

AIR PERMIT REVISION APPLICATION CUTRALE CITRUS JUICES USA, INC. LEESBURG FACILITY

Submitted To: Air Quality Division

Florida Department of Environmental Protection

Submitted By: Golder Associates Inc.

Distribution: 4 Copies—Florida Department of Environmental Protection

1 Copy—Cutrale Citrus Juices USA, Inc.

1 Copy—Golder Associates Inc.

July 2011 103-89649





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TRANSMITTAL

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			1010011	AIR REGU		
Date: To:			19/2011		Project No	
		Greg DeAngelo		Company:	Florida Department of Environmental Protection	
Fro	m:	Ver	onica Figueroa		Address:	2600 Blair Stone Rd.
cc:						Tallahassee, FL 32399-2400
Em	ail:					
RE:			PLICATION FOR AIR PER BURNDALE FACILITY	MIT REVISION	ON – CUTRAL	E CITRUS JUICES USA, INC. –
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Qı	uantii	ty	Item			Description
	4		Air Permit Revision Applic	ation	Auburndale	Facility
	4		Air Permit Revision Applic	ation	Leesburg Fa	acility
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Note	es:					
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Plea	ise a	dvis	e us if enclosures are no	t as describe	ed.	
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☐ No

Golder Associates Inc. 5100 W. Lemon Street, Suite 208 Tampa, FL 33609 USA Tel: (813) 287-1717 Fax: (813) 287-1716 www.golder.com



July 18, 2011

103-89649

Mr. Greg DeAngelo
Director, Division of Air of Air Resource Management
Permitting and Compliance Section
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

RECEIVED

JUL 20 2011

BUREAU OF AIR REGULATION

RE:

APPLICATION FOR AIR PERMIT REVISION

CUTRALE CITRUS JUICES USA, INC., LEESBURG FACILITY

Pacility ID NO. 0690002 Dear Mr. DeAngelo:

roject No: 0690002-015

Enclosed please find one original and three copies of an application for concurrent processing of revisions to the current Title V air permit, 0690002-013-AV, for the Cutrale Citrus Juices USA, Inc. (Cutrale) Leesburg Facility, as well as for the underlying air construction permits, 0690002-012-AC and 0690002-014-AC, upon which they were based. This permit application incorporates the provisions of Permit Nos. 0690002-012-AC and 0690002-014-AC, and, therefore, requires changes to conditions of the current Title V Air Operation Permit No. 0690002-013-AV to incorporate these new requirements. Permit Nos. 0690002-012-AC and 0690002-014-AC authorized the replacement of the current Solar Centaur H series gas turbine (EU 007) with a new, more efficient and lower-emitting Solar Centaur 50 unit (EU 009). The new combustion turbine was designed to be integrated with the existing duct burner and heat recovery steam generator. The new CT and existing duct burner will fire natural gas only. Permit No. 0690002-012-AC permits the existing duct burner to fire natural gas as the primary fuel and utilize low sulfur No. 2 fuel oil (0.1 percent sulfur content) as a backup fuel, however, No. 2 fuel oil will not be utilized in the existing duct burner, as the physical storage capacity of the oil does not exist; thus requiring concurrent air construction permit processing to remove the reference to the use of fuel oil.

Cutrale Leesburg Facility looks forward to working with you on this permitting effort. If you would like to discuss any issues regarding this application, please contact Mr. Aaron Corkum of Cutrale at (863) 965-5209 or me at (813) 287-1717 in Tampa.

Sincerely,

GOLDER ASSOCIATES INC.

Scott Osbourn, PE

Associate and Tampa Operations Manager

Enclosure

Cc: Aaron Cor

Aaron Corkum, Cutrale





delivered locally

AIR PERMIT REVISION APPLICATION CUTRALE CITRUS JUICES USA, INC. LEESBURG FACILITY

Submitted To: Air Quality Division

Department of Environmental Protection

2600 Blair Stone Road

MS 5000

Tallahassee, FL 32399 USA

Submitted By: Golder Associates Inc.

5100 W. Lemon Street

Suite 208

Tampa, FL 33609 USA

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CL-FI-C3: Solar Turbines Centaur 50-6200S Predicted Engine Performance

CL-FI-C4: New Cogen Status and Progress Report Requirements



PART I FDEP APPLICATION REPORT



INTRODUCTION

This concurrent processing permit revision application incorporates the provisions of the Cutrale Citrus Juices USA, Inc. (Cutrale) Leesburg Facility Permit Nos. 0690002-012-AC and 0690002-014-AC, and, therefore, requires changes to conditions of the current Title V (TV) Air Operation Permit No. 0690002-013-AV to incorporate these new requirements, as well as request changes to the underlying air construction permits, 0690002-012-AC and 0690002-014-AC, conditions. Permit Nos. 0690002-012-AC and 0690002-014-AC authorized the replacement of the current Solar Centaur H series gas turbine (EU 007) with a new, more efficient and lower-emitting Solar Centaur 50 unit (EU 009). Permit No. 0690002-014-AC provided for an extension of the expiration date of the initial construction permit from May 31, 2010 to September 30, 2011 to provide the necessary time to complete construction and conduct compliance testing. The new combustion turbine was designed to be integrated with the existing duct burner and heat recovery steam generator.

PROJECT DESCRIPTION

In order to comply with FDEP directives, the Cutrale Leesburg Facility proposed to replace the current Solar Centaur H series gas turbine (EU 007) with a new, more efficient and lower-emitting Solar Centaur 50 unit (EU 009). The new combustion turbine (CT) was designed to be integrated with the existing duct burner and heat recovery steam generator. The new CT and existing duct burner will fire natural gas only. Permit No. 0690002-012-AC permits the existing duct burner to fire natural gas as the primary fuel and utilize low sulfur No. 2 fuel oil (0.1 percent sulfur content) as a backup fuel, however, No. 2 fuel oil will not be utilized in the existing duct burner, as the physical storage capacity of the oil does not exist; thus requiring concurrent air construction permit processing to remove the reference to the use of fuel oil.

The conditions related to the new construction, as well as those that were meant to address the existing CT (in the event that new construction did not commence), are already in the current TV permit. This application is to request revisions that address conditions that assumed new construction would not be undertaken. Specifically, in the event that construction on the new CT was not commenced within 18 months of the air construction permit No. 0690002-012-AC issuance, provisions placed operating hour and fuel restrictions on the existing turbine and duct burner. Construction of the new CT did commence within 18 months of the air construction permit No. 0690002-012-AC issuance. The existing CT has been physically removed from the facility, the construction of the new CT has been completed, and all compliance demonstrations with applicable permit terms and conditions have been performed. Cultrale requests that all provisions and references to the existing CT be removed from the air operating permit. Attachment CL-FI-C1 identifies applicable requirements with respect to the construction project. Attachment CL-FI-C2 provides a summary list of previously submitted compliance demonstration reports/records. Attachment CL-FI-C3 provides Solar Turbine's predicted engine performance data on the Centaur 50-6200S. Attachment CL-FI-C4 provides a summary list of previously submitted status and 0690002-012-AC and 0690002-014-AC. progress reports with respect to Permit Nos.



PART II FDEP APPLICATION FOR AIR PERMIT





Department of Environmental Protection

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BUREAU OF AIR REGULATION

Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

• An initial federally enforceable state air operation permit (FESOP); or

1. Facility Owner/Company Name: Cutrale Citrus Juices USA, Inc.

• An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

2.	Site Name: Cutrale Citrus Juices USA, Inc. – Leesburg Facility					
3.	Facility Identification Number: 0690002					
4.	Facility Location	Facility Location				
	Street Address or Other Locator:	11 Cloud St	treet			
	City: Leesburg	County: La	ake		Zip Code: 34748	
5.	Relocatable Facility?		6. E	Existing Title	V Permitted Facility?	
	☐ Yes ⊠No			⊠ Yes	□ No	
<u>Ap</u>	plication Contact	·				
1.	Application Contact Name: Aaro	n P. Corkur	n			
2.	Application Contact Mailing Address					
	Organization/Firm: Cutrale Citrus Juices USA, Inc.					
	Street Address: 602 McKean Street					
	City: Auburndale	Sta	te: Fl	L.	Zip Code: 33823-4070	
3.	. Application Contact Telephone Numbers					
	Telephone: (863) 965-5209	ext.	Fa	ix: (863) 965-	5195	
4.	Application Contact E-mail Addr	ess: acorku	ım@c	utrale.com		
<u>Ap</u>	Application Processing Information (DEP Use)					
1.	Date of Receipt of Application: 7.	-20-11	3.	PSD Number	(if applicable):	

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

Effective: 03/11/2010

2. Project Number(s): 0.690002 - 0.5 - 40.4. Siting Number (if applicable):

0690007 -016-A

Purpose of Application

Th	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)				
\boxtimes	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

This application is for the concurrent processing of revisions to the current Title V air permit, 0690002-013-AV, for the Cutrale Citrus Juices USA, Inc. (Cutrale) Leesburg Facility, as well as for the underlying air construction permits, 0690002-012-AC and 0690002-014-AC, upon which they were based. This permit application incorporates the provisions of Permit Nos. 0690002-012-AC and 0690002-014-AC, and, therefore, requires changes to conditions of the current Title V Air Operation Permit No. 0690002-013-AV to incorporate these new requirements. Permit Nos. 0690002-012-AC and 0690002-014-AC authorized the replacement of the current Solar Centaur H series gas turbine (EU 007) with a new, more efficient and lower-emitting Solar Centaur 50 unit (EU 009). The new combustion turbine was designed to be integrated with the existing duct burner and heat recovery steam generator. The new CT and existing duct burner will fire natural gas only. Permit No. 0690002-012-AC permits the existing duct burner to fire natural gas as the primary fuel and utilize low sulfur No. 2 fuel oil (0.1 percent sulfur content) as a backup fuel, however, No. 2 fuel oil will not be utilized in the existing duct burner, as the physical storage capacity of the oil does not exist; thus requiring concurrent air construction permit processing to remove the reference to the use of fuel oil.

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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
009	New Cogeneration System Turbine & Existing Steam Generator	AV02	NA
			
	-		
	_		
 -	-	_	-

Application Processing Fee	
Check one: Attached - Amount:	

DEP Form No. 62-210.900(1) – Form

Owner/Authorized Representative Statement

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

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

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DEP Form No. 62-210.900(1) – Form

Application Responsible Official Certification

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

1.	Application Responsible Official Name: Aaron P. Corkum				
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, or CAIR source.				
3.	Application Responsible Official Mailing Address Organization/Firm: Cutrale Citrus Juices USA, Inc.				
	Street Address: 602 McKean St.				
	City: Auburndale State: FL Zip Code: 33823-4070				
4.	Application Responsible Official Telephone Numbers Telephone: (863) 965-5209 ext. Fax: (863) 965-5195				
5.	Application Responsible Official E-mail Address: acorkum@cutrale.com				

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DEP Form No. 62-210.900(1) – Form

- 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

7/15/11 Date

DEP Form No. 62-210.900(1) – Form

_	Olessional Engineer Certification					
1.	Professional Engineer Name: Scott Osbourn, Senior Consultant					
	Registration Number: 57557					
2.	Professional Engineer Mailing Address					
	Organization/Firm: Golder Associates, Inc.*					
	Street Address: 5100 Lemon Street, Suite 208					
	City: Tampa State: FL Zip Code: 33609					
3.	Professional Engineer Telephone Numbers					
	Telephone: (813) 287-1717 ext. Fax: (813) 287-1716					
4.	Professional Engineer E-mail Address: sosbourn@golder.com					
5.	Professional Engineer Statement:					
	I, the undersigned, hereby certify, except as particularly noted herein*, that:					
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and					
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.					
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \(\), if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.					
	(4) If the purpose of this application is to obtain an air construction permit (check here \square , 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 \square , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.					
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.					
	7/18/11 co17:0580.					
	Signature Date					
	(seal)					
* B	pard of Professional Engineers Certificate of Authorization No. 00001670					

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

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II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

	1. Facility UTM Coordinates			2. Facility Latitude/Longitude		
	Zone 17 East ((km) 415.5		Latitude (DD/MM/	SS)	
North (km) 3187.3				Longitude (DD/MM/SS)		
Г	I	4. Facility Status	5.	Facility Major	6. Facility SIC(s):	
	Facility Code: 0	Code:		Group SIC Code: 20	2033, 2037	
Γ	7. Facility Comment:					

The Leesburg citrus processing plant consists of one citrus peel dryer with waste heat evaporator, one pellet cooling reel, a steam boiler, a relocatable steam boiler and a cogeneration system. The facility produces various citrus juice products and animal feed.

Facility Contact

1. Facility Contact Name:

Ed Priest

2. Facility Contact Mailing Address...

Organization/Firm: Cutrale Citrus Juices USA, Inc.

Street Address: 11 Cloud Street

City: Leesburg 3. Facility Contact Telephone Numbers:

Fax: (352) 552-9066

Zip Code: 34748

Telephone: (352) 552-9036 4. Facility Contact E-mail Address: epriest@cutrale.com

Facility Primary Responsible Official

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

ext.

State: FL

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

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

Facility Regulatory Classifications

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

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

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List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
NOx	A	N
SO ₂	A	N
со	A	N
voc	A	N .

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps					
1. Pollutant	2. Facility-	3. Emissions	4. Hourly	5. Annual	6. Basis for
Subject to	Wide Cap	Unit ID's	Cap	Cap	Emissions
Emissions	[Y or N]?	Under Cap	(lb/hr)	(ton/yr)	Cap
Cap	(all units)	(if not all units)			
_					
			_		
-					
			-		
7 F 114 W			<u>.</u>		1
7. Facility-Wi	ide or Multi-Unit	Emissions Cap Con	nment:		
				-	}
1					

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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: ☐ ☐ Previously Submitted, Date: 7/13/07
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: ⊠ Previously Submitted, Date: 7/13/07
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: Previously Submitted, Date: 7/13/07
Ad	Iditional Requirements for Air Construction Permit Applications NA
_	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:
<u> </u>	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.):
10	Attached, Document ID: Not Applicable
10. 	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Not Applicable

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

Effective: 3/16/08 12

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications-- NA

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: ☐ Not Applicable (revision application)				
2.	 Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought) ☑ Attached, Document ID: CL-FI-C1 				
	☐ Not Applicable (revision application with no change in applicable requirements)				
3,	Compliance Report and Plan: (Required for all initial/revision/renewal applications) Attached, Document ID: N/A Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.				
4.	List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only) Attached, Document ID: Equipment/Activities Onsite but Not Required to be Individually Listed Not Applicable				
5.	Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only) ☐ Attached, Document ID: ☐ Not Applicable				
6.	Requested Changes to Current Title V Air Operation Permit: Attached, Document ID: Not Applicable				

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

Effective: 3/16/08 13

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:
Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
Attached, Document ID: Previously Submitted, Date:
Not Applicable (not an Acid Rain source)
Phase II NO _X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
Attached, Document ID: Previously Submitted, Date:
Not Applicable Not Applicable
New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
Attached, Document ID: Previously Submitted, Date:
Not Applicable 2. CAIR Part (DER Frank No. (2.210.000(1)(1)))
2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
☐ Attached, Document ID. ☐ Treviously Submitted, Date. ☐ Not Applicable (not a CAIR source)
Z Tree applicable (not a crimit source)
Additional Requirements Comment
Attachment CL-FI-C2 provides the documentation for demonstration of compliance.
Attachment CL-FI-C3 provides Solar Turbine's predicted engine performance data on the Centaur 50-6200S.
Attachment CL-FI-C4 provides a summary list of previously submitted status and progress reports with respect to 0690002-012-AC and 0690002-014-AC.

