on combustion of coal (worst case fuel).					

EMISSIONS UNIT INFORMATION Section [2] of [5]

POLLUTANT DETAIL INFORMATION
Page [2] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 4

1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A			
3.	Allowable Emissions and Units: 0.7 lb/MMBtu (3-Hour Average)	4. Equivalent Allowable Emissions: 1,699.6 lb/hour N/A tons/year			
5.	5. Method of Compliance: Annual stack test using EPA Reference Method 7, 7A, 7C, 7D, 7E or CEMS				
6.	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR Part 60, Subpart D, 60.44(a)(3) – Solid fuels Title V Permit 0010006-003-AV, Condition B.7.(a)(3). Allowable emission rate will be prorated when different fuels are burned simultaneously.				

Allowable Emissions 2 of 4

Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A	
Allowable Emissions and Units: 0.46 lb/MMBtu (Annual Average)	4. Equivalent Allowable Emissions: N/A lb/hour 4,891.9 tons/year	
Method of Compliance: CEMS		
Allowable Emissions Comment (Descripti	on of Operating Method):	
Acid Rain Program Phase II limit.		
	RULE Allowable Emissions and Units: 0.46 lb/MMBtu (Annual Average) Method of Compliance: CEMS Allowable Emissions Comment (Description of the complex of the	

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08 53 YAGDP-09AGRUADGSATITLVREN-FDEPAPP.DOC—051509

POLLUTANT DETAIL INFORMATION Page [3] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 3 of 4

1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A		
3.	Allowable Emissions and Units: 0.3 lb/MMBtu (3-Hour Average)	4. Equivalent Allowable Emissions: 728 lb/hour N/A tons/year		
5.	5. Method of Compliance: Annual stack test using EPA Reference Method 7, 7A, 7C, 7D, 7E or CEMS			
6.	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR Part 60, Subpart D, 50.44(a)(2) – Liquid Fuels Title V Permit 0010006-003-AV, Condition B.7.(a)(2). Allowable emission rate will be prorated when different fuels are burned simultaneously.			

Allowable Emissions 4 of 4

Basis for Allowable Emissions Code: RULE	 Future Effective Date of Allowable Emissions: N/A Equivalent Allowable Emissions: 486 lb/hour N/A tons/year 		
3. Allowable Emissions and Units: 0.2 lb/MMBtu (3-Hour Average)			
5. Method of Compliance: Annual stack test using EPA Reference Method 7, 7A, 7C, 7D, 7E or CEMS			
6. Allowable Emissions Comment (Description 40 CFR Part 60, Subpart D, 60.44(a)(1) – Title V Permit 0010006-003-AV, Condition Allowable emission rate will be prorated v simultaneously.	Gaseous fuels n B.7.(a)(1).		

POLLUTANT DETAIL INFORMATION Page [4] of [19]

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

(Optional for unregulated emissions units.)

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

1 D 11 E 1 1	2 T 1 D ESS	C.C 1			
	1. Pollutant Emitted: 2. Total Percent Efficiency of Control:				
SO2	N/A				
3. Potential Emissions:	4. Syntl	netically Limited?			
2,913.6 lb/hour 12,761.6	tons/year Y	es 🛛 No			
5. Range of Estimated Fugitive Emissions (as	applicable): N/A				
To tons/year					
6. Emission Factor: 1.20 lb/10 ⁶ Btu		7. Emissions			
Reference: Condition B.2.(2), TV Pe	rmit 0010006-003-AV	Method Code:			
		0			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period: N/A			
Tons/year N/A	From:	Го:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:			
Tons/year N/A	5 years 10 ye	ears N/A			
10. Calculation of Emissions:		·			
Hourly Rate:					
$SO2 = (1.20 \text{ lb/}10^6 \text{ Btu}) \times (2,428 \times 10^6 \text{ Btu/hr}) = 2,913.6 \text{ lb/hr}$					
Annual Rate:					
SO2 = $(1.20 \text{ lb}/10^6 \text{ Btu}) \times (21,269,280 \times 10^6)$	Btu/vr) x (1 ton/2.000 lk	o) = 12,761.6 ton/vr			
		·,, · · · · ·			
11. Potential, Fugitive, and Actual Emissions Comment:					
11.1 otolicia, 1 agitivo, and 1 otaai Elinosiono Comment.					
Potential emissions based on combustion of coal (worst case fuel).					

POLLUTANT DETAIL INFORMATION Page [5] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 2

Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A	
3. Allowable Emissions and Units: 1.2 lb/MMBtu (3-Hour Average)	4. Equivalent Allowable Emissions: 2,913.6 lb/hour 12,761.6 tons/year	
5. Method of Compliance: Annual stack test using EPA Reference M	lethod 6, 6A, 6B, 6C or CEMS	
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR Part 60, Subpart D, 60.43(a)(2) – Solid Fuels Title V Permit 0010006-003-AV, Condition B.5.(a)(2). Allowable emission rate will be prorated when different fuels are burned simultaneously.		

Allowable Emissions 2 of 2

1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 0.8 lb/MMBtu (3-Hour Average)	4. Equivalent Allowable Emissions: 1,942 lb/hour N/A tons/year		
5.	5. Method of Compliance: Annual stack test using EPA Reference Method 6, 6A, 6B, 6C or CEMS			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR Part 60, Subpart D, 60.43(a)(1) – Liquid Fuels Title V Permit 0010006-003-AV, Condition B.5.(a)(1). Allowable emission rate will be prorated when different fuels are burned simultaneously.				

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08 56 Y:\GDP-\(\theta\)GS\\TITLVREN-FDEPAPP.DOC—051509

POLLUTANT DETAIL INFORMATION Page [6] of [19]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:			
PM	N/A			
3. Potential Emissions:	4. Synthetically Limited?			
242.8 lb/hour 1,063.5	5 tons/year	Y	es 🛛 No	
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A		
To tons/year				
6. Emission Factor: 0.10 lb/10 ⁶ Btu			7. Emissions	
Reference: Condition B.4.(1), TV Pe	rmit 0010006-	003-AV	Method Code:	
			0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A	
Tons/year N/A	From:	7	Го:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:	
Tons/year N/A	5 years	☐ 10 ye	ears N/A	
10. Calculation of Emissions:				
Hourly Rate:				
$PM = (0.10 \text{ lb/}10^6 \text{ Btu}) \times (2,428 \times 10^6 \text{ Btu/hr}) = 242.8 \text{ lb/hr}$				
Annual Rate:				
$PM = (0.10 \text{ lb}/10^6 \text{ Btu}) \times (21,269,280 \times 10^6 \text{ Btu/yr}) \times (1 \text{ ton/2,000 lb}) = 1,063.5 \text{ ton/yr}$				
11. Potential, Fugitive, and Actual Emissions Comment:				
11.1 otential, Fugitive, and Actual Emissions Comment.				
Potential emissions based on combustion of coal (worst case fuel).				

EMISSIONS UNIT INFORMATION Section [2] of [5]

POLLUTANT DETAIL INFORMATION Page [7] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions: N/A	
3.	Allowable Emissions and Units: 0.10 lb/MMBtu (3-Hour Average)	4.	Equivalent Allowable Emissions: 242.8 lb/hour 1,063.5 tons/year	
5.	5. Method of Compliance: Annual compliance test using EPA Reference Method 5 or 17.			
6.	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR Part 60, Subpart D, 60.42(a)(1) – Fossil Fuels Title V Permit 0010006-003-AV, Condition B.4.(a)(1).			

Allowable Emissions of

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

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:				
PM10	N/A				
3. Potential Emissions:			netically Limited?		
50.4 lb/hour 220.9	9 tons/year		es No		
5. Range of Estimated Fugitive Emissions (as To tons/year	s applicable): N	N/A			
6. Emission Factor: 0.54 lb/ton Reference: Table 1.1-6., AP-42			7. Emissions Method Code:		
			3		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A		
Tons/year N/A	From:	7	Го:		
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:		
Tons/year N/A	5 years	☐ 10 ye	ears N/A		
10. Calculation of Emissions:					
Hourly Rate:					
$PM10 = (0.54 \text{ lb/ton}) \times (93.4 \text{ ton/hr}) = 50.4 \text{ lb/hr}$					
Annual Rate:					
$PM10 = (0.54 \text{ lb/ton}) \times (818,049 \text{ ton/hr}) \times (1 \text{ ton/2,000 lb}) = 220.9 \text{ ton/yr}$					
11. Potential, Fugitive, and Actual Emissions Comment:					
Potential emissions based on combustion of coal (worst case fuel).					
2 ottomate of the companies of the contraction of t					

EMISSIONS UNIT INFORMATION Section [2] of [5]

POLLUTANT DETAIL INFORMATION
Page [9] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

DEP Form No. 62-210.900(1) – Form Effective: 3/16/08

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:			
СО			V/A	
3. Potential Emissions:			netically Limited?	
	5 tons/year		☐ Yes 🛛 No	
5. Range of Estimated Fugitive Emissions (as applicable): N/A To tons/year				
			7. Emissions	
Reference: Table 1.1-3., AP-42			Method Code:	
Reference. Table 1:1-5., At -42			3	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A	
Tons/year N/A	From: To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
Tons/year N/A	5 years 10 years N/A			
10. Calculation of Emissions:	•			
Hourly Rate:				
$CO = (0.50 \text{ lb/ton}) \times (93.4 \text{ ton/hr}) = 46.7 \text{ lb/hr}$				
Annual Rate:				
$CO = (0.50 \text{ lb/ton}) \times (818,049 \text{ ton/h})$	ır) x (1 ton/2,0	00 lb) = 20)4.5 ton/yr	
11. Potential, Fugitive, and Actual Emissions Comment:				
Potential emissions based on combustion of coal (worst case fuel).				
2 overhear chilosions bused on combustion of cour (worst case ruci).				

EMISSIONS UNIT INFORMATION Section [2] of [5]

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [11] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

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

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

(Optional for unregulated emissions units.)

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

Totelliai, Estimated Tugitive, and Dasenile of	e i i ojecteu me	tuai Ellilis	310113	
1. Pollutant Emitted:	2. Total Perc	ent Efficie	ency of Control:	
VOC		N	V/A	
3. Potential Emissions:		_	hetically Limited?	
5.6 lb/hour 24.	5 tons/year	Y	es 🛛 No	
5. Range of Estimated Fugitive Emissions (as	s applicable): N	V/A		
To tons/year				
6. Emission Factor: 0.06 lb/ton			7. Emissions	
Reference: Table 1.1-19., AP-42			Method Code:	
8.a. Baseline Actual Emissions (if required):	Oh Dandina	24	Davis de N/A	
Tons/year N/A	8.b. Baseline 24-month Period: N/A			
•	From: To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected		C	
Tons/year N/A	5 years 10 years N/A			
10. Calculation of Emissions:				
Hourly Rate:				
$VOC = (0.06 \text{ lb/ton}) \times (93.4 \text{ ton/hr}) = 5.6 \text{ lb/hr}$				
Annual Rate:				
$VOC = (0.06 \text{ lb/ton}) \times (818,049 \text{ ton/hr}) \times (1 \text{ ton/2,000 lb}) = 24.5 \text{ ton/yr}$				
11. Potential, Fugitive, and Actual Emissions Comment:				
Potential emissions based on combustion of coal (worst case fuel).				

EMISSIONS UNIT INFORMATION Section [2] of [5]

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [13] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

2. Future Effective Date of Allowable Emissions:
4. Equivalent Allowable Emissions: lb/hour tons/year
on of Operating Method):
of 2. Future Effective Date of Allowable
Emissions:
4. Equivalent Allowable Emissions: lb/hour tons/year
on of Operating Method):

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc	cent Efficiency of Control:
HCl (H106)	N/A	
3. Potential Emissions:		4. Synthetically Limited?
112.1 lb/hour 490.	8 tons/year	☐ Yes ⊠ No
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A
To tons/year		
6. Emission Factor: 1.2 lb/ton		7. Emissions
Reference: Table 1.1-15., AP-42		Method Code:
		3
8.a. Baseline Actual Emissions (if required):		e 24-month Period: N/A
Tons/year N/A	From:	То:
9.a. Projected Actual Emissions (if required):	9.b. Projected	d Monitoring Period:
Tons/year N/A	5 years	☐ 10 years N/A
10. Calculation of Emissions:		
Hourly Rate:		
HCl = (1.2 lb/ton) x (93)	.4 ton/hr) = 11	12.1 lb/hr
Annual Rate:		
HCl = (1.2 lb/ton) x (818,049 ton/h)	r) x (1 ton/2,00	(00 lb) = 490.8 ton/yr
11. Potential, Fugitive, and Actual Emissions Co	omment:	
, ,		
Potential emissions based on combustion	of coal (worst	case fuel).

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [15] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

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

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc		ency of Control:
HF (H107)		N	I/A
3. Potential Emissions:		4. Synth	netically Limited?
14.0 lb/hour 61. 4	tons/year	□ Y	es 🛛 No
5. Range of Estimated Fugitive Emissions (as To tons/year	applicable): N	N/A	
6. Emission Factor: 0.15 lb/ton Reference: Table 1.1-15., AP-42			7. Emissions Method Code: 3
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	Γ	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
$HF = (0.15 \text{ lb/ton}) \times (93)$	3.4 ton/hr) = 14	4.0 lb/hr	
Annual Rate:			
$HF = (0.15 \text{ lb/ton}) \times (818,049 \text{ ton/h})$	nr) x (1 ton/2,0	00 lb) = 6	1.4 ton/yr
11. Potential, Fugitive, and Actual Emissions Co	omment:		
Potential emissions based on combustion of coal (worst case fuel).			

POLLUTANT DETAIL INFORMATION Page [17] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

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

DEP Form No. 62-210.900(1) – Form

POLLUTANT DETAIL INFORMATION Page [18] of [19]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:		•
HAPS			√A
3. Potential Emissions:		_	netically Limited?
126.8 lb/hour 555.4	tons/year	□ Y	es 🛛 No
5. Range of Estimated Fugitive Emissions (as	applicable): N	N/A	
To tons/year			
6. Emission Factor: 1.358 lb/ton (composite)			7. Emissions
Reference: Tables 1.1-14, 1.1-15, & 1	l.1-18, AP-42		Method Code:
			3
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	7	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate:			
HAPS = (1.358 lb/ton) x (93.4 ton/hr) =	126.8 lb/h	r
Annual Rate:			
$HAPS = (1.358 lb/ton) \times (818,049 ton)$	/hr) x (1 ton/2,	,000 lb) =	555.4 ton/yr
11. Potential, Fugitive, and Actual Emissions Co	omment:		
Potential emissions based on combustion	of coal (worst o	case fuel).	,
	<u>,</u>		

POLLUTANT DETAIL INFORMATION Page [19] of [19]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

Section [2] **of** [5]

G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>1</u>

1.	Visible Emissions Subtype: VE20	2. Basis for Allowab	ole Opacity:
3.	Allowable Opacity: Normal Conditions: 20 % E Maximum Period of Excess Opacity Allow	Exceptional Conditions: ved:	27 % 6 min/hour
4.	Method of Compliance: DEP Method 9 of	or COMS	
5.	Visible Emissions Comment: 40 CFR Part 60, Subpart D, 60.42(a)(2). Title V Permit 0010006-003-AV, Condit Opacity standards do not apply during s CFR Part 60, Subpart A, 60.11(c).	ion B.4.(a)(2).	l malfunction per 40
	Main Arthur V.		****
Vi	sible Emissions Limitation: Visible Emiss	sions Limitation of	
	sible Emissions Limitation: Visible Emiss Visible Emissions Subtype:	sions Limitation of 2. Basis for Allowab	ole Opacity:
1.	Visible Emissions Subtype: Allowable Opacity:	2. Basis for Allowab Rule Exceptional Conditions:	- •
	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: % E	2. Basis for Allowab Rule Exceptional Conditions:	Other %

DEP Form No. 62-210.900(1) – Form

Section [2] **of** [5]

1. Parameter Code:

H. CONTINUOUS MONITOR INFORMATION

2. Pollutant(s):

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

Continuous Monitoring System: Continuous Monitor 1 of 5

	VE	N/A
3.	CMS Requirement:	⊠ Rule □ Other
4.		
	Manufacturer: Spectrum	
	Model Number: Spectrum 41	Serial Number: 0347-8005
5.	Installation Date:	6. Performance Specification Test Date:
	04/17/1994	01/01/1995
7.	Continuous Monitor Comment:	
	40 CFR Part 75 and 40 CFR Part 60, Sub	part D.
	ontinuous Monitoring System: Continuous Parameter Code:	Monitor 2 of 5 2. Pollutant(s):
	CO2	N/A
3.	CMS Requirement:	⊠ Rule ☐ Other
4.	Monitor Information Manufacturer: Siemens	
	Model Number: Ultramat 6E	Serial Number: NI-S8-0790
5.	Installation Date:	6. Performance Specification Test Date:
	04/17/1994	01/01/1995
7.	Continuous Monitor Comment:	
	40 CFR Part 75 and 40 CFR Part 60, Sub	part D.