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ATTACHMENT CL-FI-C1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT CL-FI-C1 Identification of Applicable Requirements

In addition to the requirements identified in the attached TV Core List (Effective: 03/01/02), the following emission unit specific requirements are:

- 40 CFR 60 Subpart Dc Standards of Performance for New Stationary Sources;
- 40 CFR 60 Subpart KKKK Standards of Performance for Stationary Combustion Turbines;
- 40 CFR 60 Subpart A General Provisions;
- 40 CFR 60 Appendix A Test Methods;
- Chapter 403 F.S.; and
- Chapter 62-204 Air Pollution Control General Provisions.

Applicable requirements are identified in the following attached permits:

- TV Air Construction Permit 0690002-012-AC (PSD-FL-366);
- TV Air Operation Permit 0690002-013-AC; and
- TV Air Construction Permit 0690002-014-AC (PSD-FL-366A).

Title V Core List

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

Effective: 03/01/02

Federal:

(description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

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

State:

(description)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Title V Core List

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

Effective: 03/01/02

- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.400, F.A.C.: Emission Estimates.
- 62-210.650, F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions.
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit Title V Source, Form and Instructions.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit Title V and Non-Title V Source.

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

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

- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213.440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.
- 62-213.900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
- 62-213.900(7), F.A.C.: Statement of Compliance Form.

Title V Core List

Effective: 03/01/02

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

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

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

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

62-297.310, F.A.C.: General Test Requirements.

62-297.330, F.A.C.: Applicable Test Procedures.

62-297.340, F.A.C.: Frequency of Compliance Tests.

62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.

62-297.350, F.A.C.: Determination of Process Variables.

62-297.570, F.A.C.: Test Report.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Herschel T. Vinyard Jr. Secretary

Rick Scott

Governor

Jennifer Carroll

Lt. Governor

February 22, 2011

Sent by Electronic Mail - Received Receipt Requested

Aaron P. Corkum, Manager of Environmental Affairs Cutrale Citrus Juices USA, Inc. 11 Cloud Street Leesburg, FL 34748

Re: Extension of Air Construction Permit Expiration Date

Cutrale Citrus Juices USA, Inc., Leesburg Facility Project No. 0690002-014-AC, PSD-FL-366A

Extension of Original Air Permit No. 0690002-012-AC, PSD-FL-366

Dear Mr. Corkum:

On February 11, 2011, Cutrale Citrus Juices USA, Inc. (Cutrale) requested an extension of the expiration date of air construction Permit No. 0690002-012-AC for the Leesburg Facility located in Lake County at 11 Cloud Street in Leesburg, Florida. Cutrale requests the additional time to complete work authorized under this air construction permit issued by the Department on June 5, 2008. The facility received its initial Title V permit (0690002-013-AV) on July 31, 2008, which incorporated all the conditions of the construction permit. The facility is required to submit progress reports to the Department verifying work in progress or completed under the air construction permit. The latest report dated January 25, 2011 indicated the project was 96% complete. The primary remaining item is compliance testing. The air construction permit expired on May 31, 2010. Based on the circumstances and information provided, the Department approves this request in accordance with Rule 62-210.300(1)(b), F.A.C., "Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emission unit is permanently shut down..."

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

Determination: The expiration date is hereby extended from May 31, 2010 to September 30, 2011 to provide the necessary time to complete construction and conduct compliance testing. This permitting action does not authorize any new construction. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions must be filed within 14 days of receipt of this permit extension.

EXTENSION OF AIR CONSTRUCTION PERMIT EXPIRATION DATE

#35, Tallahassee, Florida 32399-3000. Petitions must be filed within 14 days of receipt of this permit extension. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

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

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

EXTENSION OF AIR CONSTRUCTION PERMIT EXPIRATION DATE

Executed in Tallahassee, Florida.

(O)

Trina Vielhauer, Chief Bureau of Air Regulation

TI.V/jfk/rlb

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Extension of Air Construction Permit Expiration Date was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on

.) / // to the persons listed below.

Aaron P. Corkum, Cutralc Citrus Juices USA, Inc. (acorkum@cutrale.com)

Scott Osbourn, Golder Associates (Scott_Osbourn@golder.com)

Caroline Shine, DEP Central District Office (caroline.shine@dep.state.fl.us)

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@cpa.gov)

Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)

Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)

Dee Morse, National Park Service (e-mail address)

Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Clerk)

Cutrale Citrus Juices USA, Inc.
Leesburg Facility
Facility ID No.: 0690002
Lake County

Title V Air Operation Permit FINAL Permit No.: 0690002-013-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Monitoring and Mobile Sources
Mail Station #5510
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114 Fax: 850/922-6979

Compliance Authority:

State of Florida
Department of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555

Fax: 407/897-5963

Title V Air Operation Permit **FINAL Permit No.:** 0690002-013-AV

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Permittee:

Cutrale Citrus Juices USA, Inc. 11 Cloud Street Leesburg, Florida 34748 PROPOSED Permit No.: 0690002-013-AV

Facility ID No.: 0690002 SIC Nos.: 2033, 2037

Project: Title V Air Operation Permit

This permit is for the operation of the Leesburg facility. This facility is located at 11 Cloud Street, Leesburg, Lake County; UTM Coordinates: Zone 17, 415.5 km East and 3187.3 km North; Latitude: 28° 49' 54" North and Longitude: 81° 49' 40" West.

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

Referenced attachments made a part of this permit:

Appendix 1-1, List of Insignificant Emissions Units and/or Activities APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06 APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96 TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96

Effective Date: July 30, 2008

Renewal Application Due Date: January 31, 2013

Expiration Date: July 30, 2013

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Joseph Kahn, Director Division of Air Resource Management

JK/es

FINAL Permit No.: 0690002-013-AV

Facility ID No.: 0690002

Section I. Facility Information.

Subsection A. Facility Description.

The Leesburg citrus processing plant consists of one citrus peel dryer with waste heat evaporator, one pellet cooling reel, a steam boiler, a relocatable steam boiler and a cogeneration system. The facility produces various citrus juice products and animal feed.

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

Based on the Title V permit application received October 17, 2005, this facility is not a major source of hazardous air pollutants (HAPs).

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

<u>E.U. ID No.</u>	Brief Description
-005	Citrus Peel Dryer
-006	Pellet Cooling Reel
-004	Process Steam Boiler #4
-008	Relocatable Boiler
-007	Existing Cogeneration System Turbine & Steam Generator
-009	New Cogeneration System Turbine & Existing Steam Generator

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

Cutrale Citrus Juices USA, Inc. Leesburg Facility FINAL Permit No.: 0690002-013-AV

Facility ID No.: 0690002

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1: Permit History/ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Title V Permit Application received October 17, 2005

Additional Information Request dated October 21, 2005

Additional Information Response received November 10, 2005

Additional Information Request dated December 7, 2005

Additional Information Response received March 3, 2006

Additional Information Response received March 14, 2006

Additional Information Request dated March 28, 2006

Additional Information Response received August 28, 2006

Additional Information Request dated September 20, 2006

Additional Information Response received July 16, 2007

Additional Information Request dated August 15, 2007

Additional Information Response received November 13, 2007

Request to include a relocatable boiler received January 17, 2008

Additional Information received March 14, 2008

Documents on file with USEPA

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

Cutrale Citrus Juices USA, Inc. Leesburg Facility FINAL Permit No.: 0690002-013-AV

Facility ID No.: 0690002

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

- 1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit. {Permitting Note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
- 2. [Not federally enforceable.] General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
 [Rules 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
- b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
- c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center Post Office Box 3346 Merrifield, VA 22116-3346 Telephone: 703/816-4434

FINAL Permit No.: 0690002-013-AV

Facility ID No.: 0690002

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

- 5. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
- 6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC)

 Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

"Nothing was deemed necessary and ordered at this time."

[Rule 62-296.320(1)(a), F.A.C.; and, Title V permit application received October 17, 2005]

- 7. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):
 - a. Paving and maintenance of roads, parking areas, and yards;
 - b. Application of water or non-hazardous chemicals to control emissions from such activities as demolition of buildings, grading roads, construction and land clearing;
 - c. Application of water or non-hazardous chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;
 - d. Removal of particulate matter from roads and other paved areas to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne;
 - e. Use of hood, fans, filters, and similar equipment to contain, capture and/or vent particulate matter;
 - f. Confine abrasive blasting, where possible; and,
 - g. Enclosures or covers on conveyor systems. [Rule 62-296.320(4)(c)2., F.A.C.; and, 0690002-012-AC]
- 8. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

FINAL Permit No.: 0690002-013-AV

Facility ID No.: 0690002

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

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS)}

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Central District office.

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-5963

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

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303

Telephone: 404/562-9155, Fax: 404/562-9163

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

[Rule 62-213.420(4), F.A.C.]

14. <u>Initial Compliance Demonstration Required</u>: An emissions unit that is subject to any emission limiting standard shall conduct an initial compliance test that demonstrates compliance with the applicable emission limiting standard during the 2008 – 2009 processing season. [Rules 62-4.070(3) and 62-210.300(1)(a), F.A.C.]

FACILITY LIMITS

15. <u>Fruit Throughput Limited</u>: The owner or operator shall not process more than 18.0 million boxes of citrus fruit in any consecutive 12 month period. For purposes of this permit, a box of citrus fruit shall be defined to contain 90 pounds of oranges or 85 pounds of grapefruit. The owner

FINAL Permit No.: 0690002-013-AV Facility ID No.: 0690002

or operator shall make and maintain monthly and rolling 12 month records of fruit processing rates to demonstrate compliance with this limitation. Such records shall be made from daily processing records and shall be completed no later than the 10th day of each following month. [Rule 62-4.070(3), F.A.C. and 0690002-012-AC]

- 15. <u>VOC Emission Limits and Oil Recovery:</u> VOC emissions will be limited by achieving by a 65 percent recovery of oil from citrus fruits processed each calendar year. Compliance with the emission limit for VOC shall be demonstrated by calculating the compliance indicator, as follows. All measured quantities of oil used in Equations I and 2 shall be in units of tons and the total results of the selected equation shall reflect the sum total for the entire calendar year.
- 1. The facility may use either Equation 1 or 2 to demonstrate compliance, provided that the facility has maintained the necessary records to use that equation. In the case of Equation 2, all recovered oil must be actually measured and all emitted volatilized oil must be treated as emissions and not as reductions of peel oil. If the result of the selected equation is positive or zero, the facility is in compliance with the VOC emission limit. If the result of the selected equation is negative, the facility is in violation of the VOC emission limit. The facility may use either equation to demonstrate compliance, even if the other equation results in a negative compliance indicator.
- 2. Facilities may accept wet peel from, or send wet peel to another facility for further processing and drying, provided that each facility involved receives or provides, respectively, sufficient recorded information to account for the recovery of oil from such peel, including oil in products and by-products at the receiving facility. A facility that sends wet peel offsite for any purpose shall not include the related oil in products and by-products in its oil recovery calculations. Such oil shall be included in the oil recovery calculations of the receiving facility. In any case, oil in products and by-products related to peel that is not processed through a peel dryer shall be excluded from all oil recovery calculations.

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Equation 1:

Compliance Indicator = OIF(1 - K1) - OPP + ODP

Equation 2:

Compliance Indicator = OJ + CPO + EO + DL + ODP - K1(OIF)

Where:

K1 = 0.65.

And the following are all in units of tons:

OIF = Oil in Incoming Fruit

ODP = Oil in Dried Pellets

OPP = Oil in Pressed Peel

OJ = Oil in Juice

CPO = Cold Press Oil

EO = Essence Oil

DL = d-limonene
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Fruit and byproduct oil quantities, required for equations 1 and 2, as applicable, shall be measured daily. All peel oil recovery at a facility shall be determined using the same methodology at all times during each processing year. The following sampling and analytical methods shall be used for determining oil contents of fruit, pressed peel, dried peel and pellets: The sampling and analytical method for determining oil content in incoming whole fruit is the method documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of

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Citrus Products, Chapter VI, Procedure 1. Whole Fruit Available Oil, FMC Technologies Inc., Lakeland, FL, pp. 119 to 123, (effective August 16, 2002)" hereby adopted by reference; the analytical method for determining oil content is the Scott Method (Bromate Titration Method) as documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of Citrus Products, Chapter IV, Procedure 10. Recoverable Oil (Scott Method), FMC Technologies Inc., Lakeland, FL, pp. 40 to 44, (effective August 16, 2002)" hereby adopted by reference; the methods for sampling, sample preparation and analytical calculations for peel residue, press cake, and pellets are those documented in "Braddock, R. J. (1999), Handbook of Citrus By-Products and Processing Technology, Section 12.3.1.2 Analysis, John Wiley & Sons, NY, pp. 180 to 181," hereby adopted by reference. Copies of these documents may be obtained by contacting the Division of Air Resource Management at 2600 Blair Stone Road, Mail Station 5500, Tallahassee, FL 32399-2400.

[Rule 62-4.070(3), F.A.C. and 0690002-012-AC]

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Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No. Brief Description Citrus Peel Dryer

The citrus peel dryer is a 52.2 tons/hour feed dryer (90.0 MMBtu) with two 100,000 lb/hour waste heat evaporators and one 50,000 lb/hr waste heat evaporator. The dryer was installed in 1972.

{Permitting note(s): This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; and, the applicable requirements of 0690002-012-AC.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. <u>Permitted Capacity</u>. The maximum heat input rate to each dryer shall not exceed 90.0 million Btu per hour, heat input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

- **A.2.** Methods of Operation (i.e., Fuels). Only natural shall be fired in this unit. [Rule 62-213.410, F.A.C.; and, 0690002-012-AC]
- **A.3.** Hours of Operation. These emissions units are allowed to operate, as necessary, to process 18.0 million boxes of citrus fruit in any consecutive 12 month period. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

{Permitting note: For emission calculations, the operation of this emissions unit is estimated not to exceed 5,880 hours per year.}

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions A.4. and A.5. are based on the specified averaging time of the applicable test method.}

- **A.4.** PM/PM10. PM/PM₁₀ emissions from the dryer shall not exceed 15.0 pounds per hour. [0690002-012-AC and 62-212.400 (BACT), F.A.C.]
- **A.5.** <u>Visible Emissions</u>. Visible emissions from each unit shall not exceed 20 percent opacity. [0690002-012-AC]

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Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

A.6. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

A.7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

A.8. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

A.9. PM/PM10. The test method for PM/PM₁₀ shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C.

[Rules 62-4.070(3), 62-213.440, and 62-297.401, F.A.C.]

A.10. <u>Visible emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-213.440 and 62-297.401, F.A.C.]

A.11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed

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for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

A.12. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.13. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. See attachment **TABLE** 297.310-1, CALIBRATION SCHEDULE.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **A.14.** Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment **APPENDIX SS-1, STACK SAMPLING FACILITIES.** [Rule 62-297.310(6), F.A.C.]
- **A.15.** <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required. (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation

permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

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- a. Did not operate; or
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- a. Visible emissions, if there is an applicable standard;
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

A.16. <u>Determination of Process Variables</u>.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

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Recordkeeping and Reporting Requirements

A.17. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

A.18. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate non-compliance for a given averaging period.

[Rule 62-4.070(3), F.A.C.]

A.19. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

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- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

- **A.20.** Fuel Usage Records. In order to provide information to document compliance with the fuel heat input rate limitations of condition 1., the permittee shall monitor and maintain daily record logs of the amount of each fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]
- **A.21.** All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Best Management Practices

- **A.22.** Best Management Practices for Carbon Monoxide: The facility shall operate its citrus peel dryers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:
 - 1. Train dryer operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate dryers;
 - 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
 - 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
 - 4. Visually check the flame characteristics once per operating shift;
 - 5. Monitor the moisture content of the dried peel exiting the dryer on a daily basis, and maintain that moisture content greater than six percent by weight at all times during operation;
 - 6. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;

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7. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;

- 8. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 9. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

[0690002-012-AC]

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Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No. Pellet Cooling Reel

The pellet cooling reel has a cyclone to recover product from the exhaust stream. The maximum dried peel throughput is 14 tons per hour. The pellet cooler was installed in 1972.