DEP Form No. 62-210.900(1) – Form

72

Section [2]

of [5]

H. CONTINUOUS MONITOR INFORMATION (Continued)

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code:		2. Pollut	tant(s):	
FLO	W		N/A	
3. CMS Requirement:		X Rule	Other	
4. Monitor Information				
Manufacturer: M	onitor Labs			
Model Number: Ul	traflow 150	Se	erial Number: 1500232	
5. Installation Date:		6. Perfor	rmance Specification Test Date:	
04/17/			01/01/1995	
7. Continuous Monitor	Comment:			
40 CED Dowt 75				
40 CFR Part 75.				
Continuous Monitoring	System: Continuous l	Monitor 4	Lof 5	
Parameter Code:				
1. Parameter Code:	r	2. Polluta	NOX	
		<u> </u>		
3. CMS Requirement:		Rule	Other	
4. Monitor Information Manufacturer: TI				
			1131 1 0405500524	
Model Number: 42	<u> </u>		erial Number: 0427508531	
5. Installation Date:	1004	6. Perfor	rmance Specification Test Date:	
04/17/1			11/01/1995	
7. Continuous Monitor	Comment:			
40 CFR Part 75 and	40 CFR Part 60, Sub	part D.		
	, , , , , , , , , , , , , , , , , , , ,			

DEP Form No. 62-210.900(1) - Form

H. CONTINUOUS MONITOR INFORMATION (Continued)

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

Continuous Monitoring System: Continuous Monitor 5 of 5

1.	Parameter Code:	2. Pollutant(s):
	EM	SO2
3.	CMS Requirement:	⊠ Rule □ Other
4.	Monitor Information Manufacturer: TECO	
	Model Number: 43C	Serial Number: 0425408089
5.	Installation Date:	6. Performance Specification Test Date:
	04/17/1994	01/01/1995
7.	Continuous Monitor Comment:	
	40 CFR Part 75 and 40 CFR Part 60, Sub	part D.

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. K Previously Submitted, Date:
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. L Not Applicable
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. M Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: 07/30/2008 Test Date(s)/Pollutant(s) Tested: 06/23-24/2008/PM, SO ₂ , NO _x , and VE To be Submitted, Date (if known):
	Test Date(s)/Pollutant(s) Tested:
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

Section [2] **of** [5]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications NOT APPLICABLE					
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):					
Attached, Document ID: Not Applicable					
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-					
212.500(4)(f), F.A.C.):					
Attached, Document ID: Not Applicable					
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)					
Attached, Document ID: Not Applicable					
Additional Requirements for Title V Air Operation Permit Applications					
1. Identification of Applicable Requirements:					
Attached, Document ID: Attachment F					
2. Compliance Assurance Monitoring:					
Attached, Document ID: Attachment N Not Applicable					
3. Alternative Methods of Operation:					
Attached, Document ID: Attachment O Not Applicable					
4. Alternative Modes of Operation (Emissions Trading): Attached, Document ID: Not Applicable					
Attached, Document ib Zi Not Applicable					
Additional Requirements Comment					
·					

EU 006

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	_	-	? (Check one, if applying kip this item if applying					
	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.							
		unit addressed in this E	missions Unit Informati	on Section is an				
En	nissions Unit Desci	ription and Status						
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)					
	This Emissions	s Unit Information Secti	on addresses, as a single	e emissions unit, a single				
	• •		which produces one or	-				
			ion point (stack or vent)					
				e emissions unit, a group				
	•	vent) but may also prod	vities which has at least	one definable emission				
	This Emissions Unit Information Section addresses, as a single emissions unit, one or							
	more process or production units and activities which produce fugitive emissions only.							
2.	. Description of Emissions Unit Addressed in this Section: Combustion Turbine No. 3							
3.	. Emissions Unit Identification Number: 006							
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit				
	Status Code:	Construction	Date:	Major Group				
-	A	Date: N/A	N/A	SIC Code: 49				
8.		Applicability: (Check all	that apply)					
	Acid Rain Unit	i						
	CAIR Unit	٠.						
	Hg Budget Uni	it						
9.	Package Unit: Manufacturer: G	eneral Electric	Model Number:	M\$7001E A				
10		plate Rating: 96.1 MW	Woder Number.	WIS/UUTEA				
	Emissions Unit C	<u> </u>						
11.	Emissions om C	omment.						
Fie	eld 10 is based on:							
			MW @ 0.9 power fact					
113	3,100 kVA @ 1.0 p	ower factor, and 96.1	MW @ 0.85 power fact	tor (base)				
	1							

DEP Form No. 62-210.900(1) – Form

Emissions Unit Control Equipment/Method: Control 1 of 2			
1. Control Equipment/Method Description:			
NO _x (Natural Gas) – Dry low-NOx (DLN) combustion			
2. Control Device or Method Code: 025			
Emissions Unit Control Equipment/Method: Control 2 of 2			
1. Control Equipment/Method Description:			
NO _x (No. 2 Distillate Fuel Oil) – Wet Injection			
2. Control Device or Method Code: 028			
Emissions Unit Control Equipment/Method: Control of			
1. Control Equipment/Method Description:			
2. Control Device or Method Code:			
Emissions Unit Control Equipment/Method: Control of			
1. Control Equipment/Method Description:			

Section [3] of [5]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:			
2.	Maximum Production Rate:			
3.	Maximum Heat Input Rate: 990.6 million Btu/hr, HHV	***		
4.	4. Maximum Incineration Rate: pounds/hr			
	tons/day			
5.	Requested Maximum Operating Schedule:	1.00000		
	24 hours/day	7	days/week	
Ī	weeks/year	3,900	hours/year	

6. Operating Capacity/Schedule Comment:

Maximum heat input rate shown in Field 3 is for No. 2 fuel oil at 59°F ambient temperature (ISO conditions) and baseload.

Maximum heat input rate when firing natural gas is 971.1×10^6 Btu/hr, HHV at $59^\circ F$ ambient temperature (ISO conditions and baseload.

Heat inputs will vary with CT load and ambient conditions.

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08 79 YAGDP-09/GRUNDGS/TITLVREN-FDEPAPP.DOC--051509

Section [3] **of** [5]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: DHCT -		2. Emission Point	Гуре Code: 1	
3.	. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A				
4.	 ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A 				
5.	Discharge Type Code: V	6. Stack Height 52 feet	:	7. Exit Diameter: 14.1 feet	
8.	Exit Temperature: 1,100°F		netric Flow Rate: 3,615 acfm	10. Water Vapor: N/A %	
11.	11. Maximum Dry Standard Flow Rate: N/A dscfm		12. Nonstack Emissi N	on Point Height: /A feet	
13.	Emission Point UTM Coo	rdinates		atitude/Longitude	
	Zone: East (km):		Latitude (DD/MI	ŕ	
1.5	North (km)	· · · · · · · · · · · · · · · · · · ·	Longitude (DD/N	MM/SS):	
15.	Emission Point Comment				
	Fields 8 and 9 : For natural gas at 60% load, $95F$, and 50% RH				
	Exit temperature and volumetric flow rate will vary with CTload and ambient conditions.				

80

DEP Form No. 62-210.900(1) - Form

Section [3]

of [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines, Electric Generation, Natural Gas, Turbine

2. Source Classification Code (SCC): 3. SCC Units: 2-01-002-01 Million Cubic Feet Burned 4. Maximum Hourly Rate: 5. Maximum Annual Rate: 6. Estimated Annual Activity 0.93 3.642 Factor: N/A 7. Maximum % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Unit: 1.040 N/A N/A

10. Segment Comment:

Unit can co-fire natural gas and distillate fuel oils (Nos. 1-2).

Fields 4 and 5 maximum hourly and annual rates based on 971.1 x 10^6 Btu/hr at 59° F and 3,900 hours per year.

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines, Electric Generation, Distillate Oil (Nos. 1 and 2), Turbine

2. Source Classification Code (SCC): 3. SCC Units: 2-01-001-01 **Thousand Gallons Burned** 4. Maximum Hourly Rate: 5. Maximum Annual Rate: 6. Estimated Annual Activity 7.1 14.151 Factor: N/A 7. Maximum % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Unit: 0.05 0.1 140

10. Segment Comment:

Unit can co-fire natural gas and distillate fuel oils (Nos. 1-2).

Fields 4 and 5 maximum hourly and annual rates based on 990.6 x 10^6 Btu/hr at 59° F and 2,000 hours per year.

Section [3]

of [5]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
NOX	025, 028		EL
СО			NS
PM/PM10			NS
SAM			NS
H106 (HCl)			NS
H107 (HF)			NS
HAPS			NS

POLLUTANT DETAIL INFORMATION Page [1] of [16]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted: SO2	2. Total Perc	ent Efficie	ency of Control:	
3. Potential Emissions: 50.0 lb/hour 53.2	2 tons/year	4. Synth	netically Limited? Yes No	
5. Range of Estimated Fugitive Emissions (as To tons/year		I/A		
0.0034 lb/10 ⁶ Btu, HHV (natural gas) Method			7. Emissions Method Code: 3	
8.a. Baseline Actual Emissions (if required): Tons/year N/A	8.b. Baseline From:		Period: N/A To:	
9.a. Projected Actual Emissions (if required): Tons/year N/A	9.b. Projected ☐ 5 years		ng Period: ears N/A	
10. Calculation of Emissions:				
Hourly Rate: (0.05% S fuel oil)				
$SO2 = (0.0505 \text{ lb}/10^6 \text{ Btu}) \text{ x } (990.6 \text{ x } 10^6 \text{ Btu/hr}, \text{HHV}) = 50.0 \text{ lb/hr}$				
Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr)				
SO2 = $[(50.0 \text{ lb/hr x } 2,000 \text{ hr/yr}) + (0.0034 \text{ x } (971.1 \text{ x } 10^6 \text{ Btu/hr, HHV}) $ $\times (1,900 \text{ hr/yr})] \times (1 \text{ ton/2,000 lb})$				
SO2 = 53.2 ton/yr				
11. Potential, Fugitive, and Actual Emissions Co	omment:			
CT3 may operate up to 3,900 hr/yr, including up to 2,000 hr/yr while firing fuel oil, per Condition C.0. of TV Permit No. 0010006-003-AV.				

POLLUTANT DETAIL INFORMATION
Page [2] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions: N/A
3.	Allowable Emissions and Units: 0.05 weight % S	4.	Equivalent Allowable Emissions: 50.0 lb/hour 50.0 tons/year
5.	Method of Compliance: Fuel sampling and analysis per applicable	AS'	TM methods.
6.	Allowable Emissions Comment (Description of Operating Method):		
	TV Permit No. 00100006-003-AV, Condition	on (C.6. (Fuel Oil)

Allowable Emissions of

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline &	rrojected Ac	tuai emis	sions	
1. Pollutant Emitted:	2. Total Perc	ent Efficie	ency of Control:	
NOX				
3. Potential Emissions:		4. Synth	netically Limited?	
184.0 lb/hour 239. 1	l tons/year	∑ Y	es No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable): N	N/A		
6. Emission Factor:			7. Emissions	
Reference:			Method Code:	
	01 7 11	24 1	0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline			
Tons/year N/A	From:		Го:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:	
Tons/year N/A	5 years	☐ 10 ye	ears N/A	
10. Calculation of Emissions:				
Hourly Rates: Fuel oil-firing: 42 ppmvd NO $_x$ @ 15% O $_2$ = 184 lb/hr Gas-firing: 15 ppmvd NO $_x$ @ 15% O $_2$ = 58 lb/hr Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr) $NO_x = \left[(184 \text{ lb/hr x 2,000 hr/yr}) + (58 \text{ lb/hr}) \text{ x (1,900 hr/yr)}\right] \text{ x (1 ton/2,000 lb)}$ $NO_x = 239.1 \text{ ton/yr}$				
11. Potential, Fugitive, and Actual Emissions Co	omment:			
CT3 may operate up to 3,900 hr/yr, including up to 2,000 hr/yr while firing fuel oil, per Condition C.0. of TV Permit No. 0010006-003-AV.				

POLLUTANT DETAIL INFORMATION Page [4] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions 1 of 2

42 ppmvd @ 15% O ₂ 184 lb/hour 184 tons/year	1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A	
EPA Reference Method (RM) 20 Allowable Emissions Comment (Description of Operating Method):	3. Allowable Emissions and Units: 42 ppmvd @ 15% O ₂	1 -	
	5. Method of Compliance: EPA Reference Method (RM) 20		
TV Permit No. 00100006-003-AV. Condition C.6. (Fuel Oil)	Allowable Emissions Comment (Description of Operating Method):		
1 V 1 cmme 1101 volume	o. Allowable Ellissions Comment (Descrip	tion of Operating Method):	
	•		
	•	,	
	•		

Allowable Emissions Allowable Emissions 2 of 2

1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	15 ppmvd @ 15% O ₂	58 lb/hour 113.1 tons/year
5.	Method of Compliance:	
	EPA RM 20	
6.	Allowable Emissions Comment (Description	of Operating Method):
	TV Permit No. 00100006-003-AV, Conditi	on C.6. (Natural Gas)

DEP Form No. 62-210.900(1) – Form

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Perc		ency of Control:
CO		N/.	
3. Potential Emissions:		_ - -	netically Limited?
75.3 lb/hour 89. 3	l tons/year	Y	'es No
5. Range of Estimated Fugitive Emissions (as	applicable): N	I/A	
To tons/year			
6. Emission Factor: 0.076 lb/106 Btu, HHV (fu			7. Emissions
0.015 lb/10 ⁶ Btu, HHV (fu	el oil)		Method Code:
Reference: Table 3.1-1, AP-42			3
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	Γ	Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
—Tons/year N/A —	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate: (fuel oil)			
$CO = (0.076 \text{ lb/}10^6 \text{ Btu}) \times (990.6 \times 10^6 \text{ Btu/hr}, \text{HHV}) = 75.3 \text{ lb/hr}$			
Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr)			
CO = $[(75.3 \text{ lb/hr x } 2,000 \text{ hr/yr}) + (0.015 \text{ x } (971.1 \text{ x } 10^6 \text{ Btu/hr, HHV}) $ $\times (1,900 \text{ hr/yr})] \times (1 \text{ ton/2,000 lb})$			
CO = 89.1 ton/yr	CO = 89.1 ton/yr		
			,, <u></u>
11. Potential, Fugitive, and Actual Emissions Co	omment:		
CT3 may operate up to 3,900 hr/yr, include per Condition C.0. of TV Permit No. 0010	~ -	0 hr/yr w	hile firing fuel oil,

POLLUTANT DETAIL INFORMATION Page [6] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

POLLUTANT DETAIL INFORMATION
Page [7] of [16]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM/PM10	2. Total Perc	ent Efficie	ency of Control:
3. Potential Emissions:			netically Limited?
	tons/year		es No
5. Range of Estimated Fugitive Emissions (as	applicable): N	I/A	
To tons/year			
6. Emission Factor: 0.015 lb/106 Btu, HHV (fu	•		7. Emissions
0.0072 lb/10 ⁶ Btu, HHV (fu	uel oil)		Method Code:
Reference: PSD-FL-212			5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:		To:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate: (fuel oil)			
$PM = (0.015 \text{ lb/}10^6 \text{ Btu}) \times (990.6 \times 10^6 \text{ Btu/hr}, HHV) = 14.9 \text{ lb/hr}$			
Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr)			
PM = $[(14.9 \text{ lb/hr x } 2,000 \text{ hr/yr}) + (0.0072 \text{ x } (971.1 \text{ x } 10^6 \text{ Btu/hr, HHV}) $ $\times (1,900 \text{ hr/yr})] \times (1 \text{ ton/2,000 lb})$			
PM = 21.5 ton/yr			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
CT3 may operate up to 3,900 hr/yr, include per Condition C.0. of TV Permit No. 0010		0 hr/yr w	hile firing fuel oil,

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [8] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

NOT APPLICABLE

of

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

90

DEP Form No. 62-210.900(1) – Form Effective: 3/16/08

POLLUTANT DETAIL INFORMATION Page [9] of [16]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:		
SAM (H ₂ SO ₄ Mist)	N/A		A
3. Potential Emissions:			netically Limited?
6.0 lb/hour 8.9	tons/year	X	es No
5. Range of Estimated Fugitive Emissions (as	applicable): N	N/A	
To tons/year			
6. Emission Factor: 0.0061 lb/106 Btu, HHV (f			7. Emissions
0.0031 lb/10 ⁶ Btu, HHV (fr	ıel oil)		Method Code:
Reference: PSD-FL-212	_		5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	7	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	☐ 5 years	☐ 10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate: (fuel oil)			
SAM = $(0.0061 \text{ lb/}10^6 \text{ Btu}) \times (990.6 \times 10^6 \text{ Btu/hr}, \text{HHV}) = 6.0 \text{ lb/hr}$			
Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr)			
SAM= [(6.0 lb/hr x 2,000 hr/yr) + (0.0031 x (971.1 x 10 ⁶ Btu/hr, HHV) x (1,900 hr/yr)] x (1 ton/2,000 lb)			
SAM = 8.9 ton/yr			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
CT3 may operate up to 3,900 hr/yr, including up to 2,000 hr/yr while firing fuel oil, per Condition C.0. of TV Permit No. 0010006-003-AV.			

POLLUTANT DETAIL INFORMATION Page [10] of [16]

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

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

POLLUTANT DETAIL INFORMATION
Page [11] of [16]

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

(Optional for unregulated emissions units.)

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

Pollutant Emitted:	2. Total Percent Efficiency of Control:		
H106 (Hydrogen Chloride – HCl)		N/.	A
3. Potential Emissions:		. <u> </u>	netically Limited?
1.9 lb/hour 22. '	7 tons/year	X	es No
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A	
To tons/year			,
6. Emission Factor: 0.00187 lb/10 ⁶ Btu, HHV			7. Emissions
(30 mg/l Cl – fuel oil) Reference: EPA Boiler MACT Stud	L7		Method Code: 5
	8.b. Baseline	24 month	
8.a. Baseline Actual Emissions (if required): Tons/year N/A			
	From:		Го:
9.a. Projected Actual Emissions (if required): Tons/year N/A	9.b. Projected		
	5 years	10 ye	ears N/A
10. Calculation of Emissions:			
Hourly Rate: (fuel oil)			
$HCl = (0.000187 \text{ lb/}10^6 \text{ Btu}) \times (990.6 \times 10^6 \text{ Btu/hr}, HHV) = 1.9 \text{ lb/hr}$			
Annual Rate: (Fuel oil for 2,000 hr/yr)			
$HCl= (1.9 lb/hr \times 2,000 hr/yr) \times (1 ton/2,000 lb) = 1.9 ton/yr$			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
11.1 otentiai, Fugitive, and Actual Ellissions Co	omment.		
CT3 may operate up to 3,900 hr/yr, include per Condition C.0. of TV Permit No. 0010		00 hr/yr w	hile firing fuel oil,

POLLUTANT DETAIL INFORMATION Page [12] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

NOT APPLICABLE

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

POLLUTANT DETAIL INFORMATION
Page [13] of [16]

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

(Optional for unregulated emissions units.)

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

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:		
H107 (Hydrogen Fluoride – HF)	N/A		
3. Potential Emissions:		4. Synthetically Limited?	
0.94 lb/hour 0.9 4	4 tons/year	Yes No	
5. Range of Estimated Fugitive Emissions (as	s applicable): N	N/A	
To tons/year			
6. Emission Factor: 0.000947 lb/10 ⁶ Btu, HHV		7. Emissions	
(17.5 ppmw F – fuel oil)		Method Code:	
Reference: EPA Utility HAP Study	T	5	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month Period: N/A	
Tons/year N/A	From:	To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	d Monitoring Period:	
Tons/year N/A	5 years	□ 10 years N/A	
10. Calculation of Emissions:			
Hourly Rate: (fuel oil)			
$HCl = (0.0000947 \text{ lb/}10^6 \text{ Btu}) \times (990.6 \times 10^6 \text{ Btu/hr}, HHV) = 0.94 \text{ lb/hr}$			
Annual Rate: (Fuel oil for 2,000 hr/yr)			
$HCl= (0.94 lb/hr \times 2,000 hr/yr) \times (1 ton/2,000 lb) = 0.94 ton/yr$			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
CT3 may operate up to 3,900 hr/yr, include per Condition C.0. of TV Permit No. 0010	-	00 hr/yr while firing fuel oil,	

POLLUTANT DETAIL INFORMATION Page [14] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

96

YAGDP-09\GRUVDGS\TITLVREN-FDEPAPP.DOC—051509

POLLUTANT DETAIL INFORMATION
Page [15] of [16]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Perc		ency of Control:
HAPS	<u> </u>	N/A	
3. Potential Emissions:			netically Limited?
	tons/year		'es No
5. Range of Estimated Fugitive Emissions (as	applicable): N	I/A	:
To tons/year			
6. Emission Factor: Composite for fuel oil + 1	_		7. Emissions
Reference: EPA Boiler MACT and U	Utility HAP St	udies	Method Code:
Tables 3.1-3, 3.1-4, and 3	.1-5 AP-42		3 and 5
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period: N/A
Tons/year N/A	From:	Т	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
Tons/year N/A	5 years		ears N/A
10. Calculation of Emissions:			
Hourly Rate: HAPS = 4.7 lb/hr			
Annual Rate: (Fuel oil for 2,000 hr/yr + natural gas for 1,900 hr/yr)			
HAPS = 5.7 ton/yr			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
CT3 may operate up to 3,900 hr/yr, include per Condition C.0. of TV Permit No. 0010	_ ·	0 hr/yr w	hile firing fuel oil,

DEP Form No. 62-210.900(1) – Form

Allowable Emissions Allowable Emissions

POLLUTANT DETAIL INFORMATION Page [16] of [16]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

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

98

DEP Form No. 62-210.900(1) – Form

Section [3] **of** [5]

G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>2</u>

1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity:		
	VE10	⊠ Rule	Other	
3.	Allowable Opacity:	<u> </u>		
	1 3	cceptional Conditions:	27 %	
	Maximum Period of Excess Opacity Allowe	•	6 min/hour	
4.	Method of Compliance: EPA Method 9			
	1			
5.	Visible Emissions Comment:			
	Specific Condition Condition C.6. of TV Permit No. 0010006-003-AV.			
	VE test not required if fuel oil is fired for no more than 400 hrs/yr.			
Visible Emissions Limitation, Visible Emissions Limitation 2 of 2				
Visible Emissions Limitation: Visible Emissions Limitation 2 of 2				
1.	Visible Emissions Subtype:	2. Basis for Allowable		
	N/A	⊠ Rule	Other	
3.	Allowable Opacity:			
		ceptional Conditions:	100 %	
	Maximum Period of Excess Opacity Allowed: 60 min/hour		60 min/hour	
4.	Method of Compliance: EPA Method 9			
4.	Method of Compliance: EPA Method 9			
			-	
4.5.	Method of Compliance: EPA Method 9 Visible Emissions Comment:			
	Visible Emissions Comment:	emissions resulting fron	n startups.	
	Visible Emissions Comment: Rule 62-210.700(1), F.A.C. allows excess 6	•	- '	
	Visible Emissions Comment:	•	- '	
	Visible Emissions Comment: Rule 62-210.700(1), F.A.C. allows excess 6	•	- '	

Section [3] **of** [5]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

	r Code: EM	2. Pollutant(s):	NO _x
3. CMS Rec	quirement:	X Rule	Other
	nformation urer: TECO		
Model No	ımber: 42C	Serial Nur	mber: 0436510216
5. Installation	on Date: 01/01/1996		Specification Test Date: 01/01/1996
7. Continuo	us Monitor Comment:	•	
NSPS Su continuo Monitori		itoring. Also used a to 40 CFR Part 64	as a continuous as a
<u>Continuous</u>	Monitoring System: Continuous	Monitor 2 of 2	
1. Parameter	r Code: CO2	2. Pollutant(s):	N/A
3. CMS Rec	uirement:	Rule	Other
	nformation urer: Siemens		
Model Nu	ımber: Ultramat 6E	Serial Nur	mber: N1-SO-0484
	on Date: 01/01/1996	6. Performance S	Specification Test Date: 01/01/1996
5. Installation			01/01/1990
	us Monitor Comment:		01/01/1990

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. K Previously Submitted, Date:
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. L Not Applicable
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. M Previously Submitted, Date
	☐ Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: <u>07/30/2008</u>
	Test Date(s)/Pollutant(s) Tested: 07/02/2008/NO _x , and VE
	To be Submitted, Date (if known):
	Test Date(s)/Pollutant(s) Tested:
	☐ Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

Section [3] **of** [5]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

<u>Add</u>	litional Requirements for Air Construction Permit Applications NOT APPLICABLE
	Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),
1 1	F.A.C.; 40 CFR 63.43(d) and (e)):
L	Attached, Document ID: Not Applicable
4	Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-
2	212.500(4)(f), F.A.C.):
[Attached, Document ID: Not Applicable
	Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities
	only)
	Attached, Document ID: Not Applicable
<u>A</u> dd	litional Requirements for Title V Air Operation Permit Applications
1. I	Identification of Applicable Requirements:
	Attached, Document ID: Attachment F
2. (Compliance Assurance Monitoring:
	Attached, Document ID: Not Applicable
3. 7	Alternative Methods of Operation:
	Attached, Document ID: <u>Attachment O</u> Not Applicable
4. /	Alternative Modes of Operation (Emissions Trading):
	Attached, Document ID: Not Applicable
<u>Add</u>	litional Requirements Comment
}	

EU 007

Section [4]

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	•	gulated Emissions Unit air operation permit. Sonly.)		
			missions Unit Informati	on Section is a regulated
	emissions unit	unit addressed in this E	missions Unit Informati	on Section is an
	unregulated en			
En	nissions Unit Desc	ription and Status		
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)	
			•	e emissions unit, a single
		duction unit, or activity, east one definable emissi		
			•	e emissions unit, a group
		roduction units and acti		
		vent) but may also prod		
		s Unit Information Secti	•	
		_ -		fugitive emissions only.
2.	Description of Em	issions Unit Addressed	in this Section: Coal Ha	indling and Storage
3.	Emissions Unit Ide	entification Number: 00)7	
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit
	Status Code:	Construction Date: N/A	Date: N/A	Major Group SIC Code: 49
-	A E-11 Document	<u> </u>		SIC Code: 49
8.	Acid Rain Uni	Applicability: (Check all	that apply)	
	CAIR Unit	Į.		
	Hg Budget Un	it		
-	Package Unit:		10.000	
´`	Manufacturer:		Model Number:	
10	Generator Namep	late Rating: MW		
11.	Emissions Unit C	Comment:		
		unit represents all coal quipment downstream uded.	9	9

Section [4] **of** [5]

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description:
Enclosure: Partial enclosures for CH-001, CH-002, and CH-003; Total enclosures for CH010, CH011, crushing and bunkering equipment.
Telescoping Chute: CH-004 and CH-005
2. Control Device or Method Code: 054, 099
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2 Control Device or Method Code:

Section [4] **of** [5]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: 3,000 tons/hr	
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: million Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	
	tons/day	
5.	Requested Maximum Operating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Comment:	

Section [4] **of** [5]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on I	Plot Plan or	2. Emission Point 7	Гуре Code:
	Flow Diagram: CH-001 t	hrough CH-011		3
3.	Descriptions of Emission	Points Comprising	this Emissions Unit	for VE Tracking:
	Transfer points, conveyo	or belts, storage p	iles.	
4.	ID Numbers or Description N/A	ns of Emission Ur	nits with this Emission	Point in Common:
5.	Discharge Type Code: F	6. Stack Height	: A feet	7. Exit Diameter: N/A feet
8.	Exit Temperature:	9. Actual Volum	netric Flow Rate:	10. Water Vapor:
	77 °F	N/A	A acfm	N/A %
11.	. Maximum Dry Standard F	low Rate:	12. Nonstack Emissi	_
	N/A dscfm		25 feet	
13.	. Emission Point UTM Coo	rdinates		Latitude/Longitude
	Zone: East (km):		Latitude (DD/MM/SS):	
	North (km)		Longitude (DD/MM/SS):	
15.	. Emission Point Comment:	•		
	Non-stack emission point various fugitive emission s			age height of the

Section [4] **of** [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Pro	ocess/Fuel Type):		
Industrial Processes, M	ineral Products,	Bulk Materials	s, Coal
2. Source Classification Co. 3-05-102-	· ·	3. SCC Units Tons Trai	s: nsferred or Handled
4. Maximum Hourly Rate: 3,000	5. Maximum 8	Annual Rate: 18,049	6. Estimated Annual Activ Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum	% Ash: / A	9. Million Btu per SCC Un N/A
10. Segment Comment:			
Hourly rate in Field 4 r	epresents maxim	um coal belt co	onveyor transfer rate.
Segment Description and R	ate: Segment	_ of	
1. Segment Description (Pro	ocess/Fuel Type):		-
-		-	
2. Source Classification Cod	de (SCC):	3. SCC Units	s:
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activ Factor:
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Un
10. Segment Comment:			<u> </u>

Section [4] **of** [5]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

	The state of the s		<u>,</u>
1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
	Potential PWI/PWI ₁₀ en	missions < 5.0 tons/yr.	-

108

EMISSIONS UNIT INFORMATION Section [4] of [5]

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Perc	ent Efficiency of Control:
3. Potential Emissions: lb/hour	tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as To tons/year	s applicable):	
6. Emission Factor: Reference:		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): Tons/year	8.b. Baseline From:	24-month Period: To:
9.a. Projected Actual Emissions (if required): Tons/year	9.b. Projected ☐ 5 years	l Monitoring Period: ☐ 10 years
10. Calculation of Emissions: Potential PM/PM ₁₀ emissions < 5.0 tons/y		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

109

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

EMISSIONS UNIT INFORMATION Section [4] of [5]

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:

POLLUTANT DETAIL INFORMATION Page [2] of [2]

2. Future Effective Date of Allowable

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

of

			Lillissions.	
3.	Allowable Emissions and Units:	4.	Equivalent Allowable	Emissions:
			lb/hour	tons/year
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	of C	Operating Method):	
A 11	Isaabla Emissisma Allamahla Emissisma	- C		
All	lowable Emissions Allowable Emissions	of		
		^	E E.CC : D	C 4 11 1 1
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date	of Allowable
			Emissions:	
	Basis for Allowable Emissions Code: Allowable Emissions and Units:		Emissions: Equivalent Allowable	Emissions:
3.	Allowable Emissions and Units:		Emissions:	
3.			Emissions: Equivalent Allowable	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:
3.5.	Allowable Emissions and Units: Method of Compliance:	4.	Emissions: Equivalent Allowable lb/hour	Emissions:

Section [4]

of [5]

G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation $\underline{1}$ of $\underline{2}$

1.	Visible Emissions Subtype:	2. Basis for Allowab	le Opacity:
	VE20	🔀 Rule	Other
3.	Allowable Opacity:		
	* •	ceptional Conditions:	%
Ì	Maximum Period of Excess Opacity Allowe	=	min/hour
<u> </u>			
4.	Method of Compliance: EPA Method 9		
5.	Visible Emissions Comment:		
٦.	Visible Emissions Comment.		
	Specific Condition I.A.5.a. of Site Certification	ation PA 74-04 Rule	62 . 296.320 (4)(h)
	F.A.C., and 40 CFR Part 60.252(c) [NSPS	•	
ł	AV, Condition F.1.	Subpart I J. Title V.	1 C1 MH 0010000 005
	111, Condition 1:11		
T 7:	cible Emissione Limitations Visible Emissio	7: : : :	
		ons Limitation 2 of 2	
	sible Emissions Limitation: Visible Emission		·
	Visible Emissions Subtype:	2. Basis for Allowab	le Opacity:
			·
1.	Visible Emissions Subtype:	2. Basis for Allowab	le Opacity:
1.	Visible Emissions Subtype: N/A Allowable Opacity:	2. Basis for Allowab	le Opacity:
1.	Visible Emissions Subtype: N/A Allowable Opacity:	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other 100 %
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exceeding the Exceeding th	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other 100 %
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other 100 %
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other 100 %
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed Method of Compliance: EPA Method 9	2. Basis for Allowab. Rule ceptional Conditions:	le Opacity: Other 100 %
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed Method of Compliance: EPA Method 9 Visible Emissions Comment:	2. Basis for Allowab. Rule ceptional Conditions: d:	le Opacity: Other 100 % 60 min/hour
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed Method of Compliance: EPA Method 9	2. Basis for Allowab. Rule ceptional Conditions: d: missions for up to 2 h	le Opacity: Other 100 % 60 min/hour
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed Method of Compliance: EPA Method 9 Visible Emissions Comment: Rule 62-210.700(1), F.A.C. allows excess en	2. Basis for Allowab. Rule ceptional Conditions: d: missions for up to 2 h	le Opacity: Other 100 % 60 min/hour
3.	Visible Emissions Subtype: N/A Allowable Opacity: Normal Conditions: % Exc Maximum Period of Excess Opacity Allowed Method of Compliance: EPA Method 9 Visible Emissions Comment: Rule 62-210.700(1), F.A.C. allows excess en	2. Basis for Allowab. Rule ceptional Conditions: d: missions for up to 2 h	le Opacity: Other 100 % 60 min/hour

Section [4] **of** [5]

H. CONTINUOUS MONITOR INFORMATION

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

<u>Cc</u>	ontinuous Monitoring System: Continuous M	onitor of NOT APPLICABLE
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:
	Continuous Monitor Comment:	
<u>Co</u>	ontinuous 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:	

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Not Applicable
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Not Applicable
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: _???? Test Date(s)/Pollutant(s) Tested: _????/VE To be Submitted, Date (if known): Test Date(s)/Pollutant(s) Tested:
	Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