{Permitting note(s): This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required, and the applicable requirements of 0690002-012-AC.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The capacity of the pellet cooler is determined by the capacity of the citrus peel dryer.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

{Permitting note: The pellet cooler input is equal to the output of dried peel from the peel dryer.}

B.2. Hours of Operation. These emissions units are allowed to operate, as necessary, to process 18.0 million boxes of citrus fruit in any consecutive 12 month period. [Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400 (BACT), F.A.C.]

{Permitting note: For emission calculations, the operation of each of this emissions units is estimated not to exceed 5,880 hours per year.}

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **B.3.** and **B.4.** are based on the specified averaging time of the applicable test method.}

- **B.3.** PM/PM10. PM/PM₁₀ emissions shall not exceed 5.0 pound per hour. [0690002-012-AC]
- **B.4.** <u>Visible Emissions</u>. Visible emissions from the pellet coolers shall not exceed 5 percent opacity.

[0690002-012-AC]

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Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

- **B.5.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **B.6.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

B.7. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standard.

[Rule 62-297.310(1), F.A.C.]

- **B.8.** PM/PM10. Tests for particulate matter and particulate matter of 10 microns or less may be conducted using United States Environmental Protection Agency Method 5, provided that all measured particulate matter is assumed to be particulate matter of 10 microns or less. Tests for compliance with the particulate matter emission limit, for the pellet cooler or cooling reel are waived as long as the facility complies with the visible emissions limitation. If any visible emissions test for the pellet cooler or cooling reel does not demonstrate compliance with the visible emissions limitation, the emissions unit shall be tested for compliance with the particulate matter emission limit within 30 days after the visible emissions test. [Rules 62-213.440 and 62-297.401, F.A.C. and 0690002-012-AC]
- **B.9.** <u>Visible emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-213.440 and 62-297.401, F.A.C.]

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B.10. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

B.11. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

B.12. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. See attachment **TABLE** 297.310-1, CALIBRATION SCHEDULE.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **B.13.** Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment **APPENDIX SS-1, STACK SAMPLING FACILITIES.** [Rule 62-297.310(6), F.A.C.]

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B.14. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard.
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

B.15. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank

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scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

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Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-004	Process Steam Boiler #4
-008	Relocatable Boiler

Boiler #4 is a Babcock & Wilcox Model 1079 boiler. The maximum operation heat input rate is 78.0 million Btu per hour and fires natural gas and 0.1 percent sulfur No. 2 fuel oil. The initial startup date was 1991.

The Relocatable Boiler will be a John Zink Model M22935, or equivalent. The maximum operation heat input rate is 96.0 million Btu per hour and fires natural gas, only. The initial startup date will be 2008.

{Permitting note(s): These emissions units are regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Units; and, NSPS - 40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800(7)(b)4, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

- C.1. Permitted Capacity. The capacity of these emissions units shall not exceed:
- a. 78.0 million Btu per hour, heat input, for Boiler #4.
- b. 96.0 million Btu per hour, heat input, for the Relocatable Boiler.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

C.2. <u>Methods of Operation - (i.e., Fuels)</u>. Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. Only natural gas shall be fired in the Relocatable Boiler.

[Rules 62-212.400 (BACT) and 62-213.410, F.A.C.]

C.3. <u>Hours of Operation</u>. These emissions units are allowed to operate continuously, i.e., 8,760 hours per year.

[Rules 62-4.160(2) and 62-210.200(PTE), and 62-212.400 (BACT), F.A.C.]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions C.4. - C.6. are based on the specified averaging time of the applicable test method.}

C.4. Particulate Matter. Particulate matter shall be limited:

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a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4.

b. By firing only natural gas in the Relocatable Boiler. [Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

C.5. Sulfur Dioxide. Sulfur dioxide shall be limited;

a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See Specific Conditions C.11. and C.12. b. By firing only natural gas in the Relocatable Boiler.

[Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

C.6. <u>Visible Emissions</u>. Visible emissions from each unit shall not exceed 20 percent opacity except for one six-minute period per hour during which opacity shall not exceed 27 percent. [Rules 62-212.400 (BACT) and 62-296.406(1), F.A.C.]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

- C.7. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **C.8.** Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- C.9. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

 [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- **C.10.** Particulate Matter. Compliance with the particulate matter standard is demonstrated:
- a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4.
- b. By firing only natural gas in the Relocatable Boiler. [Rule 62-212.400 (BACT), F.A.C.]

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C.11. Sulfur Dioxide. Compliance with the sulfur dioxide standard is demonstrated by:

a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device.

b. By firing only natural gas in the Relocatable Boiler. [Rule 62-296.406(3), F.A.C.]

C.12. Fuel Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.

[Rules 62-213.440 and 62-297.440, F.A.C.]

- C.13. <u>Visible Emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rule 62-296.406(2), F.A.C.]
- **C.14.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

 [Rules 62-297.310(2) & (2)(b), F.A.C.]

C.15. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4), F.A.C.]

- **C.16.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable

emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

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- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

- C.17. Determination of Process Variables.
- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

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Recordkeeping and Reporting Requirements

C.18. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

C.19. Fuel Usage Records. In order to provide information to document compliance with the fuel heat input rate limitations of condition 1., the permittee shall monitor and maintain daily record logs of the amount of each fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request.

[62-212.400 (BACT), F.A.C.]

C.20. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

C.21. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.

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11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Best Management Practices

- **C.22.** Best Management Practices for Carbon Monoxide. The facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:
 - 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;
 - 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
 - 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
 - 4. Visually check the flame characteristics once per operating shift;
 - 5. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;
 - 6. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
 - 7. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and

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8. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

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NSPS REQUIREMENTS

Subpart A-General Provisions

- C.23. Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 [40 CFR 60.7(c)]
- **C.24.** Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.
 - 1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
 - 2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}
[40 CFR 60.7(d)]

C.25. Reporting Frequency.

(1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent)

[40 CFR 60.7(f)]

basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

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- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

 [40 CFR 60.7(e)]
- C.26. Records Retention. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- C.27. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a

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specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)]

C.28. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

C.29. Notification:

- (a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

 [40 CFR 60.8(d)]
- **C.30.** The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2. Safe sampling platform(s).
 - 3. Safe access to sampling platform(s).
 - 4. Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

C.31. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner

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or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

- C.32. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- C.33. The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

 [40 CFR 60.11(c)]
- **C.34.** At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- C.35. Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

 [40 CFR 60.11(g)]
- **C.36.** Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

 [40 CFR 60.12]
- C.37. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under appendix B to 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

 [40 CFR 60.13(a)]

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C.38. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)]

- C.39. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
 - (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of 40 CFR 60.13 at least 10 days before the performance test required under 40 CFR 60.8 is conducted.
- (2) Except as provided in paragraph (c)(1) of 40 CFR 60.13, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.
 [40 CFR 60.13(c)]
- C.40. (1) Owners and operators of a CEMS installed in accordance with the provisions of 40 CFR 60, must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of 40 CFR 60, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS-1 in appendix B of 40 CFR 60. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or

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electro-mechanical systems and hardware and or software used during normal measurement operation.

[40 CFR 60.13(d)]

C.41. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of 40 CFR 60.13, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (1) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

 [40 CFR 60.13(e)]
- **C.42.** All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]
- C.43. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

 [40 CFR 60.13(g)]
- C.44. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in 40 CFR 60.7(f) (1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be

rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

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- **C.45.** After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:
 - (1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
 - (2) Alternative monitoring requirements when the affected facility is infrequently operated.
 - (3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
 - (4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
 - (5) Alternative methods of converting pollutant concentration measurements to units of the standards.
 - (6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
 - (7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
 - (8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator
 - may require that such demonstration be performed for each affected facility.
 - (9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

[40 CFR 60.13(i)]

- **C.46.** An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
 - (1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable

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standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g) (2) and (3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

[40 CFR 60.13(j)]

C.47. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

[40 CFR 60.14(a)]

- **C.48.** Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40

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CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[40 CFR 60.14(b)]

C.49. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[40 CFR 60.14(c)]

- C.50. The following shall not, by themselves, be considered modifications under 40 CFR 60:
 - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
 - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
 - (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
 - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
 - (6) The relocation or change in ownership of an existing facility.

[40 CFR 60.14(e)]

C.51. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.14.

[40 CFR 60.14(f)]

C.52. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[40 CFR 60.14(g)]

Subpart Dc-Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units

Standard for Sulfur Dioxide.

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C.53. On and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph. [40 CFR 60.42c(d)]

- C.54. For affected facilities listed under paragraphs 40 CFR 60.42c(h)(1), (2), or (3), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable.
- (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).[40 CFR 60.42c(h)]
- C.55. The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(i)]
- **C.56.** Only the heat input supplied to the affected facility from the combustion of oil is counted under 40 CFR 60.42c. No credit is provided for the heat input to the affected facility from other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

 [40 CFR 60.42c(j)]

Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.

- C.57. Except as provided in paragraphs 40 CFR 60.44c(g) and (h) and in 40 CFR 60.8(b), performance tests required under 40 CFR 60.8 shall be conducted following the procedures specified in paragraphs 40 CFR 60.44c(b), (c), (d), (e), and (f), as applicable. Section 60.8(f) does not apply to 40 CFR 60.44c. The 30-day notice required in 40 CFR 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator. [40 CFR 60.44c(a)]
- C.58. If only oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly SO₂ emission rate (Eho) and the 30-day average SO₂ emission rate (Eao). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate Eao when using daily fuel sampling or Method 6B.

 [40 CFR 60.44c(d)]
- **C.59.** For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

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[40 CFR 60.44c(g)]

C.60. For affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable. [40 CFR 60.44c(h)]

- **C.61.** The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 standards under 40 CFR 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour averaged firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used. [40 CFR 60.44c(i)]
- **C.62.** The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %Ps and Eho under paragraphs 40 CFR 60.44c(d), (e), or (f), as applicable, whether or not the minimum emissions data requirements under 40 CFR 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %Ps or Eho pursuant to paragraphs 40 CFR 60.44c(d), (e), or (f), as applicable.

 [40 CFR 60.44c(j)]

Emission Monitoring for Sulfur Dioxide

C.63. The monitoring requirements of paragraphs 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under 40 CFR 60.48c(f) (1), (2), or (3), as applicable. [40 CFR 60.46c(e)]

Reporting and Recordkeeping Requirements.

- **C.64.** The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:
 - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 40 CFR 60.43c.
 - (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
 - (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the

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Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of 40 CFR 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

[40 CFR 60.48c(a)]

C.65. The owner or operator of each affected facility subject to the SO₂ emission limits of 40 CFR 60.42c, or the PM or opacity limits of 40 CFR 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS using the applicable performance specifications in appendix B.

[40 CFR 60.48c(b)]

- **C.66.** The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall submit quarterly reports to the Administrator. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test. Each subsequent quarterly report shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.48c(d)]
- C.67. The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.43c shall keep records and submit quarterly reports as required under paragraph 40 CFR 60.48c(d), including the following information, as applicable.
 - (1) Calendar dates covered in the reporting period.
 - (2) Each 30-day average SO₂ emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 - (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 - (4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
 - (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
 - (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
 - (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
 - (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
 - (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).

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(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph 40 CFR 60.48c(f)(1), (2), or (3), as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.

[40 CFR 60.48c(e)]

- C.68. Fuel supplier certification shall include the following information:
 - (1) For distillate oil:
 - (i) The name of the oil supplier; and
 - (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

[40 CFR 60.48c(f)]

- **C.69.** The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. [40 CFR 60.48c(g)]
- **C.70.** The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 40 CFR 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

 [40 CFR 60.48c(h)]
- **C.71.** All records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR 60.48c(i)]

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Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No. Brief Description

-009

New Cogeneration System Turbine & Existing Steam Generator

The new cogeneration system includes new gas turbine with a maximum heat input of 62.7 MMBtu/hr, a 4 MW electric generator, an existing ERI waste heat boiler, and an existing Coen duct burner with a maximum heat input of 99.9 MMBtu/hr. Construction of the new turbine is expected to commence within 18 months of the issuance of 0690002-012-AC. See conditions 29 and 30 of this subsection.

{Permitting note(s): These emissions units are regulated under 40 CFR 60 Subpart KKKK, Standards of Performance for Stationary Gas Turbines and Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Units.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

D.1. <u>Permitted Capacity.</u> The maximum heat input to the Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the duct burner shall not exceed 99.9 million Btu per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

- **D.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition 18. [Rule 62-297.310(2), F.A.C.]
- **D.3.** Methods of Operation (i.e., Fuels). Only natural gas shall be fired in the turbine and only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight, shall be fired in the duct burner.

 [0690002-012-AC]
- **D.4.** Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [0690002-012-AC]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **D.5.** – **D.8.**. are based on the specified averaging time of the applicable test method.}

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D.5. <u>Particulate Matter.</u> Particulate matter emissions from the duct burner are limited by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.

[Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

D.6. <u>Nitrogen Oxides.</u> The maximum allowable NOx concentration from the turbine shall not exceed 25 ppmvd, corrected to 15% O₂. [Rule 62-212.400 (BACT), F.A.C.]

{Permitting Note: The turbine is also subject to a limit based on useful output by the NSPS, see Specific Condition **D.52.**}

D.7. Sulfur Dioxide. Sulfur dioxide from the turbine shall be limited by firing natural gas. Sulfur dioxide from the duct burner shall be limited by firing either natural gas; or, No. 2 distillate fuel oil with a maximum 0.10 percent sulfur, by weight. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See Specific Conditions **D.14.** and **D.15.**

[40CFR60.4330 and Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

D.8. <u>Visible Emissions.</u> Visible emissions shall not exceed 20 percent opacity. [0690002-012-AC]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

- **D.9.** Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **D.10.** Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- **D.11.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

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D.12. Particulate Matter Testing. Compliance with the particulate matter limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.

[0690002-012-AC]

- **D.13.** Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted annually using Environmental Protection Agency Method 20 or 7E. [40CFR60.4340 and 40CFR60.4400]
- **D.14.** Sulfur Dioxide. Compliance with the sulfur dioxide limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device.

 [0690002-012-AC]
- **D.15.** Fuel Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.

[Rules 62-213.440 and 62-297.440, F.A.C.]

- **D.16.** Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9. [0690002-012-AC]
- **D.17.** Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

D.18. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed

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for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

D.19. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

D.20. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit. See attachment **TABLE 297.310-1**, **CALIBRATION SCHEDULE**. [Rule 62-297.310(4), F.A.C.]
- **D.21.** Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment **APPENDIX SS-1, STACK SAMPLING FACILITIES.** [Rule 62-297.310(6), F.A.C.]
- **D.22.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.,

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the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

D.23. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

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Recordkeeping and Reporting Requirements

D.24. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

D.25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test

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- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

- **D.26.** In order to provide information to document compliance with the fuel heat input rate limitation of Specific Condition **D.1.**, the permittee shall monitor and maintain <u>daily record logs</u> of the following:
 - a. The natural gas fuel consumption for the turbine;
 - b. the ambient temperature to determine the maximum heat input rating of the turbine; and,
 - c. the operating hours of the turbine.

The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

D.27. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Miscellaneous Requirements.

- **D.28.** <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- **D.29.** Quarterly Progress Reports. Provide a quarterly report to the Department's Tallahassee office describing the progress made in completing construction of the new turbine during the quarter and the anticipated tasks to be completed in the upcoming quarter. The report shall be due within 30-days following the end of the quarter. [0690002-012-AC]
- **D.30.** If construction of the new turbine does not commence within 18 months of the issuance of permit 0690002-012-AC, the existing cogeneration system can continue operation under the permanent restrictions cited in **Section III. Subsection E.** of this permit. [0690002-012-AC]

Best Management Practices

D.31. Best Management Practices for Carbon Monoxide. Each facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices

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provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. Each facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. Each facility shall:

- 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;
- 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
- 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
- 4. Visually check the flame characteristics once per operating shift;
- 5. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;
- 6. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
- 7. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 8. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

· [0690002-012-AC]

NSPS REQUIREMENTS

Subpart A-General Provisions

- **D.32.** Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 [40 CFR 60.7(c)]

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D.33. <u>Summary Report.</u> The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.

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

{See Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}
[40 CFR 60.7(d)]

D.34. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and

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summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)]

D.35. Records Retention. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f)]

- **D.36.** Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

 [40 CFR 60.8(b)]
- **D.37.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

 [40 CFR 60.8(c)]

D.38. Notification:

(a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

[40 CFR 60.8(d)]

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- **D.39.** The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2. Safe sampling platform(s).
 - 3. Safe access to sampling platform(s).
 - 4. Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

- **D.40.** Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

 [40 CFR 60.8(f)]
- **D.41.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- **D.42.** The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- **D.43.** At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- **D.44.** <u>Credible Evidence.</u> For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible

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evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

D.45. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

D.46. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

[40 CFR 60.14(a)]

- **D.47.** Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[40 CFR 60.14(b)]

D.48. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[40 CFR 60.14(c)]

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D.49. The following shall not, by themselves, be considered modifications under 40 CFR 60:

- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
- (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
- (3) An increase in the hours of operation.
- (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
- (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
- (6) The relocation or change in ownership of an existing facility. [40 CFR 60.14(e)]
- **D.50.** Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.

 [40 CFR 60.14(f)]
- **D.51.** Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

 [40 CFR 60.14(g)]

Subpart KKKK-Standards of Performance for Stationary Gas Turbines

Emission Limits.

- **D.52.** What emission limits must I meet for nitrogen oxides (NO_X) ?
- (a) You must meet the emission limits for NO_X specified in Table 1 to this subpart [25 ppm at 15 percent O₂ or 150 ng/J of useful output (1.2 lb/ MWh)].
- (b) If you have two or more turbines that are connected to a single generator, each turbine must meet the emission limits for NO_X . [40CFR60.4320]
- **D.53.** What emission limits must I meet for sulfur dioxide (SO_2) ?
- (a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section.
 - (1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output, or

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(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input.

If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40CFR60.4330]

General Compliance Requirements.

- **D.54.** What are my general requirements for complying with this subpart?
- (a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
- (b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:
 - (1) Determine compliance with the applicable NO_X emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or
 - (2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

[40CFR60.4333]

Monitoring.

- **D.55.** How do I demonstrate continuous compliance for NO_X if I do not use water or steam injection?
- (a) If you are not using water or steam injection to control NO_X emissions, you must perform annual performance tests in accordance with 40CFR60.4400 to demonstrate continuous compliance. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests. [40CFR60.4340]
- **D.56.** How can I be exempted from monitoring the total sulfur content of the fuel? You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for units located in continental areas and I80 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

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(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for noncontinental areas; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb $SO_2/MMBtu$) heat input for continental areas or 180 ng SO_2/J (0.42 lb $SO_2/MMBtu$) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of 40CFR is required.

[40CFR60.4365]

D.57. How often must I determine the sulfur content of the fuel?

The frequency of determining the sulfur content of the fuel must be as follows:

- (b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in 40CFR60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.
- (c) Custom schedules. Notwithstanding the requirements of paragraph (b) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 40CFR60.4330.
 - (1) The two custom sulfur monitoring schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of this section are acceptable, without prior Administrative approval:
 - (i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable.
 - (ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.
 - (iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:
 - (A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(B) of this section.

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- (B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(C) of this section.
- (C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, continue to monitor at this frequency.
- (iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (c)(1)(ii) or (iii) of this section shall be followed.
- (2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of 40CFR to determine a custom sulfur sampling schedule, as follows:
 - (i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
 - (ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.
 - (iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iii) of this section.
 - (iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iv) of this section.

[40CFR60.4370]

Reporting.

D.58. What reports must I submit?

- (a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with 40CFR60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
- (b) For each affected unit that performs annual performance tests in accordance with 40CFR60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40CFR60.4375]
- **D.59.** How are excess emissions and monitoring downtime defined for SO₂? If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:
 - (a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the

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applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

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

[40CFR60.4385]

D.60. When must I submit my reports?

All reports required under 40CFR60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

[40CFR60.4395]

Performance Tests.

D.61. How do I conduct the initial and subsequent performance tests, regarding NO_X? (a) You must conduct an initial performance test, as required in 40CFR60.8. Subsequent NO_X performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

- (1) There are two general methodologies that you may use to conduct the performance tests. For each test run:
 - (i) Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of 40CFR60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of 40CFR60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

$$E = \frac{1.194X10^{-7} * (NOX)c * Qstd}{P}$$
 (Eq. 5)

Where:

 $E = NO_x$ emission rate, in lb/MWh

 $1.194 \times 10^{-7} = \text{conversion constant, in lb/dscf-ppm}$

 $(NOX)c = average NO_X concentration for the run, in ppm$

Ostd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to Sec. 60.4350(f)(2); or (ii) Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of 40CFR60. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40CFR60 to calculate the NO_x emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in

40CFR60.4350(f) to calculate the NO_X emission rate in lb/MWh.

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(2) Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

- (3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:
 - (i) You may perform a stratification test for NO_X and diluent pursuant to
 - (A) [Reserved], or
 - (B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of 40CFR.
 - (ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:
 - (A) If each of the individual traverse point NO_X concentrations is within \pm 10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than 5ppm or \pm 0.5 percent CO_2 (or O_2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_X concentration during the stratification test; or (B) For turbines with a NO_X standard greater than 15 ppm @ 15% O_2 , you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within 5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than \pm 3ppm or \pm 0.3 percent CO_2 (or O_2) from the mean for all traverse points; or
- (b) The performance test must be done at any load condition within \pm 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.
 - (2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.
 - (4) Compliance with the applicable emission limit in 40CFR60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in Sec. 60.4320.
- (6) The ambient temperature must be greater than 0 °F during the performance test. [40CFR60.4400]
- **D.62.** How do I establish a valid parameter range if I have chosen to continuously monitor parameters?

If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NO_X emission controls in accordance with 40CFR60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in 40CFR60.4355.

[40CFR60.4410]

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D.63. How do I conduct the initial and subsequent performance tests for sulfur?
(a) You must conduct an initial performance test, as required in 40CFR60.8. Subsequent SO₂ performance tests shall be conducted on an annual basis (no more than 14 calendar months

performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

onduct the performance tests.

- (1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see 40CFR60.17) for natural gas. The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
 - (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40CFR60.17).
 - (2) Measure the SO₂ concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of 40CFR60. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses", manual methods for sulfur dioxide (incorporated by reference, see 40CFR60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of 40CFR60, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO₂ emission rate:

$$E = \frac{1.664X10^{-7} * (SO2)c * Qstd}{P}$$
 (Eq. 6)

Where:

 $E = SO_2$ emission rate, in lb/MWh

 1.664×10^{-7} = conversion constant, in lb/dscf-ppm

(SO2)c = average SO₂ concentration for the run, in ppm

Qstd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to Sec. 60.4350(f)(2); or

(3) Measure the SO₂ and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of 40CFR60. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see 40CFR60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40CFR60 to calculate the SO₂ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40CFR60.4350(f) to calculate the SO₂ emission rate in lb/MWh.

(b) [Reserved] [40CFR60.4415] **FINAL Permit No.:** 0690002-013-AV

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Section III. Emissions Unit(s) and Conditions.

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No. Brief Description

-007

Existing Cogeneration System Turbine & Steam Generator

The existing cogeneration system includes a Solar Centaur "H" gas turbine with a maximum heat input of 62.7 MMBtu/hr, a 4 MW electric generator, an ERI waste heat boiler, and a Coen duct burner with a maximum heat input of 99.9 MMBtu/hr. The cogeneration system began operation in 1988.

{Permitting note(s): These emissions units are regulated under 40 CFR 60 Subpart GG, Standards of Performance for Stationary Gas Turbines and Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Units.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The maximum heat input to the Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the duct burner shall not exceed 99.9 million Btu per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0690002-012-AC]

- **E.2.** Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **E.18**. [Rule 62-297.310(2), F.A.C.]
- **E.3.** Methods of Operation (i.e., Fuels). Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight, shall be fired in these units. If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the turbine shall fire only natural gas. [0690002-012-AC and Rule 62-210.200(BACT), F.A.C.]
- **E.4.** Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the annual hours of operation of the turbine shall not exceed 750 hours per year and the annual operation of the duct burner shall not exceed 7,000 hours per year.

[0690002-012-AC and Rule 62-210.200(BACT), F.A.C.]

Emission Limitations and Standards

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **E.5.** – **E.8.** are based on the specified averaging time of the applicable test method.}

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E.5. Particulate Matter. Particulate matter emissions from the duct burner are limited by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.

[0690002-012-AC]

E.6. <u>Nitrogen Oxides.</u> The maximum allowable NOx concentration from the turbine shall not exceed 168 ppmvd, corrected to 15% O₂. [0690002-012-AC]

- E.7. Sulfur Dioxide. Sulfur dioxide shall be limited by firing either natural gas; or, No. 2 distillate fuel oil with a maximum 0.10 percent sulfur, by weight. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See Specific Conditions E.14. and E.15. [0690002-012-AC]
- **E.8.** <u>Visible Emissions.</u> Visible emissions from the turbine shall not exceed 10 percent opacity. Visible emissions from the duct burner shall not exceed 20 percent opacity except for one sixminute period per hour during which opacity shall not exceed 27 percent. [0690002-012-AC]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

- **E.9.** Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **E.10.** Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- **E.11.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

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E.12. Particulate Matter Testing. Compliance with the particulate matter limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.

[0690002-012-AC]

- **E.13.** Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted using Environmental Protection Agency Method 20 or 7E. [0690002-012-AC]
- **E.14.** Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device.

 [Requested by Applicant]
- **E.15.** Fuel Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.

[Rules 62-213.440 and 62-297.440, F.A.C.]

- **E.16.** Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9. [0690002-012-AC]
- **E.17.** Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

E.18. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

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E.19. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

E.20. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit. See attachment **TABLE 297.310-1**, **CALIBRATION SCHEDULE**. [Rule 62-297.310(4), F.A.C.]
- **E.21.** Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment **APPENDIX SS-1, STACK SAMPLING FACILITIES.** [Rule 62-297.310(6), F.A.C.]
- **E.22.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

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- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

E.23. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

Recordkeeping and Reporting Requirements

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E.24. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

E.25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

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20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

- **E.26.** In order to provide information to document compliance with the fuel heat input rate limitation of Specific Condition D.1., the permittee shall monitor and maintain <u>daily record logs</u> of the following:
 - a. The natural gas fuel consumption for the turbine;
 - b. the ambient temperature to determine the maximum heat input rating of the turbine; and,
 - c. the operating hours of the turbine.

The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

E.27. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Miscellaneous Requirements.

- **E.28.** <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- **E.29.** The sale of electrical output generated by the Gas Turbine/Heat Recovery Steam Generator unit shall not exceed one third (33.3%) of the total annual electrical output based on a 12 month rolling average. (This limitation is necessary to insure that this source (emission unit) is not considered an electric utility gas turbine under Subpart GG 40 CFR 60.331(q).) [Rule 62-204.800(7)(b)39, F.A.C. and 40 CFR 60.331(q)]
- **E.30.** If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the permittee is restricted from using any emissions reductions resulting from the reduced hours of operation or the fuel restriction as emissions offsets for any future projects. [Rule 62-212.400(12), F.A.C.]

Best Management Practices

E.31. Best Management Practices for Carbon Monoxide. Each facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. Each facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7

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days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. Each facility shall:

- 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;
- 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
- 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
- 4. Visually check the flame characteristics once per operating shift;
- 5. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;
- 6. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
- 7. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 8. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

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NSPS REQUIREMENTS

Subpart A-General Provisions

- **E.32.** Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 [40 CFR 60.7(c)]
- **E.33.** Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.

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

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

{See Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}
[40 CFR 60.7(d)]

E.34. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For I full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the

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owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)]

E.35. Records Retention. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f)]

- **E.36.** Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

 [40 CFR 60.8(b)]
- E.37. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

 [40 CFR 60.8(c)]

E.38. Notification:

(a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

[40 CFR 60.8(d)]

E.39. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

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- 2. Safe sampling platform(s).
- 3. Safe access to sampling platform(s).
- 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e)]
- **E.40.** Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

 [40 CFR 60.8(f)]
- **E.41.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- **E.42.** The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- **E.43.** At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- **E.44.** Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with

applicable requirements if the appropriate performance or compliance test or procedure had been performed.

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[40 CFR 60.11(g)]

E.45. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

- **E.46.** Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

 [40 CFR 60.14(a)]
- **E.47.** Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[40 CFR 60.14(b)]

E.48. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[40 CFR 60.14(c)]

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E.49. The following shall not, by themselves, be considered modifications under 40 CFR 60:

- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
- (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
- (3) An increase in the hours of operation.
- (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
- (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
- (6) The relocation or change in ownership of an existing facility. [40 CFR 60.14(e)]
- **E.50.** Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section. [40 CFR 60.14(f)]
- **E.51.** Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[40 CFR 60.14(g)]

Subpart GG-Standards of Performance for Stationary Gas Turbines

Standard for Nitrogen Oxides.

- **E.52.** On and after the date of the performance test required by 40 CFR 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs 40 CFR 60.332(b), (c), and (d) shall comply with one of the following, except as provided in paragraphs 40 CFR 60.332(e), (f), (g), (h), (i), (j), (k), and (l).
 - (2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

STD = 0.0150 (14.4)/Y + F

where:

STD=allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis). Y=manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

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F=NOx emission allowance for fuel-bound nitrogen as defined in paragraph 40 CFR 60.332(a)(3).

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
N ≤ 0.015	0
$0.015 < N \le 0.1$	0.04(N)
$0.1 < N \le 0.25$	0.004+0.0067(N-0.1)
N > 0.25	0.005

where:

N=the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 CFR 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

[40 CFR 60.332(a)]

- **E.53.** Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph 40 CFR 60.332(a)(2). [40 CFR 60.332(c)]
- **E.54.** Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in 40 CFR 60.332(b) shall comply with paragraph 40 CFR 60.332(a)(2).

 [40 CFR 60.332(d)]
- **E.55.** Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph 40 CFR 60.332(a). [40 CFR 60.332(e)]
- E.56. Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph 40 CFR 60.332(a)(2) when being fired with an emergency fuel.

 [40 CFR 60.332(k)]

Standard for Sulfur Dioxide.

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E.57. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

- (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. 40 CFR 60.333
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight. [40 CFR 60.333]

Monitoring of Operations.

E.58. The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NOx emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.

[40 CFR 60.334(a)]

- **E.59.** The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
 - (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph 40 CFR 60.334(b).

[40 CFR 60.334(b)]

- **E.60.** For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
 - (1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
 - (2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

[40 CFR 60.334(c)]

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Test Methods and Procedures.

E.61. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired. [40 CFR 60.335(a)]

- **E.62.** In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335 (f). [40 CFR 60.335(b)]
- **E.63.** The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 40 CFR 60.333(a) as follows:
 - (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

$$NO_X = (NO_{XO}) (P_r/P_O)^{0.5} e^{19(Ho - 0.00633)} (288 \text{ K/T}_a)^{1.53}$$

where:

NOx=emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent.

NOxo=observed NOx concentration, ppm by volume.

Pr=reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po=observed combustor inlet absolute pressure at test, mm Hg.

Ho=observed humidity of ambient air, g H2O/g air.

e=transcendental constant, 2.718.

Ta=ambient temperature, K.