Section [4]

of [5]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications NOT APPLICABLE 1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): Attached, Document ID: Not Applicable 2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): Attached, Document ID: ☐ Not Applicable 3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) Attached, Document ID: Not Applicable Additional Requirements for Title V Air Operation Permit Applications 1. Identification of Applicable Requirements: Attached, Document ID: Attachment F 2. Compliance Assurance Monitoring: Not Applicable Attached, Document ID: 3. Alternative Methods of Operation: Attached, Document ID: _ Not Applicable 4. Alternative Modes of Operation (Emissions Trading): Not Applicable Attached, Document ID: **Additional Requirements Comment**

EU 001, 002 & 008

Section [5] **of** [5]

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)				
	The emissions unit addressed in this Emissions Unit Information Section is a regulated				
	emissions unit.	. unit addressed in this E	missions Unit Informati	ion Section is an	
	unregulated em		illissions out mornan	On Section is an	
<u>En</u>	nissions Unit Descr	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
			•	e emissions unit, a single	
		duction unit, or activity, east one definable emissi		-	
			•	e emissions unit, a group	
	• •	production units and active vent) but may also prod		one definable emission	
	•	s Unit Information Section	•	e emissions unit, one or	
			_	e fugitive emissions only.	
2.	•	issions Unit Addressed i			
ĺ		s and activities identifie	ed in Appendix U-1 of	Title V Permit No.	
3.	0010006-008-AV.	entification Number: 00	1. 002. and 008		
	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit	
	Status Code:	Construction	Date:	Major Group	
	A	Date: N/A	N/A	SIC Code: 49	
			<u>.</u>		
8.	· ·	Applicability: (Check all	that apply)		
	Acid Rain Unit	t			
	CAIR Unit				
	Hg Budget Uni	ıt			
9.	Package Unit:		Madal Nissahan		
10	Manufacturer: Generator Namep	late Rating:	Model Number:		
	. Emissions Unit Co				
11.		niment. I (lime, soda ash, brine	. and flv ash) trucks, h	nandling and storage.	
		erations, brine spray d			
	cycle combustion			_	

EMISSIONS UNIT INFORMATION Section [5] of [5]

<u>Emissions</u>	Unit Co	<u>ntrol l</u>	Equipment/Method:	Control	1 of	1

1. Control Equipment/Method Description:	
Fabric Filter – Low Temperature (<180°F); Material Storage Silos	
2. Control Device or Method Code: 018	
Emissions Unit Control Equipment/Method: Control of	
1. Control Equipment/Method Description:	
2 C . 1D . M. 1C 1	
2. Control Device or Method Code:	
Emissions Unit Control Equipment/Method: Control of	
1. Control Equipment/Method Description:	
2. Control Device or Method Code:	
2. Control Device or Method Code:	
Emissions Unit Control Equipment/Method: Control of	
1. Control Equipment/Method Description:	
2 C + 1D - ' Male 1 C 1	
2. Control Device or Method Code:	

Section [5] **of** [5]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule NOT APPLICABLE

1.	. Maximum Process or Throughput Rate:					
2.	. Maximum Production Rate:					
3.	Maximum Heat Input Rate: million Btu/hr					
4.	Maximum Incineration Rate: pounds/hr					
	tons/day					
5.	Requested Maximum Operating Schedule:					
	hours/day	days/week				
	weeks/year	hours/year				
6.	Operating Capacity/Schedule Comment:					
	•					

EMISSIONS UNIT INFORMATION Section [5] of [5]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type NOT APPLICABLE

Identification of Point on Flow Diagram:	Plot Plan or	2. Emission Point	Гуре Code:	
3. Descriptions of Emission4. ID Numbers or Descriptio				
5. Discharge Type Code:	6. Stack Height	: feet	7. Exit Diameter: feet	
8. Exit Temperature: °F		metric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coo Zone: East (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS): Longitude (DD/MM/SS):		
North (km) 15. Emission Point Comment:		Longitude (DD/I	MM/SS):	

Section [5]

of [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines, Electric Generation, Natural Gas, Turbine [Each simple cycle combustion turbine]

2.	Source Classification Cod 2-01-002-0	• ,	3. SCC Units Mi		Cubic Feet Burned
4.	Maximum Hourly Rate: 0.29	5. Maximum	Annual Rate: 2,511	6.	Estimated Annual Activity Factor: N/A
7.	Maximum % Sulfur: N/A	8. Maximum % Ash: N/A		9.	Million Btu per SCC Unit: 1,040

10. Segment Comment:

Field 4 is based on 298 MMBtu/hr heat input and a nominal natural gas heat content as indicated in Field 9. Base load conditions, 95oF, 185 ft elevation, HHV fuel.

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type):

Internal Combustion Engines, Electric Generation, Distillate Oil, Turbine [Each simple cycle combustion turbine]

2.	Source Classification Code 2-01-001-01	e (SCC):	3. SCC Units: Thou	sand Gallons Burned
4.	Maximum Hourly Rate: 1.99	5. Maximum / 17,		6. Estimated Annual Activity Factor: N/A
7.	Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.1		9. Million Btu per SCC Unit: 140

10. Segment Comment:

Field 4 is based on 279 MMBtu/hr and a nominal distillate fuel oil heat content of 140,000 Btu/gal. Base load conditions, 95F, 185 ft elevation, HHV fuel.

Section [5] of [5]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Pro	ocess/Fuel Type):		
Air Stripping of Ground	lwater (Aerator)	
2. Source Classification Coo 25-04-104-		3. SCC Units	s: nousand gallons treated
4. Maximum Hourly Rate: 112.5	5. Maximum	Annual Rate: 85,500	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum	% Ash: I/A	9. Million Btu per SCC Unit N/A
10. Segment Comment:	com Field 5 h	and on 9.760 h	
Field 4 is based on 1,875	gpm. rieia 5 b	ased on 8,700 n	нуг.
Segment Description and R	ate: Segment	of	
1. Segment Description (Pro	cess/Fuel Type):		
2. Source Classification Cod	le (SCC):	3. SCC Units	:
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit
10. Segment Comment:			

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

Section [5] **of** [5]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX			NS
SO2			NS
PM	018		NS
PM10	018		NS
СО		_	NS
voc			NS
H106 (HCl)			NS
H107 (HF)			NS
HAPS			NS
_			

Section [5] of

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

NOT APPLICABLE

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

EMISSIONS UNIT INFORMATION Section [5] of [5]

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE

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

Section [5] **of** [5]

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation. NOT APPLICABLE <u>Visible Emissions Limitation:</u> Visible Emissions Limitation ___ of ___ 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: Other Rule 3. Allowable Opacity: **Normal Conditions: Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: 5. Visible Emissions Comment: Visible Emissions Limitation: Visible Emissions Limitation ___ of ___ 1. Visible Emissions Subtype: 2. Basis for Allowable Opacity: - · · Rule · · · Other 3. Allowable Opacity: Normal Conditions: % **Exceptional Conditions:** Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: 5. Visible Emissions Comment:

Section [5]

of [5]

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring. NOT APPLICABLE

Continuous Monitoring System: Continuous Monitor ____ of ____

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

125

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. C Previously Submitted, Date:
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Attach. M Previously Submitted, Date:
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Not Applicable
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
	☐ Attached, Document ID: ☐ Previously Submitted, Date ☐ Not Applicable
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: Test Date(s)/Pollutant(s) Tested:
	To be Submitted, Date (if known): Test Date(s)/Pollutant(s) Tested:
	Not Applicable
	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: Attached, Document ID: Not Applicable

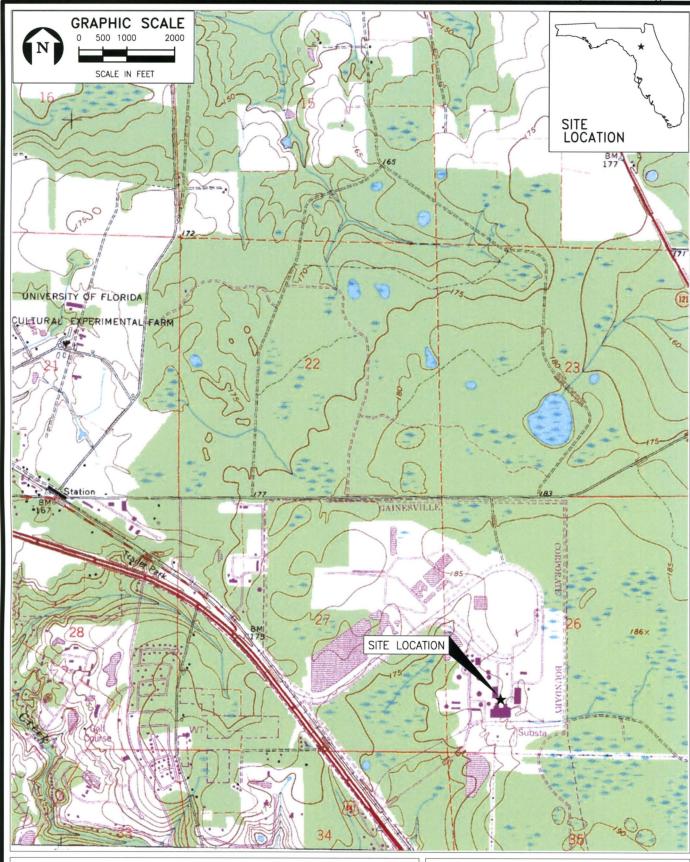
EMISSIONS UNIT INFORMATION Section [5] of [5]

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications NOT APPLICABLE				
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),				
F.A.C.; 40 CFR 63.43(d) and (e)):				
Attached, Document ID: Not Applicable				
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-				
212.500(4)(f), F.A.C.):				
Attached, Document ID: Not Applicable				
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)				
Attached, Document ID: Not Applicable				
Additional Requirements for Title V Air Operation Permit Applications				
1. Identification of Applicable Requirements:				
Attached, Document ID: <u>Attachment F</u>				
2. Compliance Assurance Monitoring:				
Attached, Document ID: Not Applicable				
3. Alternative Methods of Operation:				
Attached, Document ID: Not Applicable				
4. Alternative Modes of Operation (Emissions Trading):				
Attached, Document ID: Not Applicable				
Additional Requirements Comment				

ATTACHMENT A FACILITY LOCATION MAP

Apr 10, 2009 - 10:20am by jroberts



ATTACHMENT A.

DEERHAVEN GENERATING STATION FACILITY LOCATION MAP

Sources: USGS Quad; Alachua, Fl, 1993; ECT, 2009.



ATTACHMENTS B-1, B-2, B-3, AND B-4 FACILITY PLOT PLANS



ATTACHMENT B-1

DEERHAVEN GENERATING STATION - OVERALL FACILITY PLOT PLAN

Source: ECT, 2009.





ATTACHMENT B-2

DEERHAVEN GENERATING STATION - POWER BLOCK AREA

Source: ECT, 2009.





ATTACHMENT B-3

DEERHAVEN GENERATING STATION - UNITS 1 AND 2 PLOT PLAN

Source: ECT, 2009.





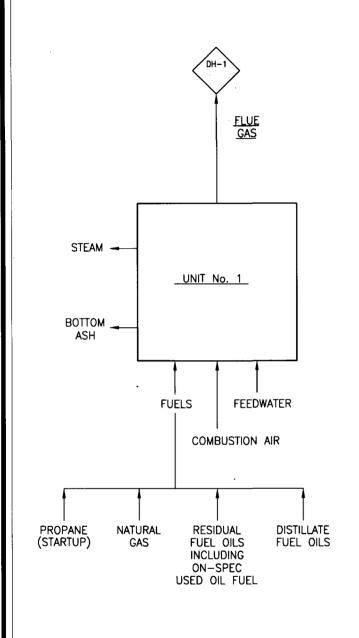
ATTACHMENT B-4

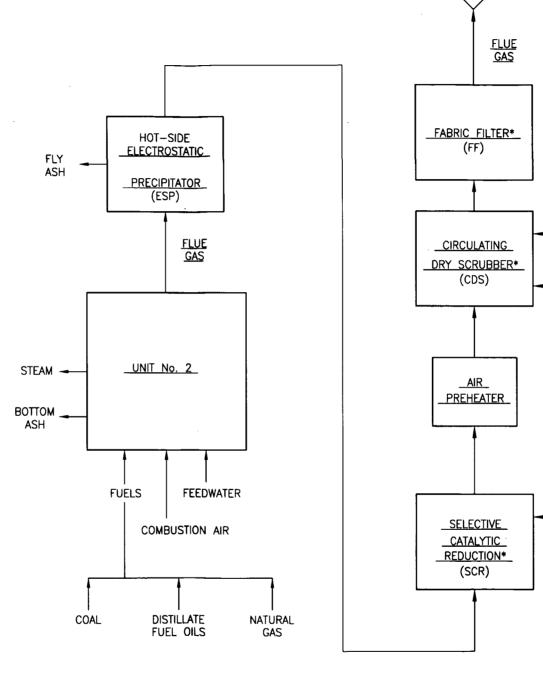
DEERHAVEN GENERATING STATION - CT NOS. 1, 2, and 3 PLOT PLAN

Source: ECT, 2009.



ATTACHMENTS C-1, C-2, AND C-2 PROCESS FLOW DIAGRAMS





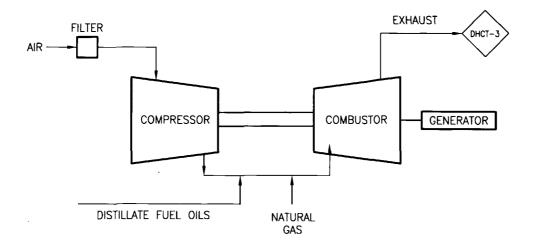
HYDRATED LIME WATER **LEGEND** EMISSION POINT * - CURRENTLY UNDER CONSTRUCTION AMMONIA

ATTACHMENT C-1.

DEERHAVEN GENERATING STATION
UNITS 1 AND 2 PROCESS FLOW DIAGRAM

Sources: ECT, 2009.

More than Energy™



LEGEND

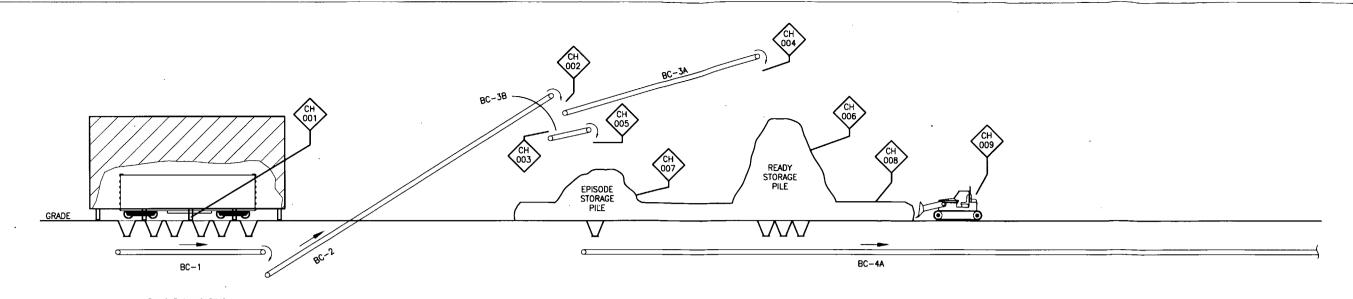


ATTACHMENT C-2.

DEERHAVEN GENERATING STATION
COMBUSTION TURBINE No. 3 PROCESS FLOW DIAGRAM

Source: ECT, 2009.

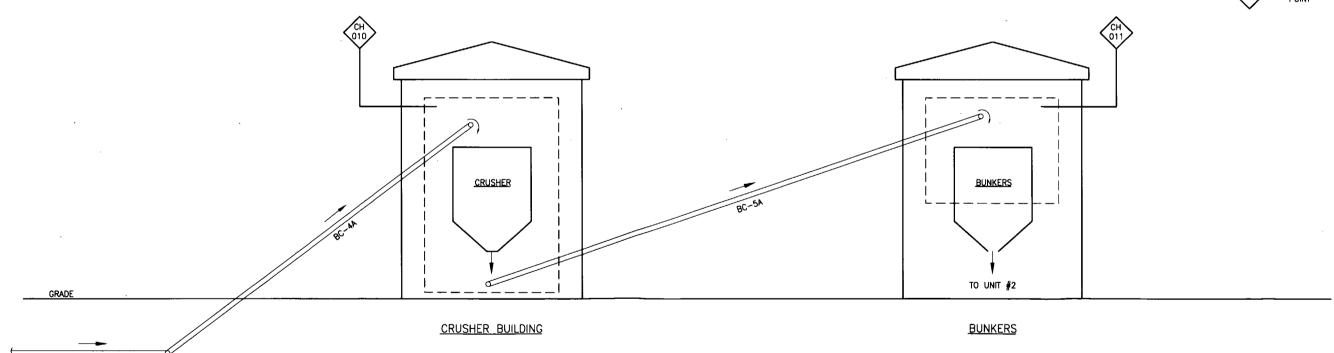




LEGEND



EMISSION POINT



ATTACHMENT C-3.

DEERHAVEN GENERATING STATION
COAL HANDLING PROCESS FLOW DIAGRAM

Source: ECT, 2009.

More than Energy

$\boldsymbol{ATTACHMENT}\;\boldsymbol{D}$

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

DEERHAVEN GENERATING STATION PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter (PM) emissions that may result from operations at the Deerhaven Generating Station include:

- Vehicular traffic on paved and unpaved roads.
- Wind-blown dust from yard and landfill areas.
- Periodic abrasive blasting.
- Materials (coal, fly ash, bottom ash, urea, lime, and brine salt) handling and storage piles.

The following techniques may be used to control unconfined PM emissions on an as-needed basis:

- Paving and maintenance of roads, parking areas, and yards.
- Chemical (dust suppressants) or water application to:
 - o Unpaved roads.
 - o Unpaved yard areas.
 - o Open stock piles.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary.

ATTACHMENT E LIST OF INSIGNIFICANT ACTIVITIES

- 1. Internal combustion engines mobile sources.
- 2. Vacuum pumps in laboratory operations.
- 3. Equipment used for steam cleaning.
- 4. Equipment used exclusively for space heating, other than boilers.
- 5. Laboratory equipment used exclusively for chemical or physical analyses.
- 6. Brazing, soldering, or welding equipment.
- 7. Fire protection and safety equipment.
- 8. Petroleum lubrication systems.
- 9. Application of fungicide, herbicide, or pesticide.
- 10. Vehicle refueling operations and associated fuel storage.
- 11. Degreasing units using heavier-than air vapors exclusively that do not use any substance containing a hazardous air pollutant.
- 12. Non-halogenated solvent storage and cleaning operations that do not use any substance containing a hazardous air pollutant.
- 13. Surface coating operations within a single facility, provided:
 - a. The surface coating operation shall use only coatings containing 5.0 percent or less VOC, by volume, or the total quantity of coatings containing greater than 5.0 percent VOC, by volume, used at the facility shall not exceed 6.0 gallons per day, averaged monthly, where the quantity of coatings used includes all solvents and thinners used in the process or for cleanup.
 - b. Such operations are not subject to any unit-specific applicable requirement.
- 14. Fossil fuel steam generators, hot water generators, and other external combustion heating units with heat input capacity equal to or less than 10 million British thermal units per hour (mmBtu/hr), provided the following conditions are met with respect to each such unit.
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The rated heat input capacity of the unit is equal to or less than 10 mmBtu/hr and, collectively, the total rated heat input capacity of all units claiming this exemption at the same facility is less than 10 mmBtu/hr.
 - c. The unit shall not burn used oil or any fuels other than natural gas or propane, except that fuel oil with a sulfur content not exceeding 1.0 percent by weight may be burned during periods of natural gas curtailment.

- 15. Fossil fuel steam generators, hot water generators, and other external combustion heating units with heat input capacity less than 100 mmBtu/hr, provided the following conditions are met with respect to each such unit.
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The rated heat input capacity of the unit is less than 100 mmBtu/hr and, collectively, the total rated heat input capacity of all units claiming this exemption at the same facility is less than 250 mmBtu/hr.
 - c. The unit shall not burn more than the maximum annual amount of a single fuel, as given in 15.e., or equivalent maximum annual amounts of multiple fuels, as addressed in 15.f.
 - d. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 15,g.., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 15.h..
 - e. If burning only one type of fuel, the annual amount of fuel burned by the unit shall not exceed 150 million standard cubic feet of natural gas, one million gallons of propane, one million gallons of fuel oil with a sulfur content not exceeding 0.05 percent, by weight, 290,000 gallons of fuel oil with a sulfur content not exceeding 0.5 percent, by weight, or 145,000 gallons of fuel oil with a sulfur content not exceeding 1.0 percent, by weight.
 - f. If burning more than one type of fuel, the equivalent annual amount of each fuel burned by the unit shall not exceed the maximum annual amount of such fuel, as given in 15.e., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total annual amount of the fuel burned by the unit to the total annual amount of such fuel allowed to be burned by the unit pursuant to 15.e. The sum of the fuel percentages for all fuels burned by the unit must be less than or equal to 100 percent.
 - g. If burning only one type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 375 million standard cubic feet of natural gas, 2.5 million gallons of 44 propane, 2.5 million gallons of fuel oil with a sulfur content not exceeding 0.05 percent, by weight, 290,000 gallons of fuel oil with a sulfur content not exceeding 0.5 percent, by weight, or 145,000 gallons of fuel oil with a sulfur content not exceeding 1.0 percent, by weight.
 - h. If burning more than one type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 15.g., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total annual amount of the fuel burned by all units claiming this exemption at the same facility to the total annual amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 15.g. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
- 16. One or more emergency generators provided:
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.

- b. The unit shall not burn used oil or any fuels other than natural gas, propane, gasoline, and diesel fuel.
- c. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 16.d., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 16.e.
- d. If burning only one type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 2,700 gallons of gasoline, 32,000 gallons of diesel fuel, 144,000 gallons of propane, or 4.4 million standard cubic feet of natural gas.
- e. If burning more than one type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 16.d., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total amount of the fuel burned by all units claiming this exemption at the same facility to the total amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 16.d. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
- 17. General purpose internal combustion engines, and other reciprocating internal combustion devices, provided the following conditions are met with respect to each such unit.
 - a. The unit is not subject to the Acid Rain Program, CAIR Program, or any unit-specific applicable requirement.
 - b. The unit shall not burn used oil or any fuels other than natural gas, propane, gasoline, and diesel fuel.
 - c. Collectively, all units claiming this exemption at the same facility shall not burn more than the collective maximum annual amount of a single fuel, as given in 17.d., or equivalent collective maximum annual amounts of multiple fuels, as addressed in 17. e.
 - d. If burning only one type of fuel, the collective annual amount of fuel burned by all units claiming this exemption at the same facility shall not exceed 2,700 gallons of gasoline, 32,000 gallons of diesel fuel, 144,000 gallons of propane, or 4.4 million standard cubic feet of natural gas.
 - e. If burning more than one type of fuel, the equivalent collective annual amount of each fuel burned by the units claiming this exemption at the same facility shall not exceed the collective maximum annual amount of such fuel, as given in 17.d., multiplied by a fuel percentage. The fuel percentage is the percentage ratio of the total amount of the fuel burned by all units claiming this exemption at the same facility to the total amount of such fuel allowed to be burned by all units claiming this exemption at the same facility pursuant to 17.d. The sum of the fuel percentages for all fuels burned by the units claiming this exemption at the same facility must be less than or equal to 100 percent.
- 18. Belt conveyors.
- 19. Turbine vapor extractor.

- 20. Combustion of on-site generated boiler non-hazardous cleaning chemicals in Units 1 and 2. This activity occurs approximately once every 3 to 5 years.
- 21. Railcar maintenance.
- 22. Application of fungicides, herbicides, and pesticides.
- 23. Asbestos renovation and demolition activities.
- 24. Steam turbine and auxiliary boiler lube oil vents.
- 25. Gas turbine lube oil reservoirs and vents.
- 26. Gas turbine dump tank vents.
- 27. Waste and used oil storage tanks.
- 28. Turbine and lube oil storage tanks.
- 29. Diesel fuel oil storage tanks.
- 30. Distillate (Nos. 1 and 2) and residual (Nos. 4, 5, and 6) fuel oil storage tanks.
- 31. Wastewater treatment equipment.
- 32. Storage tanks less than 550 gallons.
- 33. Architectural (equipment) maintenance painting.
- 34. Diesel fuel oil, distillate (Nos. 1 and 2) fuel oils, and residual (Nos. 4, 5, and 6) fuel oils truck unloading.
- 35. Natural gas safety relief valves.
- 36. Fresh water cooling towers and related equipment.
- 37. Oil/water separators.

- 38. Disposal of narcotics (approximately 150 lb/yr) using a portable 55-gallon drum "Drug Terminator" combustion device.
- 39. Any other emissions unit or activity that:
 - a. It would be subject to no unit-specific applicable requirement.
 - b. It would neither emit nor have the potential to emit:
 - (I) 500 pounds per year or more of lead and lead compounds expressed as lead;
 - (II) 1,000 pounds per year or more of any hazardous air pollutant;
 - (III) 2,500 pounds per year or more of total hazardous air pollutants; or
 - (IV) 5.0 tons per year or more of any other regulated pollutant.
 - c. Its emissions, in combination with the emissions of other units and activities at the facility, would not cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.
 - d. In the case of a proposed new emissions unit at an existing facility, the emissions of such unit, in combination with the emissions of any other proposed new or modified units and activities at the facility, would not result in a modification subject to the preconstruction review requirements of subparagraph 62-204.800(11)(d)2., Rule 62-212.400 or 62-212.500, F.A.C.
 - e. In the case of a proposed new pollutant-emitting activity, such activity would not constitute a modification of any existing non-exempt emissions unit at a non-Title V source or any existing non-insignificant emissions unit at a Title V source.

ATTACHMENT F IDENTIFICATION OF APPLICABLE REQUIREMENTS

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

A. FACILITY-WIDE REQUIREMENTS

Federal:

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State:

CHAPTER 62-4, F.A.C.: PERMITS, effective 03-16-08

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits; Application.

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review.

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 10-12-08

62-210.300, F.A.C.: Permits Required.

62-210.300(1), F.A.C.: Air Construction Permits.

62-210.300(2), F.A.C.: Air Operation Permits.

62-210.300(3), F.A.C.: Exemptions.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.

62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370(2), F.A.C.: Computation of Emissions.
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.650, F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions. [Not Applicable to Unit 2]
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit Long Form, Form and Instructions.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 10-06-08

- 62-212.300, F.A.C.: General Preconstruction Review Requirements.
- 62-212.400, F.A.C.: Prevention of Significant Deterioration (PSD).
- 62-212.500, F.A.C.: Preconstruction Review for Nonattainment Areas.
- 62-212.710, F.A.C.: Air Emissions Bubble.
- 62-212.720, F.A.C.: Actuals Plantwide Applicability Limits (PALS).

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 10-12-08

- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.405, F.A.C.: Concurrent Processing of Permit Applications.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213.440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

- 62-213.900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
- 62-213.900(7), F.A.C.: Statement of Compliance Form.
- 62-213.900(8), F.A.C.: Responsible Official Notification Form.

CHAPTER 62-256, F.A.C.: OPEN BURNING AND FROST PROTECTION FIRES, effective 10-06-08

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 10-06-08

- 62-296.320(2), F.A.C.: Objectionable Odor Prohibited.
- 62-296.320(3), F.A.C.: Permitted Open Burning.
- 62-296.320(4)(b), F.A.C.: General Visible Emissions Standard.
- 62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 02-12-04

- 62-297.310, F.A.C.: General Test Requirements.
- 62-297.320, F.A.C.: Standards for Persons Engaged in Visible Emissions Observations.
- 62-297.401, F.A.C.: Compliance Test Methods.
- 62-297.440, F.A.C.: Supplementary Test Procedures.
- 62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: DECISIONS DETERMINING SUBSTANTIAL INTERESTS, effective 12-24-07

CHAPTER 62-110, F.A.C.: EXCEPTION TO THE UNIFORM RULES OF PROCEDURE, effective 07-01-98

B. <u>UNIT NO. 1; EU ID NO. 003</u>

ACID RAIN PROGRAM (ARP)

- 40 CFR 72: Permits Regulation
- 40 CFR 75: Continuous Emissions Monitoring
- 40 CFR 77: Excess Emissions
- 40 CFR 78: Appeal Procedures

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

CLEAN AIR INTERSTATE RULE (CAIR)

40 CFR 96: NO_x Budget Trading Program and CAIR NO_x and SO₂ Trading Programs for State Implementation Plans

Rule 62-213.413, F.A.C.: Fast-Track Revision of Acid Rain Parts.

CHAPTER 62-214, F.A.C.: REQUIREMENTS FOR SOURCES SUBJECT TO THE FEDERAL ACID RAIN PROGRAM, effective 03-16-08

Rule 62-296.405(1), F.A.C.: Fossil Fuel Steam Generators with More Than 250 Million Btu Per Hour Heat Input.

Rule 62-296.470, F.A.C.: Implementation of Federal Clean Air Interstate Rule (CAIR).

FINAL Permit No: 00100006-003-AV, Section III., Subsection A., Emissions Unit No. 003; Permit Condition Nos. A.1. through A.33.

C. <u>UNIT 2; EU ID NO. 005</u>

NEW SOURCE PERFORMANCE STANDARDS

40 CFR 60, Subpart A: General Provisions

§60.7: Notification and Recordkeeping

§60.8: Performance Tests

§60.11: Compliance with Standards and Maintenance Requirements

§60.12: Circumvention

§60.13: Monitoring Requirements

§60.19: General Notification and Reporting Requirements

40 CFR 60, Subpart D: Standards of Performance for Fossil-Fuel-Fired steam Generators for Which Construction is Commenced After August 17, 1971.

§60.40: Applicability and Designation of Affected Facility

§60.41: Definitions

§60.42: Standards for Particulate Matter (PM)

§60.43: Standards for Sulfur Dioxide (SO₂)

§60.44: Standards for Nitrogen Oxides (NO_x)

§60.45: Emissions and Fuel Monitoring

§60.46: Test Methods and Procedures

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

COMPLIANCE ASSURANCE MONITORING (FOR PM ONLY)

- 40 CFR 64, Compliance Assurance Monitoring (CAM)
 - §64.1 Definitions
 - §64.2 Applicability
 - §64.3 Monitoring Plan Design
 - §64.4 Submittal Requirements
 - §64.5 Deadlines for Submittals
 - §64.7 Operation of Approved Monitoring
 - §64.8 Quality Improvement Plan (QIP) Requirements
 - §64.9 Reporting and Recordkeeping Requirements
 - §64.10 Savings Provisions

ACID RAIN PROGRAM (ARP)

- 40 CFR 72: Permits Regulation
- 40 CFR 75: Continuous Emissions Monitoring
- 40 CFR 77: Excess Emissions
- 40 CFR 78: Appeal Procedures

CLEAN AIR INTERSTATE RULE (CAIR)

40 CFR 96: NO_x Budget Trading Program and CAIR NO_x and SO₂ Trading Programs for State Implementation Plans

FINAL Permit No: 00100006-003-AV, Section III., Subsection B., Emissions Unit No. 005; Permit Condition Nos. B.1. through B.15.

C. COMBUSTION TURBINE NO. 3; EU ID NO. 006

NEW SOURCE PERFORMANCE STANDARDS

- 40 CFR 60, Subpart A: General Provisions
 - §60.7: Notification and Recordkeeping
 - §60.8: Performance Tests
 - §60.11: Compliance with Standards and Maintenance Requirements
 - §60.12: Circumvention
 - §60.13: Monitoring Requirements
 - §60.19: General Notification and Reporting Requirements
- 40 CFR 60, Subpart GG: Standards of Performance for Stationary Gas Turbines
 - §60.330: Applicability and Designation of Affected Facility
 - §60.331: Definitions
 - §60.332(a)(1): Standard for Nitrogen Oxides
 - §60.333: Standard for Sulfur Dioxide
 - §60.334(b), (c), (h), (i), and (j): Monitoring of Operations
 - §60.335: Test Methods and Procedures

DEERHAVEN GENERATING STATION IDENTIFICATION OF APPLICABLE REQUIREMENTS

ACID RAIN PROGRAM (ARP)

40 CFR 72: Permits Regulation

40 CFR 75: Continuous Emissions Monitoring

40 CFR 77: Excess Emissions 40 CFR 78: Appeal Procedures

CLEAN AIR INTERSTATE RULE (CAIR)

 $40~\text{CFR}~96:~\text{NO}_x$ Budget Trading Program and CAIR NO_x and SO_2 Trading Programs for State Implementation Plans

Rule 62-213.413, F.A.C.: Fast-Track Revision of Acid Rain Parts.

CHAPTER 62-214, F.A.C.: REQUIREMENTS FOR SOURCES SUBJECT TO THE FEDERAL ACID RAIN PROGRAM, effective 03-16-08

Rule 62-296.470, F.A.C.: Implementation of Federal Clean Air Interstate Rule (CAIR).

FINAL Permit No: 00100006-003-AV, Section III., Subsection C., Emissions Unit No. 006; Permit Condition Nos. C.0. through C.20.

ATTACHMENT G COMPLIANCE REPORT

DEERHAVEN GENERATING STATION COMPLIANCE REPORT

Attachment F to this Title V operation permit renewal application identifies the requirements that are applicable to the emission units that comprise this Title V source.

A copy of the most recent Deerhaven Generating Station Annual Statement of Compliance—Title V Source is provided in this attachment.