- (2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

[40 CFR 60.335(c)]

E.64. The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur

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in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

[40 CFR 60.335(d)]

E.65. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs 40 CFR 60.335(a) and (d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 CFR 60.335(e)]

- **E.66.** The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
 - (1) Instead of using the equation in 40 CFR 60.335 (b)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR 60.335(f)]

PERMITTEE:

Cutrale Citrus Juices USA, Inc. 11 Cloud Street Leesburg, Florida 34748

Responsible Official:

Hugh W. Thompson III, President

Leesburg Facility

DEP File No.: 0690002-012-AC (PSD-FL-366)

Facility ID No.: 0690002 SIC Nos.: 2033, 2037

Permit Expires: May 31, 2010

PROJECT AND LOCATION

This permit establishes federally enforceable emissions limits for the Leesburg Facility, previously subject to the provisions of Chapter 403.08725, Florida Statutes; resolves the alleged violation that sometime in 1987, before Cutrale Citrus Juices USA, Inc. became owner or operator, the prior owner/operator constructed a cogeneration system at the Leesburg facility currently operated by Cutrale without obtaining a PSD construction permit; and, authorizes the construction of a relocatable boiler, located at 11 Cloud Street, Leesburg, Lake County; UTM Coordinates: Zone 17, 415.5 km East and 3187.3 km North; Latitude: 28° 49' 54" North and Longitude: 81° 49' 40" West.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

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Section 2. Administrative Requirements

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Section 4. Appendices

Joseph Kahn, Director Division of Air Resource Management	(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The Leesburg citrus processing plant consists of one citrus peel dryer with waste heat evaporator, one pellet cooling reel, a steam boiler, a relocatable steam boiler and a cogeneration system. The facility produces various citrus juice products and animal feed.

E.U. ID No.	Brief Description
-005	Citrus Peel Dryer
-006	Pellet Cooling Reel
-004	Process Steam Boiler #4
-008	Relocatable Boiler
-007	Cogeneration System Turbine & Steam Generator
-009	New Cogeneration System Turbine & Existing Steam Generator

REGULATORY CLASSIFICATION

Title III: The existing facility is not identified as a potential major source of hazardous air pollutants (HAP).

Title IV: The existing facility has no units subject to the acid rain provisions of the Clean Air Act.

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

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

NSPS: The existing facility has turbines subject to the New Source Performance Standards of 40 CFR 60, Subpart GG and 40 CFR 60, Subpart KKKK.

<u>NESHAP</u>: The existing facility has no units subject to the National Emissions Standards for Hazardous Air Pollutants of 40 CFR 63.

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: All documents related to applications for permits to construct or modify emissions units regulated by this permit shall be submitted to the Bureau of Air Monitoring and Mobile Sources of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5510), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Bureau of Air Monitoring and Mobile Sources of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5510), Tallahassee, Florida 32399-2400.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Florida Department of Environmental Protection (DEP) Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767.
- 3. <u>Appendices</u>: The following Appendices are attached as part of this permit: Appendix GC (General Conditions).
- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); and, Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
- 8. <u>Initial Compliance Demonstration Required</u>: An emissions unit that is subject to any emission limiting standard shall conduct an initial compliance test that demonstrates compliance with the applicable emission limiting standard during the 2008 2009 processing season. [Rules 62-4.070(3) and 62-210.300(1)(a), F.A.C.]
- 9. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements:
 - a. Paving and maintenance of roads, parking areas, and yards;

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- b. Application of water or non-hazardous chemicals to control emissions from such activities as demolition of buildings, grading roads, construction and land clearing;
- c. Application of water or non-hazardous chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;
- d. Removal of particulate matter from roads and other paved areas to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne;
- e. Use of hood, fans, filters, and similar equipment to contain, capture and/or vent particulate matter;
- f. Confine abrasive blasting, where possible; and,
- g. Enclosures or covers on conveyor systems. [Rule 62-296.320(4)(c)2., F.A.C.; and, Requested by Applicant]
- 9. Fruit Throughput Limited: The owner or operator shall not process more than 18.0 million boxes of citrus fruit in any consecutive 12 month period. For purposes of this permit, a box of citrus fruit shall be defined to contain 90 pounds of oranges or 85 pounds of grapefruit. The owner or operator shall make and maintain monthly and rolling 12 month records of fruit processing rates to demonstrate compliance with this limitation. Such records shall be made from daily processing records and shall be completed no later than the 10th day of each following month. [Rule 62-4.070(3), F.A.C.; and, Requested by Applicant]
- 10. <u>VOC Emission Limits and Oil Recovery:</u> VOC emissions will be limited by achieving by a 65 percent recovery of oil from citrus fruits processed each calendar year. Compliance with the emission limit for VOC shall be demonstrated by calculating the compliance indicator, as follows. All measured quantities of oil used in Equations 1 and 2 shall be in units of tons and the total results of the selected equation shall reflect the sum total for the entire calendar year.
 - 1. The facility may use either Equation 1 or 2 to demonstrate compliance, provided that the facility has maintained the necessary records to use that equation. In the case of Equation 2, all recovered oil must be actually measured and all emitted volatilized oil must be treated as emissions and not as reductions of peel oil. If the result of the selected equation is positive or zero, the facility is in compliance with the VOC emission limit. If the result of the selected equation is negative, the facility is in violation of the VOC emission limit. The facility may use either equation to demonstrate compliance, even if the other equation results in a negative compliance indicator.
 - 2. Facilities may accept wet peel from, or send wet peel to another facility for further processing and drying, provided that each facility involved receives or provides, respectively, sufficient recorded information to account for the recovery of oil from such peel, including oil in products and by-products at the receiving facility. A facility that sends wet peel offsite for any purpose shall not include the related oil in products and by-products in its oil recovery calculations. Such oil shall be included in the oil recovery calculations of the receiving facility. In any case, oil in products and by-products related to peel that are not processed through a peel dryer shall be excluded from all oil recovery calculations.

Equation 1:

Compliance Indicator = OIF(1 - K1) - OPP + ODP

Equation 2

Compliance Indicator = OJ + CPO + EO + DL + ODP - K1(OIF)

Where:

K1 = 0.65.

And the following are all in units of tons:

OIF = Oil in Incoming Fruit

ODP = Oil in Dried Pellets

OPP = Oil in Pressed Peel

OJ = Oil in Juice

Cutrale Citrus Juices USA, Inc. Leesburg Facility DEP File No.: 0690002-012-AC (PSD-FL-366)
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CPO = Cold Press Oil EO = Essence Oil DL = d-limonene

Fruit and byproduct oil quantities, required for equations 1 and 2, as applicable, shall be measured daily. All peel oil recovery at a facility shall be determined using the same methodology at all times during each processing year. The following sampling and analytical methods shall be used for determining oil contents of fruit, pressed peel, dried peel and pellets: The sampling and analytical method for determining oil content in incoming whole fruit is the method documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of Citrus Products, Chapter VI, Procedure 1. Whole Fruit Available Oil. FMC Technologies Inc., Lakeland, FL, pp. 119 to 123, (effective August 16, 2002)" hereby adopted by reference; the analytical method for determining oil content is the Scott Method (Bromate Titration Method) as documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of Citrus Products, Chapter IV, Procedure 10, Recoverable Oil (Scott Method), FMC Technologies Inc., Lakeland, FL, pp. 40 to 44, (effective August 16, 2002)" hereby adopted by reference; the methods for sampling, sample preparation and analytical calculations for peel residue, press cake, and pellets are those documented in "Braddock, R. J. (1999), Handbook of Citrus By-Products and Processing Technology, Section 12.3.1.2 Analysis, John Wiley & Sons, NY, pp. 180 to 181," hereby adopted by reference. Copies of these documents may be obtained by contacting the Division of Air Resource Management at 2600 Blair Stone Road, Mail Station 5500, Tallahassee, FL 32399-2400. [Rule 62-4.070(3), F.A.C. and Requested by Applicant]

A. EU-005 - Citrus Peel Dryer

This section of the permit addresses the following emissions units.

E.U. ID No. Brief Description
-005 Citrus Peel Dryer

The citrus peel dryer is a 52.2 tons/hour feed dryer (90.0 MMBtu) with two 100,000 lb/hour waste heat evaporators and one 50,000 lb/hr waste heat evaporator. The dryer was installed in 1972.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

- 1. <u>Permitted Capacity</u>. The maximum heat input rate to each dryer shall not exceed 90.0 million Btu per hour, heat input. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]
- 2. Methods of Operation (i.e., Fuels). Only natural shall be fired in this unit. [Rule 62-213.410, F.A.C.; and, Requested by Applicant]
- 3. <u>Hours of Operation</u>. These emissions units are allowed to operate, as necessary, to process 18.0 million boxes of citrus fruit in any consecutive 12 month period. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]

{Permitting note: For emission calculations, the operation of this emissions unit is estimated not to exceed 5,880 hours per year.}

Emission Limitations and Standards

- 4. <u>PM/PM10</u>. PM/PM₁₀ emissions from the dryer shall not exceed 15.0 pounds per hour. [Requested by Applicant and 62-212.400 (BACT), F.A.C.]
- 5. <u>Visible Emissions</u>. Visible emissions from each unit shall not exceed 20 percent opacity. [Requested by Applicant]

Excess Emissions

- 6. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

A. EU-005 - Citrus Peel Dryer

Test Methods and Procedures

- 8. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- 9. <u>PM/PM10</u>. The test method for PM/PM₁₀ shall be EPA Method 5, incorporated in Chapter 62-297, F.A.C. [Rules 62-4.070(3), 62-213.440, and 62-297.401, F.A.C.]
- 10. <u>Visible emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-213.440 and 62-297.401, F.A.C.]
- 11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- 12. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. Applicable Test Procedures.
 - (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. See attachment **TABLE 297.310-1**, **CALIBRATION SCHEDULE.**
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- 14. <u>Stack Sampling Facilities Provided by the Owner of an Emissions Unit.</u> See attachment APPENDIX SS-1, STACK SAMPLING FACILITIES. [Rule 62-297.310(6), F.A.C.]
- 15. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate: or
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
 - (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag

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house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

16. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

- 17. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 18. <u>Notification Requirements</u>: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate non-compliance for a given averaging period. [Rule 62-4.070(3), F.A.C.]

19. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

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- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge. [Rules 62-213.440 and 62-297.310(8), F.A.C.]
- 20. <u>Fuel Usage Records</u>. In order to provide information to document compliance with the fuel heat input rate limitations of condition 1., the permittee shall monitor and maintain daily record logs of the amount of fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]
- 21. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Best Management Practices

22. <u>Best Management Practices for Carbon Monoxide</u>: The facility shall operate its citrus peel dryers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and

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copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:

- 1. Train dryer operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate dryers;
- 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
- 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
- 4. Visually check the flame characteristics once per operating shift;
- 5. Monitor the moisture content of the dried peel exiting the dryer on a daily basis, and maintain that moisture content greater than six percent by weight at all times during operation;
- 6. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;
- 7. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
- 8. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 9. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes. [Requested by Applicant and 62-212.400 (BACT), F.A.C.]

B. EU-006 - Pellet Cooling Reel

This section of the permit addresses the following emissions units.

E.U. ID No. Pellet Cooling Reel

The pellet cooling reel has a cyclone to recover product from the exhaust stream. The maximum dried peel throughput is 14 tons per hour. The pellet cooler was installed in 1972.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

1. <u>Permitted Capacity</u>. The capacity of the pellet cooling reel is determined by the capacity of the citrus peel dryer. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]

{Permitting note: The pellet cooling reel input is equal to the output of dried peel from the peel dryer.}

2. <u>Hours of Operation</u>. These emissions units are allowed to operate, as necessary, to process 18.0 million boxes of citrus fruit in any consecutive 12 month period. [Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400 (BACT), F.A.C.]

{Permitting note: For emission calculations, the operation of this emissions unit is estimated not to exceed 5,880 hours per year.}

Emission Limitations and Standards

- 3. PM/PM10. PM/PM₁₀ emissions shall not exceed 5.0 pounds per hour. [Requested by Applicant]
- 4. <u>Visible Emissions</u>. Visible emissions from the pellet coolers shall not exceed 5 percent opacity. [Requested by Applicant]

Excess Emissions

- 5. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 6. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

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Test Methods and Procedures

- 7. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- 8. <u>PM/PM10</u>. Tests for particulate matter and particulate matter of 10 microns or less may be conducted using United States Environmental Protection Agency Method 5, provided that all measured particulate matter is assumed to be particulate matter of 10 microns or less. Tests for compliance with the particulate matter emission limit, for the pellet cooler or cooling reel are waived as long as the facility complies with the visible emissions limitation. If any visible emissions test for the pellet cooler or cooling reel does not demonstrate compliance with the visible emissions limitation, the emissions unit shall be tested for compliance with the particulate matter emission limit within 30 days after the visible emissions test. [Rule 62-4.070(3), F.A.C.]
- 9. <u>Visible emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-213.440 and 62-297.401, F.A.C.]
- 10. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- 11. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 12. Applicable Test Procedures.
 - (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall

B. EU-006 - Pellet Cooling Reel

be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. See attachment **TABLE 297.310-1**, **CALIBRATION SCHEDULE.**
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- 13. <u>Stack Sampling Facilities Provided by the Owner of an Emissions Unit</u>. See attachment APPENDIX SS-1, STACK SAMPLING FACILITIES. [Rule 62-297.310(6), F.A.C.]
- 14. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard.
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

B. EU-006 - Pellet Cooling Reel

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

15. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) <u>Accuracy of Equipment</u>. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

C. EU-004 and EU-008 - Boilers

This section of the permit addresses the following emissions unit.

E.U. ID No.	Brief Description
-004	Process Steam Boiler #4
-008	Relocatable Boiler

Boiler #4 is a Babcock & Wilcox Model 1079 boiler. The maximum operation heat input rate is 78.0 million Btu per hour and fires natural gas and 0.1 percent sulfur No. 2 fuel oil. The initial startup date was 1991.

The Relocatable Boiler will be a John Zink Model M22935, or equivalent. The maximum operation heat input rate is 96.0 million Btu per hour and fires natural gas, only. The initial startup date will be 2008.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

- 1. Permitted Capacity. The capacity of these emissions units shall not exceed:
 - a. 78.0 million Btu per hour, heat input, for Boiler #4.
 - b. 96.0 million Btu per hour, heat input, for the Relocatable Boiler. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]
- 2. Methods of Operation (i.e., Fuels). Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. Only natural gas shall be fired in the Relocatable Boiler. [Rules 62-212.400 (BACT) and 62-213.410, F.A.C.]
- 3. <u>Hours of Operation</u>. These emissions units are allowed to operate continuously, i.e., 8,760 hours per year. [Rules 62-4.160(2) and 62-210.200(PTE), and 62-212.400 (BACT), F.A.C.]

Emission Limitations and Standards

- 4. Particulate Matter. Particulate matter shall be limited:
 - a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4.
 - b. By firing only natural gas in the Relocatable Boiler. [Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]
- 5. Sulfur Dioxide. Sulfur dioxide shall be limited;
 - a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See specific conditions 11. and 12
 - b. By firing only natural gas in the Relocatable Boiler. [Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

C. EU-004 and EU-008 - Boilers

6. <u>Visible Emissions</u>. Visible emissions from each unit shall not exceed 20 percent opacity except for one sixminute period per hour during which opacity shall not exceed 27 percent. [Rules 62-212.400 (BACT) and 62-296.406(1), F.A.C.]