STRATEGIC PLANNING

February 27, 2009

Via email

Mr. Chris Kirts, P.E., Administrator Northeast District Air Program Florida Department of Environmental Protection 7825 Baymeadows Way, Suite B200 Jacksonville, Florida 32256-7590

Re:

Gainesville Regional Utilities
Deerhaven Generating Station
Facility I.D. No. 0010006
Permit No. 0010006-003-AV
Statement of Compliance - Title V Source

Dear Mr. Kirts,

Attached for the above referenced facility is the Statement of Compliance - Title V Source for the calendar year 2008 as required by Title V Permit, Appendix TV-3, Condition 51. If you have any questions, please contact me by e-mail at embryrg@gru.com, or by phone at (352) 393-1299.

Sincerely,

Regina Embry

Electric Utility Engineer

Attachment

cc electronically:

John Gay, FDEP NED

Rosalyn Hughes, U. S. EPA - Region IV, Air and EPCRA Enforcement Branch

R. Klemans D. Moffett S. Holder

J. Stanton J. Taylor

file: CAA/COMPCERT

X:\u0070\Regina\2008 Air\2008 Statement of Compliance and supporting doc's\2008 DH trans letter Title V Stat of Compliance



Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

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

	X Annual Requirement	Permanent Facility Shutdown
	REPORTING PERIOD*	REPORT DEADLINE**
	<u>January 1st</u> through <u>December 31st</u> of <u>2008</u> (year)	February 28, 2009
	The statement of compliance must cover all conditions that were in effectincluding any conditions that were added, deleted, or changed through p See Rule 62-213.440(3)(a)2., F.A.C.	
Fa	cility Owner/Company Name: City of Gainesville, Gaine	esville Regional Utilities
Si	te Name: <u>Deerhaven Generating Station</u> Facility ID No. <u>00100</u>	006 County: Alachua
0	MPLIANCE STATEMENT (Check only one of the following three	options)
<u></u>	A. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part, and there were no reportable requirements associated with any malfunction or breakdown of equipment, or inonitoring systems during the reporting period iden	incidents of deviations from applicab process, fuel burning or emission contr
	B. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part; however, there were one or mo applicable requirements associated with malfunctions or breakde control equipment, or monitoring systems during the reporting pe to the Department. For each incident of deviation, the following in	over reportable incidents of deviations fro owns of process, fuel burning or emission eriod identified above, which were reported
	 Date of report previously submitted identifying the incident of Description of the incident. 	of deviation.
X	C. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part, EXCEPT those identified in t reportable incidents of deviations from applicable requirements a of process, fuel burning or emission control equipment, or moni identified above, which were reported to the Department. For einformation is included:	he pages attached to this report and as ssociated with malfunctions or breakdow itoring systems during the reporting period
	 Emissions unit identification number. Specific permit condition number (note whether the permit changed during certification period). 	condition has been added, deleted, or
	3. Description of the requirement of the permit condition.	
	4. Basis for the determination of noncompliance (for monitored was continuous, i.e., recorded at least every 15 minutes, or in	
	5. Beginning and ending dates of periods of noncompliance.	
	 Identification of the probable cause of noncompliance and d preventative measures implemented. 	escription of corrective action or
	7. Dates of any reports previously submitted identifying this in	cident of noncompliance.

DEP Form No. 62-213.900(7)

Description of the incident.

DHTV Stimt of Comp.doc
Effective: 6-02-02

Date of report previously submitted identifying the incident of deviation.

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

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

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

(Signature of Title V Source Responsible Official)

Name: Daniel W. Moffett Title: Plant Manager, Deerhaven Generating Station

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

(Signature of Acid Rain Source Levignated Representative)

Name: Daniel W. Moffett Title: Plant Manager, Deerhaven Generating Station

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

Deerhaven Generating Station Title V Permit 0010006-003-AV

Annual Compliance Certification January 1, 2008 - December 31, 2008

Incidents of Deviation

Emission Unit ID. No.	003 (Steam Unit #1)
Permit Condition No.	Specific Condition A.33.
Description of Permit Condition	This condition requires that visible emissions shall be monitored by the use of a CEMS.
Description of Incidents	Opacity monitoring not performed due to Emissions Monitoring Systems Problems, DAHS reboot
	1 six-minute average period.
Date(s) of Previous Report of Incident	October 27, 2008 - Quarterly Excess Emission Report
Emission Unit ID, No.	005 (Steam Unit #2)
Permit Condition No.	Specific Condition B.4.(a)(2)
Description of Permit Condition	This condition requires that any gases which are discharged do not exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.
Description of Incidents	Excess emissions of opacity caused by ESP malfunction; 1 six-minute average period.
Date(s) of Previous Report of Incident	July 29, 2008 - Quarterly Excess Emission Report
Emission Unit ID. No.	005 (Steam Unit #2)
Permit Condition No.	Specific Condition B.4.(a)(2)
Description of Permit Condition	This condition requires that any gases which are discharged do not exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.
Description of Incidents	Excess emissions of opacity caused by ESP malfunction; 2 six-minute average periods.
Date(s) of Previous Report of Incident	October 27, 2008 - Quarterly Excess Emission Report
Emission Unit ID. No.	005 (Steam Unit #2)
Permit Condition No.	Specific Condition B.4.(a)(2)
Description of Permit Condition	This condition requires that any gases which are discharged do not exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.
Description of Incidents	Excess emissions of opacity caused by pulverizer trip; 4 six-minute average periods.
Date(s) of Previous Report of Incident	October 27, 2008 - Quarterly Excess Emission Report

Deerhaven Generating Station Title V Permit 0010006-003-AV

Annual Compliance Certification January 1, 2008 - December 31, 2008

Non-Compliances Page 1

Emissions unit identification number	005 (Steam Unit #2)
Permit condition number	Specific Condition D.2
Description of requirement of permit condition	Excess emissions resulting from startup, shutdown, fuel switching, or malfunction shall be permitted but in no case exceed two hours in any 24-hour period, unless authorized by the Department.
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	March 4, 2008; 90 minutes over the 2 hours allowed by permit
Probable cause of noncompliance	Startup after tube leak repair
Corrective Action/Preventative Measures	None
Dates of previous reports of noncompliance	E-mail to Rick Banks and John Gay, FDEP NED, on March 5, 2008.

Emissions unit identification number	005 (Steam Unit #2)
Permit condition number	Specific Condition D.2
Description of requirement of permit condition	Excess emissions resulting from startup, shutdown, fuel switching, or malfunction shall be permitted but in no case exceed two hours in any 24-hour period, unless authorized by the Department.
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance.	August 6, 2008; 30 minutes over the 2 hours allowed by permit
Probable cause of noncompliance	Electrical issue which caused Unit to trip
Corrective Action/Preventative Measures	None
Dates of previous reports of noncompliance	E-mail to Rick Banks and John Gay, FDEP NED, on August 7, 2008.

Emissions unit identification number	005 (Steam Unit #2)
Permit condition number	Specific Condition D.2
Description of requirement of permit condition	Excess emissions resulting from startup, shutdown, fuel switching, or malfunction shall be permit-
	ted but in no case exceed two hours in any 24-hour period, unless authorized by the Department.
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	August 22, 2008; 168 minutes over the 2 hours allowed by permit
Probable cause of noncompliance	Falling tree downed 3 miles of transmission lines during Tropical Storm Fay
Corrective Action/Preventative Measures	None
Dates of previous reports of noncompliance	E-mail to Rick Banks and John Gay, FDEP NED, on August 22, 2008, voicemail to John Gay, and email update August 26, 2008.

Non-Compliances Page 2

Emissions unit identification number	005 (Steam Unit #2)
Permit condition number	Specific Condition D.2
Description of requirement of permit condition	Excess emissions resulting from startup, shutdown, fuel switching, or malfunction shall be permit-
	ted but in no case exceed two hours in any 24-hour period, unless authorized by the Department.
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	October 9, 2008; 6 minutes over the 2 hours allowed by permit
Probable cause of noncompliance	Intense rain events
Corrective Action/Preventative Measures	None
Dates of previous reports of noncompliance	E-mail to John Gay, FDEP NED, on October 10, 2008

Emissions unit identification number	006 (Combustion Turbine #3)
Permit condition number	Specific Condition C.13.a and Appendix TV-4, Title V Conditions 9. and 10.
Description of requirement of permit condition	Excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the BACT standards (15/42 gas/oil) and shall be reported as excess emissions. The permittee shall immediately notify the Department
Basis for determination of noncompliance	Continuous monitoring
•	
Beginning and ending dates of noncompliance	March 9, 2008; 4 hours of rolling averages above 15 ppmvd NOx over the 2 allowed
Probable cause of noncompliance	Unit tripped due to compressor differential problem; Unit also dropped out of pre-mix for unknown reason. Untimely reporting due to problem with programming that performs the computation of the hourly averages.
Corrective Action/Preventative Measures	Turbine specialist brought in to troubleshoot; also, investigation by CEMs vendor that revealed programming error.
Dates of previous reports of noncompliance	March 10, 2008; emails to Rick banks and John Gay for 2 hours over; Additional 2 hours reported June 26, 2008, upon discovery.

Non-Compliances Page 3

Emissions unit identification number	006 (Combustion Turbine #3)
Permit condition number	Specific Condition C.13.a and Appendix TV-4, Title V Conditions 9, and 10.
Description of requirement of permit condition	Excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the BACT standards (15/42 gas/oil) and shall be reported as excess emissions. The permittee shall immediately notify the Department
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	June 6, 2008; 3 hours of rolling averages above 15 ppmvd NOx over the 2 allowed
Probable cause of noncompliance	Malfunction of combustion controls; also problem with programming that performs the computation of the hourly averages.
Corrective Action/Preventative Measures	Investigation by CEMs vendor that revealed programming error
Dates of previous reports of noncompliance	June 26, 2008; email to Rick banks and John Gay

Emissions unit identification number	006 (Combustion Turbine #3)
Permit condition number	Specific Condition C.13,a and Appendix TV-4, Title V Conditions 9, and 10.
Description of requirement of permit condition	Excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the BACT standards (15/42 gas/oil) and shall be reported as excess emissions. The permittee shall immediately notify the Department
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	January 19, 2006; 2 hours of rolling averages above 15 ppmvd NOx over the 2 allowed
Probable cause of noncompliance	Unit did not go into premix, reporting delay due to programming error for NOx computation
Corrective Action/Preventative Measures	Investigation by CEMs vendor that revealed programming error
Dates of previous reports of noncompliance	June 30, 2008; emails to Rick banks and John Gay

Emissions unit identification number	006 (Combustion Turbine #3)
Permit condition number	Specific Condition C.13.a and Appendix TV-4, Title V Conditions 9. and 10.
Description of requirement of permit condition	Excess emissions shall be any unit operating hour in which the 4-hour rolling average NOx con-
	centration exceeds the BACT standards (15/42 gas/oil) and shall be reported as excess emissions
	The permittee shall immediately notify the Department
Basis for determination of noncompliance	Continuous monitoring
Beginning and ending dates of noncompliance	September 21, 2006, 1 hour of rolling averages above 15 ppmvd NOx over the 2 allowed
Probable cause of noncompliance	Unit went into lean-lean mode on previous day
	Reporting delay due to programming error for NOx computation
Corrective Action/Preventative Measures	Investigation by CEMs vendor that revealed programming error
Dates of previous reports of noncompliance	June 30, 2008; emails to Rick banks and John Gay

ATTACHMENT H LIST OF EQUIPMENT REGULATED UNDER TITLE VI

DEERHAVEN GENERATING STATION LIST OF EQUIPMENT REGULATED UNDER TITLE VI

Unit ID	Manufacturer	Model No.	Serial No.	Location	Refrigerant Type	Charge Amount (lb)
Cond 102	Carrier	30GT050600KA	21943F1773	Process Plant	R-22	60

ATTACHMENT I ACID RAIN PART

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: New Rev	vised Renewal
------------------------------	---------------

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Deerhaven	Florida	0663
Plant name	State	ORIS/Plant Code

STEP 2 Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO₂ Opt-in unit, enter "yes" in olumn "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

а	b	С	d	е
Unit ID#	SO₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
B1	No	Yes	N/A	N/A
B2	No	Yes	N/A	N/A
СТЗ	No	Yes	N/A	N/A
!		Yes		
		Yes	<u></u>	

1

Deerhaven

Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:

- (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
- (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;

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 DEP; 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
- (4) For applications including a SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

- (ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

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

DEP Form No. 62-210.900(1)(a) - Form Effective: 3/16/08

_				
De	er	กล	VR	n

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 an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4 For SO₂ Opt-in units only.

In column "f" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

	f	g	h (not required for renewal application)	
	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application	
L				
	_			

Effective: 3/16/08

Deerhaven
Plant Name (from STEP 1)

STEP 5

For SO₂ Opt-in units only.
(Not required for SO₂ Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO₂ Opt-in unit identified in column "a" (and in column "f").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

i	j	k	ı	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO₂ Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO ₂ Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO ₂ Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO₂ Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)
				<u> </u>	

STEP 6

For SO₂ Opt-in units only.

Attach additional requirements, certify and sign.

- A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
- B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
- D. Attach a complete compliance plan for SO₂ under 40 CFR 72.40.
- E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
- F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature Date Certification (for designated representative or alternate designated representative only)

STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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.

John W. Stanton Name		Assistant General Manager - Energy Supply Title		
City of Galnesville, Gainesville Regional Utilities Owner Company Name				
(352) 393-1789 Phone	stantonjw@g E-mail address	ru.com		
Signature TAm-		Date	5-13-09	

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

ATTACHMENT J -CAIR PART

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

	This submission is: New Revised Renewal				
STEP 1	Plant Name: Deerhaven		•	State: Florida	ORIS or EIA Plant Code:
Identify the source by plant name and ORIS or EIA plant code					0663

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the olumn(s).

For new units, enter the requested information in columns "e" and "f.

	· · · · · · · · · · · · · · · · · · ·				
а	b	C	d	е	f
Unit ID#	Unit will hold nitrogen oxides (NO _X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO ₂) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO _X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
B1	x	X	X	N/A	N/A
B2	x	х	х	N/A	N/A
СТЗ	x	х	х	N/A	N/A
			-		
			<u> </u>		
					

DEP Form No. 62-210.900(1)(b) - Form Effective: 3/16/08

1 Y\\GDP-09\\GRU\DGS\TITLVREN-ATTJ.DOC—051509

STEP 3

Read the standard requirements.

Deerhaven

Plant Name (from STEP 1)

CAIR NOx ANNUAL TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and (ii) [Reserved];
- (2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO_X unit shall be subject to the requirements under paragraph (1) of the NO_X Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.

 (3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Requirements, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.
- (4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

- If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:
- (1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x 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 before the end of 5 years, in writing by the DEP or the Administrator.
- (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under 40 CFR 96.113 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

DEP Form No. 62-210.900(1)(b) - Form

Effective: 3/16/08 2 Y\GDP-09\GRU\DGS\TITLVREN-ATTJ.DOC—051509

Deerhaven

Plant Name (from STEP 1)

Liability.

STEP 3,

Continued

(1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.

(2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR

NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall:
 - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and (ii) [Reserved];
- The owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296, 470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine

compliance by each CAIR SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO2 allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO2 unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO2 allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

 (6) A CAIR SO₂ allowance does not constitute a property right.
 (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR

Excess Emissions Requirements.

If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO2 unit at the source shall surrender the CAIR SO2 allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

DEP Form No. 62-210.900(1)(b) - Form Effective: 3/16/08

Deerhaven

STEP 3,

Continued

Plant Name (from STEP 1)

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR SO2 source and each CAIR SO2 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 before the end of 5 years, in writing by the Department or the Administrator.
- (i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under 40 CFR 96.213 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.
- (2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

- (1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
- (2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.
- (3) Any provision of the CAIR SO2 Trading Program that applies to a CAIR SO2 unit or the CAIR designated representative of a CAIR SO2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall: (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C.; in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and (ii) [Reserved]:
- The owners and operators of each CAIR NO_X Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296,470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
- (2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
- (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
- (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization. (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_X Ozone Season unit.

4

DEP Form No. 62-210.900(1)(b) - Form Effective: 3/16/08

Deerhaven Plant Name (from STEP 1)

STEP 3, Continued

Excess Emissions Requirements.

If a CAIR NO_X Ozone Season source emits NO_X during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season 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 before the end of 5 years, in writing by the DEP or the Administrator.
- (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under 40 CFR 96.113 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
- (2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

- (1) Each CAIR NO_χ Ozone Season source and each CAIR NO_χ Ozone Season unit shall meet the requirements of the CAIR NO_χ Ozone Season Trading Program.
- (2) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season source or the CAIR designated representative of a CAIR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_X Ozone Season units at the source.
- (3) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season unit or the CAIR designated representative of a CAIR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X Ozone Season source or CAIR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)

5

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR 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 noce 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.

John W. Stanton Name		Assistant Gene Title	Assistant General Manager - Energy Supply Title		
City of Gainesville, Owner Company Name	Gainesville Regional U	Jtilities 			
393-1789	(352) Phone	stantonjw@gru.com E-mail address			
Signature	The		Date	5-13-09	

DEP Form No. 62-210.900(1)(b) - Form

Effective: 3/16/08

ATTACHMENT K FUEL SPECIFICATIONS

DEERHAVEN GENERATING STATION FUEL ANALYSES OR SPECIFICATIONS

A. Natural Gas (typical composition)

Component	Mole Percent (by volume)		
Gas Composition			
Hexane+	0.018		
Propane	0.190		
I-butane	0.010		
N-butane	0.007		
Pentane	0.002		
Nitrogen	0.527		
Methane	96.195		
CO_2	0.673		
Ethane	2.379		
Other Characteristics			
Heat content (HHV)	1,050 Btu/ft ³ at 14.73 psia, dry		
Real specific gravity	0.5776		
Sulfur content	0.5 gr/100 scf		

Note:

Btu/ft³ = British thermal units per cubic foot. psia = pounds per square inch absolute.

 $gr/100 \text{ scf} = grains per 100 standard cubic foot.}$

B. Distillate Fuel Oils

Specification	Units	Value
Heat Content (nominal)	Btu/gal (HHV)	138,000
Sulfur Content	Weight %	0.05 – 2.5
Ash Content	Weight %	0.1

DEERHAVEN GENERATING STATION FUEL ANALYSES OR SPECIFICATIONS

C. Residual Fuel Oils

Specification	Units	Value
Heat Content (nominal)	Btu/gal (HHV)	150,000
Sulfur Content	Weight %	2.5
Ash Content	Weight %	0.1

D. On-Specification Used Oil

Meets specifications of 40 CFR 279.11

E. Coal

Specification	Units	Value
Heat Content (nominal)	Btu/lb (HHV)	13,000
Sulfur Content	lb/10 ⁶ Btu	2.5
Ash Content	Weight %	10.0
Moisture Content	Weight %	10.0

ATTACHMENT L DETAILED DESCRIPTION OF CONTROL EQUIPMENT

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

A. Unit 2 (EU 005) Hot-Side Electrostatic Precipitator - Existing

Manufacturer: Research-Cottrell

Model No.: UP-6024

Control Efficiency (%): 99.5

Pressure Drop (in H_2O), operating: 7

Temperature, operating (EF): 650 - 760

Temperature, design (EF): 800

Inlet Air Flow Rate (acfm): 1,346,000

Collection Plate Area (ft²): 621,837

Plate Cleaning Procedures: Rappers.

B. Unit 2 (EU 005) Selective Catalytic Reduction (SCR) – Under Construction

The selective catalytic reduction (SCR) NO_x removal process functions by reacting NO_x contained in the flue gas with ammonia in the presence of a catalyst at a temperature between 613 and 800 degrees Fahrenheit (°F) to produce nitrogen (N_2) and water (H_2O). NH_3 is injected upstream of the catalyst bed where the following primary reactions take place:

$$4NH_3 + 4NO + O_2 \rightarrow 4N_2 + 6H_2O$$

 $4NH_3 + 2NO_2 + O_2 \rightarrow 3N_2 + 6H_2O$

The DGS Unit 2 SCR system will tie into the ductwork at the outlet of the existing hot-side electrostatic precipitator which will remain in-service after installation of the Unit 2 Air Quality Control System (AQCS). Ammonia mixer plates and patented Delta WingTM mixers will be located within the inlet duct to the two SCR reactors. The SCR outlet duct will connect to the existing air heaters.

The SCR system is designed so that flue gas flows through it whenever the DGS Unit 2 is operating i.e., there are no bypasses. The SCR system contains instrumentation to measure flue gas pressures, temperatures and NO_x concentrations at various locations in the ductwork and reactors. NO_x control is initiated when the temperature at the outlet of the reactor reaches the minimum short-term operating temperature specified by the catalyst vendor and ammonia flow is started through the injection nozzles.

The DGS Unit 2 flue gas will flow through the three layers (two active and one future layer) of honeycomb catalyst. This SCR design provides sufficient space with margin to accommodate plate or honeycomb type catalyst and meet the performance requirements

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

without using the spare catalyst level. The catalyst handling system will consist of a catalyst-rotating device, catalyst module lift device (supplied by the catalyst vendor), electric and manual hoists, and a catalyst cart and rail system. Provisions have been made in the catalyst design for removable test samples of catalyst material that can be used to monitor and predict catalyst activity during the catalyst life. The design life of the catalyst is 24,000 hours.

Gaseous arsenic is one of the predominant catalyst deactivation mechanisms in coal-fired SCR applications. Introducing calcium oxide (CaO) to the fuel reduces the gaseous arsenic in the flue gas and decreases its harmful effect on the catalyst. For the DGS Unit 2 SCR system, an addition rate of 0.51 weight percent CaO is expected to reduce the concentration of arsenic in the flue gas to within acceptable limits, subsequently ensuring the catalyst for a minimum 24,000 hours of operation. This optional CaO addition may be provided from lime or limestone.

A urea-based ammonia system will be provided to supply ammonia for the SCR catalyst to remove NO_x. The system is sized to produce ammonia for two SCRs at full load. The urea to ammonia (U2A) system will use urea that is dissolved into water and the solution will be injected into heated in-line hydrolysers at a controlled rate and under conditions to provide the required amount of ammonia. The process will produce a gaseous mixture of ammonia, carbon dioxide and water vapor, which will be mixed into the flue gas stream.

The DGS Unit 2 SCR control system is designed to achieve a target outlet NO_x emission rate of 0.07 pounds per million British thermal units (lb/10⁶ Btu) with an ammonia slip concentration of no more than 5.0 parts per million at 3% O_2 .

C. Unit 2 (EU 005) Circulating Dry SO₂ Scrubber – Under Construction

A Circulating Dry Scrubber (CDS) will be installed down stream of the existing DGS Unit 2 induced draft (ID) fans. This flue gas desulfurization (FGD) system will remove the acidic constituents of the flue gas, primarily SO₂ and SO₃ and to a lesser extent CO₂, HCl and HF, by reaction with hydrated lime. The system includes the CDS vessel, adsorbent preparation and injection, water injection, product recycle injection and a flue gas recycle system. To assure a high level of SO₂ removal, a portion of the solid products exiting the CDS vessel (i.e., primarily reaction products such as CaSO₃, CaSO₄, CaCO₃, CaCl₂ and CaF₂ and inerts) will be separated from the flue gas in the baghouse and recycled to the vessel inlet at a high ratio to the inlet solids.

The dominant CDS equations are as follows:

$$Ca(OH)_2 + SO_2 \leftrightarrow CaSO_3 \times \frac{1}{2}H_2O + \frac{1}{2}H_2O$$

 $Ca(OH)_2 + SO_3 \leftrightarrow CaSO_4 \times \frac{1}{2}H_2O + \frac{1}{2}H_2O$

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

 $CaSO_3 \times \frac{1}{2}H_2O + \frac{1}{2}O_2 \leftrightarrow CaSO_4 \times \frac{1}{2}H_2O$ $Ca(OH)_2 + CO_2 \leftrightarrow CaCO_3 + H_2O$ $Ca(OH)_2 + 2HCI = CaCl_2 + 2H_2O$ $Ca(OH)_2 + 2HF = CaF_2 + 2H_2O$

The CDS is designed so that flue gas flows through it whenever the DGS Unit 2 is operating (i.e., there are no bypasses). It contains instrumentation to measure flue gas pressures, temperatures and SO_2 concentrations at various locations in the ductwork.

The DGS Unit 2 flue gas will first pass through a group of venturi nozzles. The venturi nozzles serve to accelerate the flue gas just prior to the injection of high-pressure water, recycled solids, and adsorbent (i.e., lime). The reactor acts as a fluidized bed, assuring maximum contact between the pollutants in the flue gas and the adsorbent solids. The reactor is characterized by high turbulences and optimal chemical and physical heat and mass transfer rates. Water is added to bring the flue gas closer to the saturation temperature where the SO₂ absorption is most effective. The high dust load leaving the reactor is captured in the baghouse (fabric filter).

Hydrated lime, Ca(OH)₂, is the adsorbent used in the CDS process. Lime (CaO) will be delivered to the DGS via truck or rail and subsequently hydrated to increase its reactivity before injection in the CDS. Within the hydrator, the lime is mixed with water and agitated until the hydration reaction is complete. The quantity of fresh lime that is introduced into the CDS is controlled by inlet and outlet SO₂ concentrations.

A portion of the material captured in the baghouse will be recycled back into the CDS to maintain the fluidized bed, while the excess material will be pneumatically transported out of the system to a storage silo. The amount of solids recycled is dependent upon the differential pressure within the CDS and the volumetric flue gas flow rate.

In order to ensure that the CDS is constantly fluidized, a portion of the flue gas stream downstream of the two booster fans will be recirculated to the inlet duct of the CDS during boiler operation at reduced loads. The amount of flue gas recirculated is accomplished through the positions of the two recirculation dampers.

The DGS Unit 2 CDS control system is designed to achieve a target outlet SO₂ emission rate of 0.12 lb/10⁶ Btu.

D. Unit 2 (EU 005) Fabric Filter - Under Construction

For particulate removal, one pulse-jet baghouse containing ten (10) compartments will be installed between the outlet of the CDS and inlet of the booster fans at DGS Unit 2. The

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

fabric filter is designed so that flue gas flows through it whenever the DGS Unit 2 is operating; i.e., there are no bypasses.

Particulate contained in the raw flue gas as well as reaction products from the CDS are captured in the pulsejet fabric filter. The pulsejet fabric filter is multi-compartmented, consisting of two parallel trains with centrally located inlet and outlet plenums. Each parallel train of compartments is served by an air slide utilizing heated air. The air slide conveys a significant portion of the collected particulate back to the CDS to maintain a high solids environment and improve overall reagent utilization. The balance of the collected particulate goes to surge bins (one per air slide) from which it is pneumatically conveyed to a common ash silo equipped with redundant pug mills The ash can then be loaded into trucks.

Each compartment will contain one cylindrical bag bundle with 984 filter bags per bundle. This equates to a total of 9,840 bags installed, with an additional 2 percent included as startup spares. The filter bags for this project will be fabricated from heavy weight 18 oz/yd nominal weight PPS, self supported with fused seam. The design air-to-cloth ratio is 4:1 or less with one compartment off-line for maintenance.

The pulsejet fabric filter utilizes bags fabricated from felted polyphenyl sulfide fabric that is appropriate for this application. During operation the incoming particulate laden flue gas passes from outside of each bag creating a filter cake. With the passage of time, this cake thickens and tends to increase pressure drop. An automatic cleaning system is utilized to dislodge this filter cake, thus maintaining the desired overall pressure drop. The motive force for cleaning is pressurized air that is introduced at the top of the bags, just above the tubesheet. This flow of pressurized air travels counter to the normal flow of flue gas, thus dislodging the accumulated filter cake and assisting its downward drop into the collecting hoppers below. Redundant low-pressure positive displacement blowers provide the pressurized air.

Two 50 percent booster fans are provided for the DGS Unit 2 AQCS. The fans serve two functions. They provide the additional motive force to overcome the additional pressure drop imposed on the system by the addition of the SCRs, the CDS, and the baghouse. They also allow the CDS to operate at reduced Unit 2 loads by recycling a portion of flue gas from the baghouse outlet to the CDS vessel inlet, thereby keeping the solids bed in the vessel fluidized. The discharge of the booster fans ties into the ductwork upstream of the stack.

The DGS Unit 2 fabric filter control system is designed to achieve a target outlet filterable PM emission rate of 0.015 lb/10⁶ Btu.

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

E. Combustion Turbine No. 3 (EU 006) NOx Controls

When firing natural gas, Combustion Turbine No. 3 utilizes dry low- NO_x (DLN) combustors that premix turbine fuel and air prior to combustion in the primary zone. Use of a premix burner results in a homogeneous air/fuel mixture without an identifiable flame front. For this reason, the peak and average flame temperatures are the same, causing a decrease in thermal NO_x emissions in comparison to a conventional diffusion burner. A typical DLN combustor incorporates fuel staging using several operating modes as follows:

- <u>Primary Mode</u>—Fuel supplied to first stage only at turbine loads from 0 to 35 percent. Combustor burns with a diffusion flame with quiet, stable operation. This mode is used for ignition, warm-up, acceleration, and low-load operation.
- <u>Lean-Lean Mode</u>—Fuel supplied to both stages with flame in both stages at turbine loads from 35 to 50 percent. Most of the secondary fuel is premixed with air. Turbine loading continues with a flame present in both fuel stages. As load is increased, CO emissions will decrease, and NO_x levels will increase. Lean-lean operation will be maintained with increasing turbine load until a preset combustor fuel-to-air ratio is reached when transfer to premix operation occurs.
- <u>Secondary Mode (Transfer to Premix)</u>—At 70-percent load, all fuel is supplied to second stage.
- <u>Premix Mode</u>—Fuel is provided to both stages with approximately 80 percent furnished to the first stage at turbine loads from 70 to 100 percent. Flame is present in the second stage only.

In addition to lean premixed combustion, DLN combustors typically incorporate lean combustion and reduced combustor residence time to reduce the rate of NO_x formation. All CTs cool the high-temperature CT exhaust gas stream with dilution air to lower the exhaust gas to an acceptable temperature prior to entering the CT turbine. By adding additional dilution air, the hot CT exhaust gases are rapidly cooled to temperatures below those needed for NO_x formation. Reduced residence time combustors add the dilution air sooner than do standard combustors. The amount of thermal NO_x is reduced because the CT combustion gases are at a higher temperature for a shorter period of time.

When firing distillate fuel oils, Combustion Turbine No. 3 utilizes water injection to reduce NO_x formation. Injection of water into the CT's primary combustion zone reduces the formation of thermal NO_x by decreasing the peak combustion temperature. Water injection decreases the peak flame temperature by diluting the combustion gas stream and acting as a heat sink by absorbing heat necessary to: (a) vaporize the water (latent heat of vaporization), and (b) raise the vaporized water temperature to the combustion

DEERHAVEN GENERATING STATION DETAILED DESCRIPTION OF CONTROL EQUIPMENT

temperature. High purity water must be employed to prevent turbine corrosion and deposition of solids on the turbine blades. Typical injection rates range from 0.3 to 1.0 pounds of water per pound of fuel. Water injection will not reduce the formation of fuel NO_x.

The maximum amount of water that can be injected depends on the CT combustor design. Excessive rates of injection will cause flame instability, combustor dynamic pressure oscillations, thermal stress (cold-spots), and increased emissions of CO and VOCs due to combustion inefficiency. Accordingly, the efficiency of water injection to reduce NO_x emissions also depends on turbine combustor design. For a given turbine design, the maximum water-to-fuel ratio (and maximum NO_x reduction) will occur up to the point where cold-spots and flame instability adversely affect safe, efficient, and reliable operation of the turbine.

Both DLN combustion (when firing natural gas) and water injection (when firing distillate fuel oil) are considered *pollution prevention* technologies; i.e., both technologies do not remove nor destroy NO_x but rather reduce its formation.

PROCEDURES FOR STARTUP AND SHUTDOWN

DEERHAVEN GENERATING STATION PROCEDURES FOR STARTUP AND SHUTDOWN

A. Unit 1 (EU 003) and Unit 2 (EU 005)

Startup Procedures

- Ensure all fluid levels are in limits.
- Insure fuel inventory is adequate.
- Ensure all fuel safety systems are in service.
- Ensure all environmental monitoring systems are in service.
- Ensure all valves/switches/breakers are set for startup.
- Establish fire in steam generator.
- Regulate firing rate to raise pressure and temperatures within established limits.
- At approximately 800 psig and saturation temperature +75 degrees Fahrenheit, begin steam admission to turbine.
- Increase turbine speed and firing rate in accordance with established operating limits until turbine speed reaches approximately 3,600 rpm.
- Synchronize generator to power grid and increase generator load to 5 percent.
- Ensure all required systems are in service and operable.
- Increase generator load to desired operating level.

Shutdown Procedures

- Reduce generator load and reduce pressure and temperature to established levels.
- Open generator breaker(s) to disconnect generator from power grid.
- Reduce fuel flow to minimum and trip fuel.
- Secure all operating and safety systems in accordance with established operating procedures.

DEERHAVEN GENERATING STATION PROCEDURES FOR STARTUP AND SHUTDOWN

B. Combustion Turbine No. 3 (EU 006)

Startup Procedures

- Operator checks all alarms from the Alarm *Display* screen of the Primary Operator Interface Panel of the Mark V Turbine Control System and performs a master reset if required.
- Operator selects GAS or LIQUID fuel operation and AUTO synchronization from the Main Display of the Interface Panel.
- Operator initiates a start from the Interface Panel by selecting START and EXECUTE.
- Turbine electric cranking motor engages and turns the combustion turbine rotor to a speed of approximately 360 RPM at which time the combustors are ignited.
- The natural gas or liquid fuel systems deliver a proper amount of fuel to the combustion turbine and in combination with the cranking motor the turbine accelerates to a speed of approximately 2400 RPM at which time the cranking motor disengages.
- The fuel system accelerates the turbine to a synchronous speed of 3600 RPM. The generator field is obtained and the generator synchronizes with the power grid.
- Operator selects the load at which the generator is to operate and the power output of the generator automatically increases at a rate of 3 MW/min. until it reaches the required load.
- When the turbine firing temperature reaches the proper level the WATER INJECTION system engages while firing liquid fuel or the DRY LOW NOx system engages while firing natural gas to control NOx emissions.