Excess Emissions

- 7. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 8. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- 9. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- 10. Particulate Matter. Compliance with the particulate matter standard is demonstrated:
 - a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4.
 - b. By firing only natural gas in the Relocatable Boiler. [Rule 62-212.400 (BACT), F.A.C.]
- 11. Sulfur Dioxide. Compliance with the sulfur dioxide standard is demonstrated by:
 - a. By firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight shall be fired in Boiler #4. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device.
 - b. By firing only natural gas in the Relocatable Boiler. [Rule 62-296.406(3), F.A.C.]
- 12. <u>Fuel Sulfur Content</u>. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.]
- 13. <u>Visible emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rule 62-296.406, F.A.C.]
- 14. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher

C. EU-004 and EU-008 - Boilers

capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

15. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes. [Rule 62-297.310(4), F.A.C.]
- 16. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
 - (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag

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house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

17. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) <u>Accuracy of Equipment</u>. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

- 18. Excess Emissions Reporting. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 19. <u>Fuel Usage Records</u>. In order to provide information to document compliance with the fuel heat input rate limitations of condition 1., the permittee shall monitor and maintain daily record logs of the amount of each fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request. [62-212.400 (BACT), F.A.C.]
- 20. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

21. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.

C. EU-004 and EU-008 - Boilers

- 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge. [Rules 62-213.440 and 62-297.310(8), F.A.C.]

Best Management Practices

- 22. Best Management Practices for Carbon Monoxide. The facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:
 - 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;

C. EU-004 and EU-008 - Boilers

- 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
- 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
- 4. Visually check the flame characteristics once per operating shift;
- 6. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks:
- 7. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
- 8. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 9. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes. [Rule 62-212.400 (BACT), F.A.C.]

NSPS REQUIREMENTS

Subpart A-General Provisions

- 23. Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)]
- 24. <u>Summary Report.</u> The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.
 - 1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
 - 2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five

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percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted. [40 CFR 60.7(d)] {See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

25. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)]
- 26. Records Retention. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]

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- 27. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(b)]
- 28. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

29. Notification:

- (a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement. [40 CFR 60.8(d)]
- 30. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2. Safe sampling platform(s).
 - 3. Safe access to sampling platform(s).
 - 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e)]
- 31. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f)]

C. EU-004 and EU-008 - Boilers

- 32. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- 33. The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 34. At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- 35. <u>Credible Evidence.</u> For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g)]
- 36. <u>Circumvention.</u> No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]
- 37. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under appendix B to 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]
- 38. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)]
- 39. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous

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emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of 40 CFR 60.13 at least 10 days before the performance test required under 40 CFR 60.8 is conducted.
- (2) Except as provided in paragraph (c)(1) of 40 CFR 60.13, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation. [40 CFR 60.13(c)]
- 40 (1) Owners and operators of a CEMS installed in accordance with the provisions of 40 CFR 60, must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of 40 CFR 60, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS-1 in appendix B of 40 CFR 60. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
 - (2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation. [40 CFR 60.13(d)]
- 41. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of 40 CFR 60.13, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
 - (1) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
 - (2) All continuous monitoring systems referenced by paragraph (c) of 40 CFR 60.13 for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. [40 CFR 60.13(e)]
- 42. All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]

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- 43. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. [40 CFR 60.13(g)]
- 44. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in 40 CFR 60.7(f) (1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]
- 45. After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:
 - (1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
 - (2) Alternative monitoring requirements when the affected facility is infrequently operated.
 - (3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
 - (4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
 - (5) Alternative methods of converting pollutant concentration measurements to units of the standards.
 - (6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
 - (7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
 - (8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator

may require that such demonstration be performed for each affected facility.

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- (9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point. [40 CFR 60.13(i)]
- 46. An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
 - (1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).
 - (2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g) (2) and (3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2. [40 CFR 60.13(j)]
- 47. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14(a)]

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- 48. Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs. [40 CFR 60.14(b)]
- 49. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source. [40 CFR 60.14(c)]
- 50. The following shall not, by themselves, be considered modifications under 40 CFR 60:
 - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
 - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
 - (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
 - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
 - (6) The relocation or change in ownership of an existing facility. [40 CFR 60.14(e)]
- 51. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section. [40 CFR 60.14(f)]
- 52. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [40 CFR 60.14(g)]

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Subpart Dc-Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units

Standard for Sulfur Dioxide.

- 53. On and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph. [40 CFR 60.42c(d)]
- 54. For affected facilities listed under paragraphs 40 CFR 60.42c(h)(1), (2), or (3), compliance with the emission limits or fuel oil sulfur limits under 40 CFR 60.42c may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable.

 (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr). [40 CFR 60.42c(h)]
- 55. The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under 40 CFR 60.42c apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(i)]
- 56. Only the heat input supplied to the affected facility from the combustion of oil is counted under 40 CFR 60.42c. No credit is provided for the heat input to the affected facility from other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns. [40 CFR 60.42c(j)]

Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.

- 57. Except as provided in paragraphs 40 CFR 60.44c(g) and (h) and in 40 CFR 60.8(b), performance tests required under 40 CFR 60.8 shall be conducted following the procedures specified in paragraphs 40 CFR 60.44c(b), (c), (d), (e), and (f), as applicable. Section 60.8(f) does not apply to 40 CFR 60.44c. The 30-day notice required in 40 CFR 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator. [40 CFR 60.44c(a)]
- 58. If only oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly SO₂ emission rate (Eho) and the 30-day average SO₂ emission rate (Eao). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate Eao when using daily fuel sampling or Method 6B. [40 CFR 60.44c(d)]
- 59. For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2). [40 CFR 60.44c(g)]

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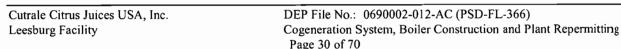
- 60. For affected facilities subject to 40 CFR 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable. [40 CFR 60.44c(h)]
- 61. The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ standards under 40 CFR 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour averaged firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used. [40 CFR 60.44c(i)]
- 62. The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %Ps and Eho under paragraphs 40 CFR 60.44c(d), (e), or (f), as applicable, whether or not the minimum emissions data requirements under 40 CFR 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %Ps or Eho pursuant to paragraphs 40 CFR 60.44c(d), (e), or (f), as applicable. [40 CFR 60.44c(j)]

Emission Monitoring for Sulfur Dioxide

63. The monitoring requirements of paragraphs 60.46c(a) and (d) shall not apply to affected facilities subject to 40 CFR 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under 40 CFR 60.48c(f) (1), (2), or (3), as applicable. [40 CFR 60.46c(e)]

Reporting and Recordkeeping Requirements.

- 64. The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:
 - (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 40 CFR 60.43c.
 - (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
 - (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of 40 CFR 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator. [40 CFR 60.48c(a)]
- 65. The owner or operator of each affected facility subject to the SO₂ emission limits of 40 CFR 60.42c, or the PM or opacity limits of 40 CFR 60.43c, shall submit to the Administrator the performance test data from



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the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS using the applicable performance specifications in appendix B. [40 CFR 60.48c(b)]

- 66. The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall submit quarterly reports to the Administrator. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test. Each subsequent quarterly report shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.48c(d)]
- 67. The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.43c shall keep records and submit quarterly reports as required under paragraph 40 CFR 60.48c(d), including the following information, as applicable.
 - (1) Calendar dates covered in the reporting period.
 - (2) Each 30-day average SO₂ emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 - (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 - (4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
 - (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
 - (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
 - (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
 - (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
 - (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).
 - (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
 - (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph 40 CFR 60.48c(f)(1), (2), or (3), as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier

certifications submitted represent all of the fuel combusted during the quarter. [40 CFR 60.48c(e)]

- 68. Fuel supplier certification shall include the following information:
 - (1) For distillate oil:
 - (i) The name of the oil supplier; and
 - (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. [40 CFR 60.48c(f)]

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- 69. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. [40 CFR 60.48c(g)]
- 70. The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 40 CFR 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month. [40 CFR 60.48c(h)]
- 71. All records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR 60.48c(i)]

D. EU-009 - New Cogeneration System Turbine & Existing Steam Generator

This section of the permit addresses the following emissions unit.

E.U. ID No. Brief Description

-009

New Cogeneration System Turbine & Existing Steam Generator

The cogeneration system includes new gas turbine with a maximum heat input of 62.7 MMBtu/hr, a 4 MW electric generator, an existing ERI waste heat boiler, and an existing Coen duct burner with a maximum heat input of 99.9 MMBtu/hr. Construction of the new turbine is expected to commence within 18 months of the issuance of this permit. See conditions 29 and 30 of this subsection.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

- 1. <u>Permitted Capacity.</u> The maximum heat input to the Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the duct burner shall not exceed 99.9 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]
- 2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition 18. [Rule 62-297.310(2), F.A.C.]
- 3. Methods of Operation (i.e., Fuels). Only natural gas shall be fired in the turbine and only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight, shall be fired in the duct burner. [Requested by Applicant]
- 4. <u>Hours of Operation.</u> This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Requested by Applicant]

Emission Limitations and Standards

- 5. <u>Particulate Matter.</u> Particulate matter emissions from the duct burner are limited by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. [Requested by Applicant]
- 6. <u>Nitrogen Oxides.</u> The maximum allowable NOx concentration from the turbine shall not exceed 25 ppmvd, corrected to 15% O₂. [Rule 62-210.200(BACT), F.A.C.]
 - {Permitting Note: The turbine is also subject to a limit based on useful output by the NSPS, see specific condition 52.}
- 7. Sulfur Dioxide. Sulfur dioxide from the turbine shall be limited by firing natural gas. Sulfur dioxide from the duct burner shall be limited by firing either natural gas; or, No. 2 distillate fuel oil with a maximum 0.10 percent sulfur, by weight. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each

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emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See specific conditions 14. and 15. [Requested by Applicant]

8. <u>Visible Emissions</u>. Visible emissions shall not exceed 20 percent opacity. [Requested by Applicant]

Excess Emissions

- 9. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 10. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- 11. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- 12. <u>Particulate Matter Testing.</u> Compliance with the particulate matter limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. [Requested by Applicant]
- 13. <u>Nitrogen Oxides Testing.</u> Tests for nitrogen oxides shall be conducted annually using Environmental Protection Agency Method 20 or 7E. [Requested by Applicant]
- 14. <u>Sulfur Dioxide</u>. Compliance with the sulfur dioxide limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. [Requested by Applicant]
- 15. <u>Fuel Sulfur Content</u>. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.]
- 16. Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9. [Requested by Applicant]
- 17. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured

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provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards. [Rule 62-297.310(1), F.A.C.]

- 18. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- 19. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 20. Applicable Test Procedures.
 - (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
 - (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit. See attachment **TABLE** 297.310-1, CALIBRATION SCHEDULE. [Rule 62-297.310(4), F.A.C.]
- 21. <u>Stack Sampling Facilities Provided by the Owner of an Emissions Unit</u>. See attachment **APPENDIX SS-1**, **STACK SAMPLING FACILITIES.** [Rule 62-297.310(6), F.A.C.]

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- 22. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
 - (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

- 23. Determination of Process Variables.
 - (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with

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emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

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

25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.

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- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge. [Rules 62-213.440 and 62-297.310(8), F.A.C.]
- 26. In order to provide information to document compliance with the fuel heat input rate limitation of Specific Condition D.1., the permittee shall monitor and maintain <u>daily record logs</u> of the following:
 - a. The natural gas fuel consumption for the turbine;
 - b. the ambient temperature to determine the maximum heat input rating of the turbine; and,
 - c. the operating hours of the turbine.

The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

27. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Miscellaneous Requirements.

- 28. <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- 29. Quarterly Progress Reports. Provide a quarterly report to the Department's Tallahassee office describing the progress made in completing construction of the new turbine during the quarter and the anticipated tasks to be completed in the upcoming quarter. The report shall be due within 30-days following the end of the quarter. [Rule 62-4.070(3), F.A.C.]
- 30. If construction of the new turbine does not commence within 18 months of the issuance of permit 0690002-012-AC, the existing cogeneration system can continue operation under the permanent restrictions cited in Section 3.E. of this permit. [Requested by Applicant]

Best Management Practices

31. <u>Best Management Practices for Carbon Monoxide</u>. Each facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer,

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equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. Each facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. Each facility shall:

- 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;
- 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
- 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
- 4. Visually check the flame characteristics once per operating shift;
- 5. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks:
- 6. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
- 7. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
- 8. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes. [Rule 62-4.070(3), F.A.C.]

NSPS REQUIREMENTS

Subpart A-General Provisions

- 32. Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)]
- 33. <u>Summary Report.</u> The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.

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

{See Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} [40 CFR 60.7(d)]

34. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)]
- 35. <u>Records Retention.</u> Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing

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measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]

- 36. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(b)]
- 37. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

38. Notification:

- (a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement. [40 CFR 60.8(d)]
- 39. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2. Safe sampling platform(s).
 - 3. Safe access to sampling platform(s).
 - 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e)]
- 40. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions

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specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f)]

- 41. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- 42. The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 43. At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- 44. <u>Credible Evidence.</u> For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g)]
- 45. <u>Circumvention.</u> No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]
- 46. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14(a)]
- 47. Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior

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to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

- (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs. [40 CFR 60.14(b)]
- 48. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source. [40 CFR 60.14(c)]
- 49. The following shall not, by themselves, be considered modifications under 40 CFR 60:
 - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
 - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
 - (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
 - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
 - (6) The relocation or change in ownership of an existing facility. [40 CFR 60.14(e)]
- 50. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section. [40 CFR 60.14(f)]
- 51. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [40 CFR 60.14(g)]

Subpart KKKK-Standards of Performance for Stationary Gas Turbines

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Emission Limits.

- 52. What emission limits must I meet for nitrogen oxides (NO_X) ?
 - (a) You must meet the emission limits for NO_X specified in Table 1 to this subpart [25 ppm at 15 percent O_2 or 150 ng/J of useful output (1.2 lb/ MWh)].
 - (b) If you have two or more turbines that are connected to a single generator, each turbine must meet the emission limits for NO_X . [40CFR60.4320]
- 53. What emission limits must I meet for sulfur dioxide (SO₂)?
 - (a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section.
 - (1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output, or
 - (2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40CFR60.4330]

General Compliance Requirements.

- 54. What are my general requirements for complying with this subpart?
 - (a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
 - (b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:
 - (1) Determine compliance with the applicable NO_X emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or
 - (2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part. [40CFR60.4333]

Monitoring.

- 55. How do I demonstrate continuous compliance for NO_X if I do not use water or steam injection?
- (a) If you are not using water or steam injection to control NO_X emissions, you must perform annual performance tests in accordance with 40CFR60.4400 to demonstrate continuous compliance. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests. [40CFR60.4340]
- 56. How can I be exempted from monitoring the total sulfur content of the fuel?

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You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb $SO_2/MMBtu$) heat input for units located in continental areas and 180 ng SO_2/J (0.42 lb $SO_2/MMBtu$) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

- (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for noncontinental areas; or
- (b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input for continental areas or 180 ng SO₂/J (0.42 lb SO₂/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of 40CFR is required. [40CFR60.4365]
- 57. How often must I determine the sulfur content of the fuel?

The frequency of determining the sulfur content of the fuel must be as follows:

- (b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in 40CFR60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.
- (c) Custom schedules. Notwithstanding the requirements of paragraph (b) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 40CFR60.4330.
 - (1) The two custom sulfur monitoring schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of this section are acceptable, without prior Administrative approval:
 - (i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable.
 - (ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.
 - (iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:
 - (A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(B) of this section.

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- (B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(C) of this section.
- (C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, continue to monitor at this frequency.
- (iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (c)(1)(ii) or (iii) of this section shall be followed.
- (2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of 40CFR to determine a custom sulfur sampling schedule, as follows:
 - (i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
 - (ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.
 - (iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iii) of this section.
 - (iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iv) of this section. [40CFR60.4370]

Reporting.

- 58. What reports must I submit?
 - (a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with 40CFR60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
 - (b) For each affected unit that performs annual performance tests in accordance with 40CFR60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40CFR60.4375]
- 59. How are excess emissions and monitoring downtime defined for SO₂?

 If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring

If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

- (a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are

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obtained. The period of monitor downtime ends on the date and hour of the next valid sample. [40CFR60.4385]

60. When must I submit my reports?

All reports required under 40CFR60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40CFR60.4395]

Performance Tests.

- 61. How do I conduct the initial and subsequent performance tests, regarding NO_X?
 - (a) You must conduct an initial performance test, as required in 40CFR60.8. Subsequent NO_X performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).
 - (1) There are two general methodologies that you may use to conduct the performance tests. For each test run:
 - (i) Measure the NO_X concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of 40CFR60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of 40CFR60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

$$E = \frac{1.194X10^{-7} * (NOX)c * Qstd}{P}$$
 (Eq. 5)

Where:

 $E = NO_X$ emission rate, in lb/MWh

 $1.194 \times 10^{-7} = \text{conversion constant}, \text{ in lb/dscf-ppm}$

 $(NOX)c = average NO_X$ concentration for the run, in ppm

Qstd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to Sec. 60.4350(f)(2); or

- (ii) Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of 40CFR60. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40CFR60 to calculate the NO_X emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40CFR60.4350(f) to calculate the NO_X emission rate in lb/MWh.
 - (2) Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially.

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Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

- (3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:
 - (i) You may perform a stratification test for NO_X and diluent pursuant to
 - (A) [Reserved], or
 - (B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of 40CFR.
 - (ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:
 - (A) If each of the individual traverse point NO_X concentrations is within \pm 10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than 5ppm or \pm 0.5 percent CO_2 (or O_2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_X concentration during the stratification test; or
 - (B) For turbines with a NO_X standard greater than 15 ppm @ 15% O_2 , you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within 5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than \pm 3ppm or \pm 0.3 percent CO_2 (or O_2) from the mean for all traverse points; or
- (b) The performance test must be done at any load condition within \pm 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.
 - (2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.
 - (4) Compliance with the applicable emission limit in 40CFR60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in Sec. 60.4320.
 - (6) The ambient temperature must be greater than 0 °F during the performance test. [40CFR60.4400]
- 62. How do I establish a valid parameter range if I have chosen to continuously monitor parameters? If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NO_X emission controls in accordance with 40CFR60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in 40CFR60.4355. [40CFR60.4410]
- 63. How do I conduct the initial and subsequent performance tests for sulfur?
 - (a) You must conduct an initial performance test, as required in 40CFR60.8. Subsequent SO₂ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

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- (1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see 40CFR60.17) for natural gas. The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
 - (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see 40CFR60.17).
- (2) Measure the SO₂ concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of 40CFR60. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses", manual methods for sulfur dioxide (incorporated by reference, see 40CFR60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of 40CFR60, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO₂ emission rate:

$$E = \frac{1.664X10^{-7} * (SO2)c * Qstd}{P}$$
 (Eq. 6)

Where:

 $E = SO_2$ emission rate, in lb/MWh 1.664 x 10^{-7} = conversion constant, in lb/dscf-ppm (SO2)c = average SO₂ concentration for the run, in ppm Qstd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to Sec. 60.4350(f)(2); or

- (3) Measure the SO_2 and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of 40CFR60. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see 40CFR60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40CFR60 to calculate the SO_2 emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40CFR60.4350(f) to calculate the SO_2 emission rate in lb/MWh.
- (b) [Reserved] [40CFR60.4415]

E. EU-007 - Existing Cogeneration System Turbine & Steam Generator

This section of the permit addresses the following emissions unit.

E.U. ID No. Brief Description

-007 Existing Cogeneration System Turbine & Steam Generator

The cogeneration system includes a Solar Centaur "H" gas turbine with a maximum heat input of 62.7 MMBtu/hr, a 4 MW electric generator, an ERI waste heat boiler, and a Coen duct burner with a maximum heat input of 99.9 MMBtu/hr. The cogeneration system began operation in 1988.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

- 1. <u>Permitted Capacity.</u> The maximum heat input to the Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the duct burner shall not exceed 99.9 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]
- 2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition 18. [Rule 62-297.310(2), F.A.C.]
- 3. Methods of Operation (i.e., Fuels). Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight, shall be fired in these units. If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the turbine shall fire only natural gas. [Requested by Applicant and Rule 62-210.200(BACT), F.A.C.]
- 4. <u>Hours of Operation.</u> This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the annual hours of operation of the turbine shall not exceed 750 hours per year and the annual operation of the duct burner shall not exceed 7,000 hours per year. [Requested by Applicant and Rule 62-210.200(BACT), F.A.C.]

Emission Limitations and Standards

- 5. <u>Particulate Matter.</u> Particulate matter emissions from the duct burner are limited by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. [Requested by Applicant]
- 6. <u>Nitrogen Oxides.</u> The maximum allowable NOx concentration from the turbine shall not exceed 168 ppmvd, corrected to 15% O₂. [Requested by Applicant]
- 7. Sulfur Dioxide. Sulfur dioxide shall be limited by firing either natural gas; or, No. 2 distillate fuel oil with a maximum 0.10 percent sulfur, by weight. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel or fuels fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. See specific conditions 14. and 15. [Requested by Applicant]

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8. <u>Visible Emissions</u>. Visible emissions from the turbine shall not exceed 10 percent opacity. Visible emissions from the duct burner shall not exceed 20 percent opacity except for one six-minute period per hour during which opacity shall not exceed 27 percent. [Requested by Applicant]

Excess Emissions

- 9. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 10. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- 11. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

- 12. <u>Particulate Matter Testing.</u> Compliance with the particulate matter limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. [Requested by Applicant]
- 13. <u>Nitrogen Oxides Testing.</u> Tests for nitrogen oxides shall be conducted using Environmental Protection Agency Method 20 or 7E. [Requested by Applicant]
- 14. <u>Sulfur Dioxide</u>. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. [Requested by Applicant]
- 15. <u>Fuel Sulfur Content</u>. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.]
- 16. <u>Opacity Testing.</u> Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9. [Requested by Applicant]
- 17. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary

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in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards. [Rule 62-297.310(1), F.A.C.]

- 18. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- 19. <u>Calculation of Emission Rate</u>. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

20. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit. See attachment **TABLE** 297.310-1, CALIBRATION SCHEDULE. [Rule 62-297.310(4), F.A.C.]
- 21. Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment APPENDIX SS-1, STACK SAMPLING FACILITIES. [Rule 62-297.310(6), F.A.C.]

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- 22. <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - (a) General Compliance Testing.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit
 - 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
 - (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations

- 23. Determination of Process Variables.
 - (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with

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emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Recordkeeping and Reporting Requirements

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

25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.

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- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge. [Rules 62-213.440 and 62-297.310(8), F.A.C.]
- 26. In order to provide information to document compliance with the fuel heat input rate limitation of Specific Condition D.1., the permittee shall monitor and maintain <u>daily record logs</u> of the following:
 - a. The natural gas fuel consumption for the turbine;
 - b. the ambient temperature to determine the maximum heat input rating of the turbine; and,
 - c. the operating hours of the turbine.

The logs shall be maintained on file and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

27. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

Miscellaneous Requirements.

- 28. <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]
- 29. The sale of electrical output generated by the Gas Turbine/Heat Recovery Steam Generator unit shall not exceed one third (33.3%) of the total annual electrical output based on a 12 month rolling average. (This limitation is necessary to insure that this source (emission unit) is not considered an electric utility gas turbine under Subpart GG 40 CFR 60.331(q).) [Rule 62-204.800(7)(b)39, F.A.C. and 40 CFR 60.331(q)]
- 30. If construction of the new turbine addressed in the preceding subsection does not commence within 18 months following issuance of permit 0690002-012-AC, the permittee is restricted from using any emissions reductions resulting from the reduced hours of operation or the fuel restriction as emissions offsets for any future projects. [Rule 62-212.400(12), F.A.C.]

Best Management Practices

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- 31. Best Management Practices for Carbon Monoxide. Each facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. Each facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. Each facility shall:
 - 1. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;
 - 2. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
 - 3. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
 - 4. Visually check the flame characteristics once per operating shift;
 - 5. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks:
 - 6. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
 - 7. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
 - 8. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes. [Rule 62-4.070(3), F.A.C.]

NSPS REQUIREMENTS

Subpart A-General Provisions

- 32. Quarterly Report. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance reports to the Administrator semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
 - 1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - 2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - 4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)]

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- 33. <u>Summary Report.</u> The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored.
 - 1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
 - 2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
 - {See Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} [40 CFR 60.7(d)]

34. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;
 - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)]

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- 35. Records Retention. Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]
- 36. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(b)]
- 37. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

38. Notification:

- (a) The owner or operator shall provide to the Administrator at least 30 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement. [40 CFR 60.8(d)]
- 39. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2. Safe sampling platform(s).
 - 3. Safe access to sampling platform(s).
 - 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e)]

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- 40. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f)]
- 41. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). [40 CFR 60.11(b)]
- 42. The opacity standards set forth in this part apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- 43. At all times, including periods of start-up, shutdown, and malfunction owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- 44. <u>Credible Evidence.</u> For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g)]
- 45. <u>Circumvention.</u> No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]
- 46. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14(a)]

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- 47. Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs. [40 CFR 60.14(b)]
- 48. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source. [40 CFR 60.14(c)]
- 49. The following shall not, by themselves, be considered modifications under 40 CFR 60:
 - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
 - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
 - (4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
 - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
 - (6) The relocation or change in ownership of an existing facility. [40 CFR 60.14(e)]
- 50. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section. [40 CFR 60.14(f)]
- 51. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [40 CFR 60.14(g)]

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Subpart GG-Standards of Performance for Stationary Gas Turbines

Standard for Nitrogen Oxides.

- 52. On and after the date of the performance test required by 40 CFR 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs 40 CFR 60.332(b), (c), and (d) shall comply with one of the following, except as provided in paragraphs 40 CFR 60.332(e), (f), (g), (h), (i), (j), (k), and (l).
 - (2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 (14.4)/Y + F$$

where:

STD=allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis). Y=manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F=NOx emission allowance for fuel-bound nitrogen as defined in paragraph 40 CFR 60.332(a)(3).

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \le 0.015$	þ
$0.015 < N \le 0.1$	0.04(N)
$0.1 \le N \le 0.25$	0.004+0.0067(N-0.1)
N > 0.25	0.005

where:

N=the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 CFR 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register. [40 CFR 60.332(a)]

53. Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph 40 CFR 60.332(a)(2). [40 CFR 60.332(c)]

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- 54. Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in 40 CFR 60.332(b) shall comply with paragraph 40 CFR 60.332(a)(2). [40 CFR 60.332(d)]
- 55. Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph 40 CFR 60.332(a). [40 CFR 60.332(e)]
- 56. Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph 40 CFR 60.332(a)(2) when being fired with an emergency fuel. [40 CFR 60.332(k)]

Standard for Sulfur Dioxide.

- 57. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:
 - (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.

40 CFR 60.333

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight. [40 CFR 60.333]

Monitoring of Operations.

- 58. The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NOx emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Administrator. [40 CFR 60.334(a)]
- 59. The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
 - (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph 40 CFR 60.334(b). [40 CFR 60.334(b)]
- 60. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

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- (1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
- (2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent. [40 CFR 60.334(c)]

Test Methods and Procedures.

- 61. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired. [40 CFR 60.335(a)]
- 62. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335 (f). [40 CFR 60.335(b)]
- 63. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 40 CFR 60.333(a) as follows:
 - (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

$$NO_X = (NO_{XO}) (P_r/P_O)^{0.5} e^{19(H_O - 0.00633)} (288 \text{ K/T}_a)^{1.53}$$

where:

NOx=emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent. NOxo=observed NOx concentration, ppm by volume.

Pr=reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg. Po=observed combustor inlet absolute pressure at test, mm Hg.

Ho=observed humidity of ambient air, g H2O/g air.

e=transcendental constant, 2.718.

Ta=ambient temperature, K.

- (2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx

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emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section. [40 CFR 60.335(c)]

- 64. The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. [40 CFR 60.335(d)]
- 65. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs 40 CFR 60.335(a) and (d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. [40 CFR 60.335(e)]
- 66. The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
 - (1) Instead of using the equation in 40 CFR 60.335 (b)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register. [40 CFR 60.335(f)]

SECTION 4. APPENDICES

APPENDIX GC

GENERAL PERMIT CONDITIONS [RULE 62-4.160, F.A.C.]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and.
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

- The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
 - (a) Determination of Best Available Control Technology (X);
 - (b) Determination of Prevention of Significant Deterioration (X); and
 - (c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information, required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

TABLE 297.310-1 CALIBRATION SCHEDULE (version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- (a) <u>Permanent Test Facilities</u>. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- (b) <u>Temporary Test Facilities</u>. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

- 1. All sampling ports shall have a minimum inside diameter of 3 inches.
- 2. The ports shall be capable of being sealed when not in use.
- 3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
- 3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
- 4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

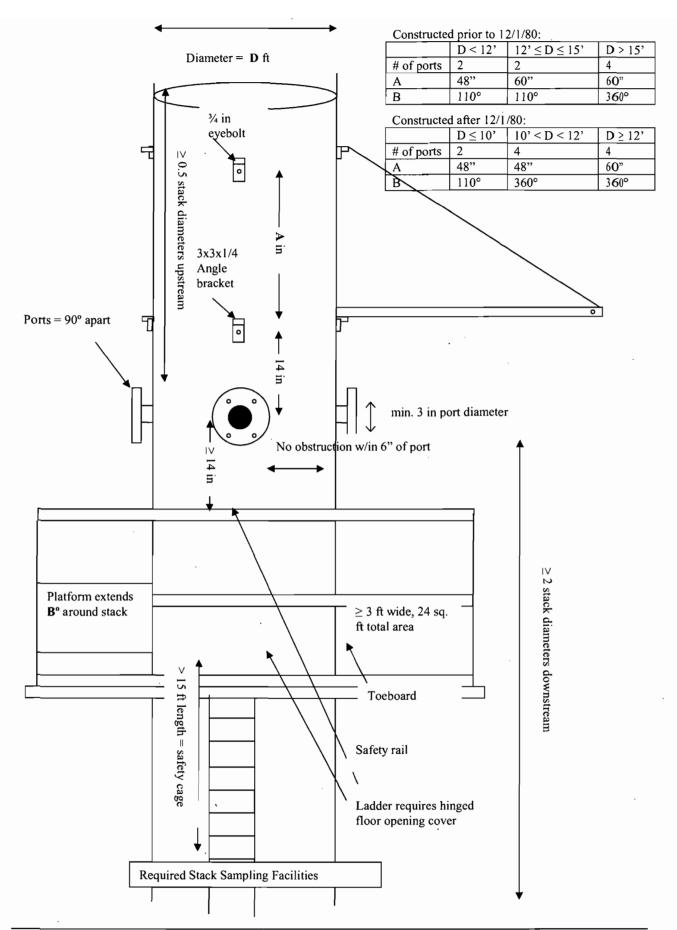
(f) Electrical Power.

- 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- (g) Sampling Equipment Support.