Shutdown Procedures

- Operator selects STOP and EXECUTE from the Main Display of the Interface Panel on the Mark V Control System.
- The generator output decreases to zero at a rate of approximately 3 MW/min. at which time the generator breaker opens and disconnects the generator from the grid.
- The combustion turbine coasts down to a speed of 0 RPM at which time the ratcheting feature engages to keep the turbine rotor turning while the unit cools down.

ATTACHMENT N COMPLIANCE ASSURANCE MONITORING

DEERHAVEN GENERATING STATION COMPLIANCE ASSURANCE MONITORING

In order to be subject to the CAM Rule contained in 40 Code of Federal Regulations (CFR) Part 64, an emission unit must:

- 1. Be located at a major source that is required to obtain Part 70 or 71 permit per 40 CFR §64.2(a).
- 2. Be subject to an emission limitation or standard for the applicable pollutant per 40 CFR §64.2(a)(1).
- 3. Use a control device to achieve compliance per 40 CFR §64.2(a)(2).
- 4. Have potential pre-control emissions of the applicable regulated pollutant at least 100 percent of the major source threshold amount per 40 CFR §64.2(a)(3).
- 5. Not otherwise be exempt from CAM per 40 CFR §64.2(b).

A discussion of CAM applicability for the Deerhaven Generating Station regulated emissions units follows:

A. Unit 1 (EU 003)

Unit 1 is a steam generating boiler that is fired with natural gas and fuel (distillate and residual) oils. Unit 1 does not employ any *control devices* as defined 40 CFR §64.1. Accordingly, Unit 1 is not subject to the requirements of 40 CFR Part 64.

B. Unit 2 (EU 005)

Unit 2 is a steam generating boiler that that is fired with coal, natural gas, and distillate fuel oils. Unit 2 is subject to the applicable PM, SO₂, and NO_x emission standards of NSPS Subpart D.

Unit 2 is currently equipped with a hot-side electrostatic precipitator (ESP) to control particulate matter (PM) emissions. In response to the Clean Air Interstate Rule (CAIR), additional emission controls (i.e., Selective Catalytic Reduction [SCR] for NO_x control, Circulating Dry Scrubber [CDS] for SO₂ control, and Fabric Filter [FF] for PM control) are presently being installed on Unit 2.

Unit 2 is equipped with NO_x and SO₂ Continuous Emission Monitoring Systems (CEMS) pursuant to Acid Rain Program (ARP) monitoring requirements; i.e., in accordance with 40 CFR Part 75 monitoring requirements.

Unit 2 meets the above criteria for CAM applicability and is subject to the requirements of 40 CFR Part 64 with respect to PM only. In accordance with §64.2(b)(1)(vi), CAM is not

DEERHAVEN GENERATING STATION COMPLIANCE ASSURANCE MONITORING

applicable to the Unit 2 NSPS Subpart D SO_2 and NO_x emission standards since SO_2 and NO_x emissions are measured directly using CEMS; i.e., the Part 75 CEMS serve as a continuous compliance determination method.

C. Combustion Turbine No. 3 (EU 006)

Combustion Turbine No. 3 is a simple cycle combustion turbine (CT) fired with natural gas and distillate fuel oil. CT No. 3 employs dry low-NO_x (DLN) combustors to reduce the formation of NO_x when firing natural gas. During distillate fuel oil-firing, CT No. 3 uses water injection to reduce the formation of NO_x.

DLN combustors (used during natural gas-firing) is a combustion design feature and therefore specifically exempt from CAM requirements in accordance with the 40 CFR §64.1 definition of a control device.

Water injection (used during distillate fuel oil-firing) is a pollution prevention technique and a combustion design feature that reduces the formation of NO_x. This technology does not appear to meet the 40 CFR Part 64 definition of a control device since it neither destroys nor removes air pollutants prior to discharge to the atmosphere. Rather, it is a pollution prevention technique that reduces the formation of pollutants; i.e., nitrogen oxides (NO_x).

Wet injection is also considered a passive control measure since, following initial combustion turbine tuning by the vendor, there is no day-to-day intervention by the CT operator; i.e., the control measures operate passively via the CT's operational control instrumentation and software. Re-tuning of a CT is only necessary in the event of major CT component replacement.

Although GRU does not believe the CT No. 3 NO_x emission limits are subject to CAM as discussed above, CT No. 3 is subject to the ARP and is equipped with a NO_x/diluent CEMS. Accordingly, CAM is also not applicable to the CT No. 3 NO_x emission standards since NO_x emissions are measured directly using CEMS; i.e., the Part 75 CEMS serve as a *continuous compliance determination method*.

In summary, the 40 CFR Part 64 CAM requirements for the Deerhaven Generating Station are applicable to Unit 2 for PM emissions. A PM CAM Plan for Unit 2 follows this introduction.

DEERHAVEN GENERATING STATION COMPLIANCE ASSURANCE MONITORING

I. Background

A. Emissions Unit

Description:

Steam Electric Generating Unit boiler fired with Coal and

Natural Gas

Identification:

Unit 2 - Emissions Unit ID 005

Facility:

GRU - Deerhaven Generating Station

Facility ID No. 0010006

B. Applicable Emission Limit and Monitoring Requirements

Emission Limit:

PM - 0.10 lb/MMBtu, three-hour average

Monitoring

Requirement:

Annual Compliance Test - Method 5

C. Control Technology

Electrostatic Precipitator (ESP)

II. Monitoring Approach

A. Indicator

Opacity will be used as an indicator.

B. Measurement Approach

Opacity will be measured in the stack with a Continuous Opacity Monitoring System (COMS).

C. Indicator Range

An excursion is defined as any one-hour average opacity greater than 18%, excluding periods of start-up, shutdown, or malfunction, pursuant to Rule 62-210.700, F.A.C. An excursion will trigger an evaluation of the operation of the boiler and ESP. Corrective action will be taken as necessary. Any excursion will trigger recordkeeping and reporting pursuant to the requirements of 40 CFR 64.9.

D. Performance Criteria

Data Representativeness:

Opacity measurements are made in the stack.

DEERHAVEN GENERATING STATION COMPLIANCE ASSURANCE MONITORING

D. Performance Criteria (continued)

Verification of Operational

Status:

Not Applicable

QA/QC Practices

and Criteria:

The COMS is automatically calibrated every 24 hours. Calibration information is recorded through a data acquisition and handling system (DAHS). A neutral density filter test is performed quarterly, as well as preventative maintenance; replace filters, clean optics,

etc., as prescribed by the manufacturer.

Monitoring Frequency:

Opacity is monitored continuously.

Data Collection

Procedure:

Six-minute averages are recorded by the DAHS. Daily reports with all six-minute averages are generated. One-hour averages are determined every six minutes from the average of the previous ten consecutive six-

minute averages.

III. Justification

A. Background

This facility is a multi-unit electric power generating plant. The pollutant-specific emissions unit is Steam Unit #2 boiler which is fired with coal and natural gas. Particulate emissions are controlled by an electrostatic precipitator.

B. Rationale for Selection of Performance Indicator

Opacity was selected as the performance indicator because it is indicative of the operation of the ESP in a manner necessary to comply with the particulate emissions standard. When the boiler and ESP are operating properly, the opacity measured by the COMS will be significantly below 20%.

Any rolling one-hour average of the six-minute average opacities measured that approaches or exceeds 18% is indicative of problems with boiler operation and/or efficacy of the ESP, therefore opacity is a reasonable indicator of particulate emissions.

DEERHAVEN GENERATING STATION COMPLIANCE ASSURANCE MONITORING

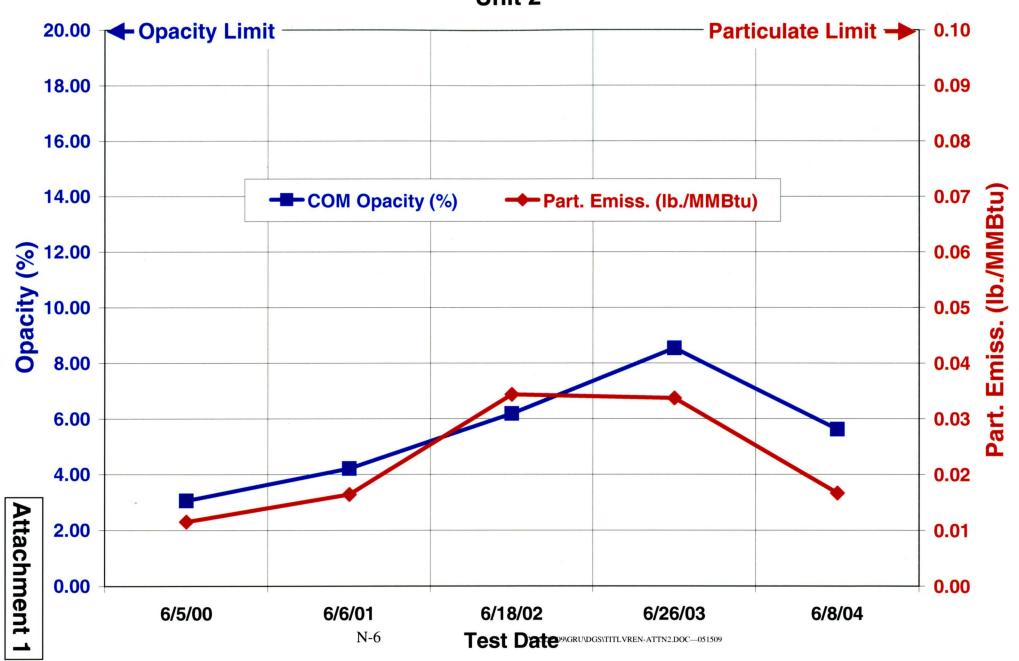
C. Rationale for Selection of Indicator Level

The selected indicator range is a rolling one-hour average of the six-minute average opacities exceeding 18%. When an excursion occurs, the cause of the elevated opacity will be identified in order to determine the appropriate corrective action to be implemented. All excursions will be documented and reported pursuant to the requirements of 40 CFR 64.9. The specific indicator range was selected after an analysis of the last five years of annual compliance testing results (6/5/00, 6/6/01, 6/18/02, 6/26/03, and 6/8/04) and the corresponding COMS opacity readings was performed. Two graphs were generated from these data which are presented as Attachment 1 and Attachment 2.

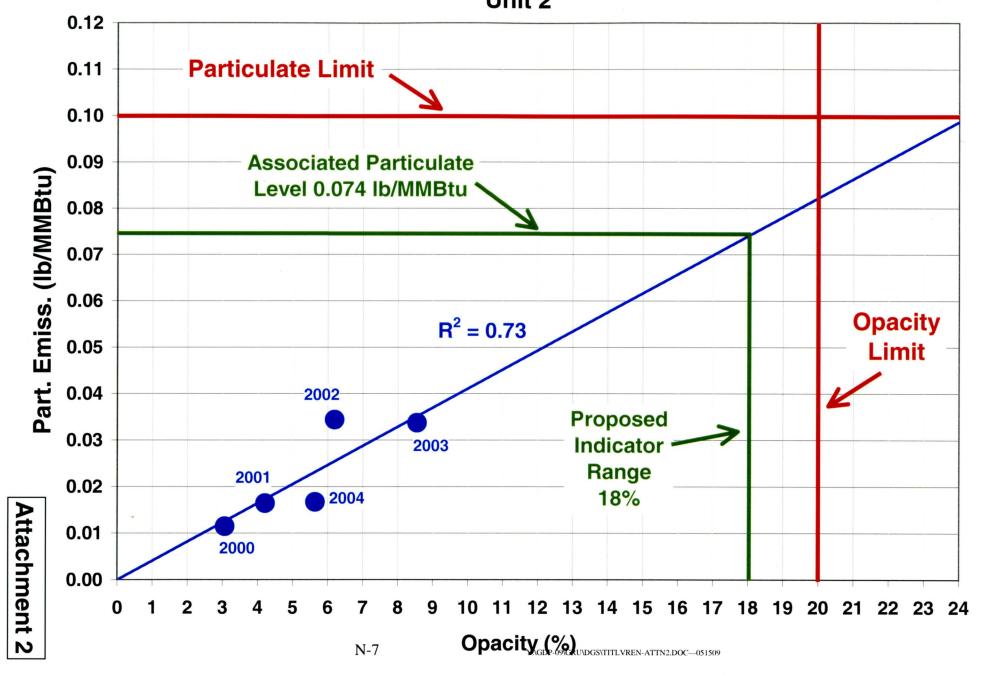
Attachment 1 displays the COMS opacity and particulate (PM) on the Y-axes and test date on the X-axis. This graph shows clearly that COMS opacity and PM follow each other quite well. Generally, when opacity rises, PM rises and when opacity drops, PM drops. Attachment 2 displays the two data sources plotted against each other. PM is plotted on the Y-axis with opacity plotted on the X-axis. A blue line represents the "best fit" line through the five data points and results in an R² value of 0.73. Extrapolating this "best fit" line until it intersects the PM limit of 0.10 lb/MMBtu shows that this particular representation predicts an opacity of about 24% which is in excess of the 20% limit.

The selected indicator range of a rolling one-hour average of the six-minute average opacities of 18% corresponds to a projected PM rate of 0.074 lb/MMBtu which still is well below the three-hour average limit of 0.10 lb/MMBtu. This level provides a significant amount of "safety factor" for assuring compliance with the PM limit. In addition, actual PM emissions following installation of the Unit 2 fabric filter are expected to be well below the NSPS Subpart D emission standard.

Gainesville Regional Utilities Deerhaven Generating Station Unit 2



Gainesville R jional Utilities Deerhaven Generating Station Unit 2



ATTACHMENT O ALTERNATE METHODS OF OPERATION

DEERHAVEN GENERATING STATION ALTERNATIVE METHODS OF OPERATION

A. UNIT 1 (EU ID 003)

				Maximum Operating Hours			
Method No.	Fuel Type	Fuel Sulfur Content (Wt %)	Heat Input Range, HHV (10 ⁶ Btu/hr)	(Hrs/Dy)	(Dys/Wk)	(Hrs/Yr)	
1	Natural Gas Propane (For Ignition)	N/A	0 – 960	24	7	8,760	
2	Residual Fuel Oils (Nos. 4, 5, and 6)	2.5	0 – 960	24	7	8,760	
3	Distillate Fuel Oils (Nos. 1 and 2)	2.5	0 – 960	24	7	8,760	
4	On-Specification Used Oil	2.5	0 – 960	24	7	1	
5	Any Combination of the Above Fuels	2.5	0 960	24	7	8,760¹	

Combustion of on-specification used oil limited to no more than 1,500,000 gallons in any consecutive 12 month period per Condition A.11.b of Title V Permit No. 0010006-003-AV.

DEERHAVEN GENERATING STATION ALTERNATIVE METHODS OF OPERATION

B. UNIT 2 (EU ID 005)

			,	Maximum Operating Hours			
Method No.	Fuel Type	Fuel Sulfur Content ¹ (Wt %)	Heat Input Range, HHV (10 ⁶ Btu/hr)	(Hrs/Dy)	(Dys/Wk)	(Hrs/Yr)	
1	Coal	N/A	0 – 2,428	24	7	8,760	
2	Natural Gas	N/A	0 – 591	24	7	8,760	
3	Distillate Fuel Oils (Nos. 1 and 2)	N/A	0 – 900	24	7	8,760	
4	Any Combination of the Above Fuels	N/A	0 – 2,428	24	7	8,760	

Unit 2 is subject to the applicable SO₂ emission standards of NSPS Subpart D.

DEERHAVEN GENERATING STATION ALTERNATIVE METHODS OF OPERATION

C. COMBUSTION TURBINE NO. 3 (EU ID 006)

				Maximum Operating Hours			
Method No.	Fuel Type	Fuel Sulfur Content (Wt %)	Heat Input Range, HHV (10 ⁶ Btu/hr) ¹	(Hrs/Dy)	(Dys/Wk)	(Hrs/Yr)	
1	Natural Gas	N/A	0 – 971.1	24	7	3,900	
2	Distillate Fuel Oils (Nos. 1 and 2)	0.05	0 – 990.6	24	7	2,000	
3	Any Combination of the Above Fuels	N/A	0 – 990.6	24	7	$3,900^2$	

Maximum heat input rates based on 100 percent CT load and ISO ambient conditions (1 atmosphere pressure, 59°F, and 60 percent relative humidity).

² Combustion of distillate fuel oils is limited to no more than 2,000 hours per year per Condition C.0. of Title V Permit No. 0010006-003-AV.