SECTION 4. APPENDICES

- 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - a. The bracket shall be a standard 3 inch \times 3 inch \times one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
- 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]



ATTACHMENT CL-FI-C2 COMPLIANCE DEMONSTRATION REPORTS/NOTIFICATIONS

ATTACHMENT CL-FI-C2 Compliance Demonstration Reports/Records

Test Methods and Procedures					
Permit Condition	Description	Method or means used to determine compliance	Compliant/ non- compliant		
12	Particulate Matter Testing. Compliance with the particulate matter limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. [Requested by Applicant]	Fuel sampling, see Attachment A.	In compliance		
13	Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted annually using Environmental Protection Agency Method 20 or 7E. [Requested by Applicant]	Method 20 conducted on 1/28/11; see Attachment B.	In compliance		
14	Sulfur Dioxide. Compliance with the sulfur dioxide limit is demonstrated by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. [Requested by Applicant]	Fuel sampling, see Attachment A.	In compliance		
15	Fuel Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.]	Fuel sampling, see Attachment A.	In compliance		
16	Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9. [Requested by Applicant]	Method 9 conducted on 1/28/11; see Attachment B.	In compliance		
	Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards. [Rule 62- 297.310(1), F.A.C.]	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance		

	EU-009 New Congeneration System Turbine & Existing Ste	am Generator	
18	Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance
19	19. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance
20	Applicable Test Procedures. (a) Required Sampling Time. 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows: c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes. (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit. See attachment TABLE 297.310-1, CALIBRATION SCHEDULE. [Rule 62-297.310(4), F.A.C.]	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance
21	Stack Sampling Facilities Provided by the Owner of an Emissions Unit. See attachment APPENDIX SS-1, STACK SAMPLING FACILITIES. [Rule 62-297.310(6), F.A.C.]	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance

Permit No. 0690002-012-AC Permit No. 0690002-014-AC

	EU-009 New Congeneration System Turbine & Existing Steam Generator							
the focation of the contract o	Test Methods and Procedures Tequency of Compliance Tests. The following provisions apply only to hose emissions units that are subject to an emissions limiting standard or which compliance testing is required. a) General Compliance Testing. b) The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that temonstrates compliance with the applicable emission limiting standard shall conduct a compliance test that temonstrates compliance with the applicable emission limiting standard rior to obtaining a renewed operation permit. Emissions units that are equired to conduct an annual compliance test may submit the most ecent annual compliance test to satisfy the requirements of this rovision. In renewing an air operation permit pursuant to Rule 62-101.0300(2)(a)3.b., c., or d., F.A.C., the Department shall not require ubmission of emission compliance test results for any emissions unit nat, during the year prior to renewal: Did not operate; or In the case of a fuel burning emissions unit, burned liquid and/or olid fuel for a total of no more than 400 hours. During each federal fiscal year (October 1 - September 30), unless therwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test once er each five-year period, coinciding with the term of its air operation ermit 9. The owner or operator shall notify the Department, at least 15 ays prior to the date on which each formal compliance test is to begin, fit he date, time, and place of each such test, and the test contact erson who will be responsible for coordinating and having such test onducted for the owner or operator. D) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible missions or questionable maintenance of control equipment) to elieve that any applicable emission standard contained in a lepartment rule or in a permit issued pursuant to those rules is be	Compliance testing conducted on 1/28/11; see Attachment B.	In compliance					

ATTACHMENT A FUEL SAMPLING

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information provided. his information is provided on a best efforts basis and is an estimate.

he information is not used for billing purposes.

Florida Gas is not responsible for any reliance on this information by any party.

Stream Histo	ry	Perry 36" Stream #1		Perry 30" Stream #2		Perry 24" Stream #3		
	FGT.UIS.GMF	PATE NAME OF THE PATE N		INFERRYSO A		INPERRYON	FGT.UIS.ORG	
State of the last of		Avg		Avg		Avg		Avg
Gas Day	Avg ppm	Grains/hcf	Avg ppm	Grains/hcf	Avg ppm	Grains/hcf	Avg ppm	Grains/hcf
04/26/2011	0.579	0.036	0.609	0.038	0.821	0.051	2.895	0,181
04/25/2011	0.684	0.043	0.996	0.062	0.967	0.060	2.828	0.177
04/24/2011	0.635	0.040	1.026	0.064	0.983	0.061	3.095	0.193
04/23/2011	0.626	0.039	0.956	0.060	0.914	0.057	3.121	0.195
04/22/2011	0.502	0.031	1.042	0.065	1.000	0.062	3.140	0.196
04/21/2011	0.520	0.032	1.000	0.063	0.959	0.060	3.270	0.204
04/20/2011	0.495	0.031	1.047	0.065	1.001	0.063	3.505	0.219
04/19/2011	0.407	0.025	1.055	0.066	1.008	0.063	3.690	0.231
04/18/2011	0.325	0.020	1.197	0.075	1.165	0.073	3.338	0.209
04/17/2011	0.273	0.017	0.920	0.057	0.897	0.056	2.856	0.179
04/16/2011	0.348	0.022	0.969	0.061	0.989	0.062	3.043	0.190
04/15/2011	0.295	0.018	1.017	0.064	1.003	0.063	3.396	0.212
04/14/2011	0.229	0.014	0.802	0.050	0.798	0.050	3.244	0.203
04/13/2011	0.200	0.013	0.827	0.052	0.810	0.051	2.688	0.168
04/12/2011	0.221	0.014	0.901	0.056	0.913	0.057	2.410	0.151
04/11/2011	0.126	0.008	0.694	0.043	0.789	0.049	3.114	0.195
04/10/2011	0.117	0.007	0.869	0.054	0.886	0.055	3.742	0.234
04/09/2011	0.130	0.008	0.732	0.046	0.762	0.048	3.498	0.219
4/08/2011	0.159	0.010	0.730	0.046	0.722	0.045	3.001	0.188
04/07/2011	0.195	0.012	1.078	0.067	1.140	0.071	0.683	0.043
04/06/2011	0.192	0.012	1.177	0.074	1.230	0.077	2.522	0.158
04/05/2011	0.163	0.010	0.966	0.060	1.028	0.064	0.615	0.038
04/04/2011	0.082	0.005	1.557	0.097	1.620	0.101	0.615	0.038
04/03/2011	0.103	0.006	1.419	0.089	1.405	0.088	0.615	0.038
04/02/2011	0.391	0.024	1.088	0.068	1.060	0.066	0.615	0.038
04/01/2011	0.298	0.019	1.222	0.076	1.204	0.075 0.073	0.615	0.038
03/31/2011	0.289	0.019	1.185 1.265	0.074	1.166 1.254		0.615	0.038
03/30/2011	0.269	0.018 0.021	1.583	0.079 0.099	1.561	0.078	0.615 0.615	0.038
	0.264	0.021	1.542	0.096	1.497		0.615	0.038
03/28/2011 03/27/2011	0.210	0.013	1.480	0.093	1.577	0.094	0.615	0.038
03/26/2011	0.098	0.013	1.081	0.068	1.091	0.099	0.615	0.038
03/25/2011	0.245	0.000	1.383	0.086	1.442	0.090	0.615	0.038
03/24/2011	0.189	0.013	1.434	0.090	1.408	0.090		0.038
03/23/2011	0.264	0.012	1.362	0.085	1.337	0.084	0.615	0.038
03/22/2011	0.286	0.018	1.499	0.094	1.477	0.084	0.615	0.038
03/21/2011	0.304	0.019	1.460	0.091	1.588	0.099	0.615	0.038
03/20/2011	0.233	0.015	0.840	0.052	1.426	0.089	0.615	0.038
03/19/2011	0.334	0.021	1.132	0.071	1.487	0.093	0.615	0.038
03/18/2011	0.336	0.021	1.607	0.100	1.581	0.099	0.615	0.038
03/17/2011	0.357	0.022	1.561	0.098	1.518	0.095	0.615	0.038
03/16/2011	0.394	0.025	1.605	0.100	1.719	0.107	0.615	0.038
03/15/2011	0.373	0.023	1.702	0.106	1.607	0.100	0.615	0.038
03/14/2011	0.445	0.028	1.275	0.080	1.297	0.081	0.615	0.038
03/13/2011	0.418	0.026	1.192	0.075	1.241	0.078	0.615	0.038
3/12/2011	0.377	0.024	1.130	0.071	1.226	0.077	0.615	0.038
o3/11/2011	0.430	0.027	1.117	0.070	1.177	0.074	0.615	0.038
03/10/2011	0.446	0.028	1.080	0.067	1.108	0.069	0.615	0.038
03/09/2011	0.462	0.029	1.336	0.084	1.370	0.086	0.615	0.038
03/08/2011	0.573	0.036	1.600	0.100	1.571	0.098	0.615	0.038
03/07/2011	0.611	0.038	1.667	0.104	1.647	0.103	0.615	0.038
	-70.1	0.000		001		050		

Stream History

Perry 36"
Stream #1

Perry 30"
Stream #2

Perry 24"
Stream #3

Gas Day	Avg ppm	Avg Grains/hcf						
03/06/2011	0.586	0.037	1,661	0.104	1,666	0.104	0.615	0.038
03/05/2011	0.697	0.044	2.668	0.167	2.706	0.169	0.615	0.038
03/04/2011	1.062	0.066	3.335	0.208	3.242	0.203	0.615	0.038
03/03/2011	0.852	0.053	2.088	0.131	2.025	0.127	0.030	0.002
03/02/2011	0.535	0.033	1.545	0.097	1.545	0.097	0.030	0.002
03/01/2011	0.509	0.032	1.608	0.100	1.622	0.101	0.030	0.002
02/28/2011	0.425	0.027	1.552	0.097	1.521	0.095	0.428	0.027
02/27/2011	0.551	0.034	1.597	0.100	1.582	0.099	0.034	0.002
02/26/2011	0.416	0.026	1.570	0.098	1.536	0.096	0.775	0.048
02/25/2011	0.354	0.022	1.267	0.079	1.231	0.077	0.775	0.048
02/24/2011	0.292	0.018	1.082	0.068	1.104	0.069	0.775	0.048
02/23/2011	0.281	0.018	1.211	0.076	1.531	0.096	0.023	0.001
02/22/2011	0.286	0.018	1.043	0.065	1.839	0.115	0.030	0.002
02/21/2011	0.307	0.019	0.911	0.057	1.916	0.120	0.031	0.002
02/20/2011	0.349 0.359	0.022	0.941	0.059	1.625	0.102 0.088	0.033	0.002
02/19/2011	0.508	0.022	0.804 1.521	0.050	1.405 1.579		0.019	0.001 0.074
02/18/2011 02/17/2011	0.308	0.032 0.027	1.741	0.095 0.109	1.762	0.099 0.110	1.178 3.284	0.074
02/16/2011	0.506	0.027	1.615	0.109	1.589	0.110	2.579	0.203
02/15/2011	0.623	0.032	1.592	0.101	1.609	0.099	2.379	0.101
02/14/2011	0.875	0.055	1.399	0.087	1.509	0.094	2.270	0.142
02/13/2011	0.748	0.047	1.151	0.072	1.314	0.082	1.345	0.084
2/12/2011	0.725	0.045	1.010	0.063	1.097	0.069	1.221	0.076
2/11/2011	0.730	0.046	1.484	0.093	1.515	0.095	1.192	0.075
02/10/2011	0.554	0.035	1.347	0.084	1.365	0.085	0.022	0.001
02/09/2011	0.490	0.031	1.431	0.089	1.464	0.091	0.041	0.003
02/08/2011	0.444	0.028	1.574	0.098	1.601	0.100	0.518	0.032
02/07/2011	0.331	0.021	1.484	0.093	1.509	0.094	1.871	0.117
02/06/2011	0.334	0.021	1.216	0.076	1.213	0.076	1.993	0.125
02/05/2011	0.366	0.023	1.101	0.069	1.106	0.069	2.263	0.141
02/04/2011	0.365	0.023	1.067	0.067	1.083	0.068	2.248	0.141
02/03/2011	0.359	0.022	1.389	0.087	1.418	0.089	1.800	0.112
02/02/2011	0.338	0.021	1.251	0.078	1.626	0.102	1.887	0.118
02/01/2011	0.339	0.021	0.788	0.049	1.312	0.082	2.226	0.139
01/31/2011	0.373	0.023	0.786	0.049	0.990	0.062	1.776	0.111
01/30/2011	0.445 0.443	0.028	0.506	0.032	0.642	0.040	1.387	0.087
01/29/2011 01/28/2011	0.443	0.028 0.026	1.062 1.249	0.066		0.080		0.106 0.126
01/28/2011	0.409	0.026	0.998	0.078	1.052	0.078		0.126
01/26/2011	0.342	0.021	1.298	0.082	1.345	0.084	1.618	0.124
01/25/2011	0.434	0.023	1.849	0.061	1.774	0.064	2.268	0.101
01/24/2011	0.436	0.027	0.925	0.058	0.947	0.059		0.131
01/23/2011	0.394			0.050		0.059		0.082
01/22/2011	0.779			0.089		0.095		0.096

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	IC6	IC7	IC8	C9	Wobbe	CHDP
4/25/2011	1014	1.373	0.372	0.581	96.367	1.623	0.162	0.031	0.033	0.011	0.006	0.011	0.008		0		-16
4/24/2011	1014	1.383	0.384	0.581	96,498	1.427	0.185	0.038	0.039	0.013	.0,007	0.012	0.009		0		-13
4/23/2011	1013	1.4	0.401	0.581	96.434	1,468	0.179	0.035	0.036	0.013	0.007	0.013	0.009		0		-12
4/22/2011	1014	1.403	0.39	0.581	96,375	1.547	0.173	0.034	0.034	0.012	0.007	0.012	0.009		ō		-14
4/21/2011	1013	1.425	0.39	0.581	96.477	1.421	0.173	0.035	0.035	0.012	0.007	0.012	0.009	0.004	0		-13
4/20/2011	1013	1,431	0.379		96,495	1,404	0.173	0.036	0.036	0.013	0.007	0.012	0.009		Ö		-13
4/19/2011	1013	1.398	0.384	0.581	96.48	1.45	0.172	0.036	0.036	0.013	0.007	0.012	0.009		0		-14
4/18/2011	1015	1.353	0.396	0.581	96.371	1.604	0.166	0.033	0.033	0.011	0.007	0.012	0.009		0		-13
4/17/2011	1014	1.414	0.406	0.582	96.354	1.516	0.186	0.037	0.038	0.013	0.007	0.013	0.01	0.005			-11
4/16/2011	1014	1.413	0.4	0.582	96.352	1.529	0.184	0.037	0.038	0.013	0.008		0.009				-12
4/15/2011	1014	1.395	0:416	0.582	96.279	1.631	0.172	0.033	0.033	0.011	0.006		0.009		0		-15
4/14/2011	1013	1.394	0.406		96.408	1,508	0.173	0.034	0.033	0.011	0.006				0		-13
4/13/2011	1014	1.392	0.398	0.581	96.428	1.496	0.174	0.034	0.033	0.012							
4/12/2011	1013	1.417	0.406	0.581	96.415	1.476	0.172	0.034	0.035	0.012			0.009				-12
4/11/2011	1013	1.423	0.417	0.581	96.377	1.493	0.176	0.035	0.035	0.012		0.012	0.009		0		-14
4/10/2011	1014	1.423	0.403	0.582	96.294	1.56	0.2	0.038	0.038	0.012		0.012	0.009		0		-14
4/9/2011	1014	1.336	0.368		96.501	1.522	0.162	0.033	0.034	0.012					ō		-14
4/8/2011	1015	1,314	0.375	0.58	96.509	1.513	0.169	0.036	0.036	0.013	0.007	0.013	0.01	0.005	. 0	1332	-11
4/7/2011	1013	1.327	0.397	0.58	96.601	1.391	0.168	0.035	0.035	0.013							-12
4/6/2011	1015	1.268	0.379	0.58	96.661	1.392	0.174	0.037	0.037	0.013	0.007	0.015	0.011	0.005	0	1333	-8
4/5/2011	1015	1.269	0.368	0.579	96.68	1.379	0.175	0.039	0.037	0.014	0.008	0.014	0.01	0.005	0	1333	-10
4/4/2011	1016	1,221	0.387	0.58	96.503	1.583	0.182	0.039	0.038	0.013	0.007	0.012	0.009	0.004	0	1335	-13
4/3/2011	1017	1.239	0.356	0.58	96.383	1.767	0.155	0.031	0.03	0.01	0.005	0.011	0.008	0.004	0	1335	-15
4/2/2011	1016		0.393	0.58	96.398	1.681	0.164	0.032	0.031	0.01	0.005	0.011	0.008	0.004	. 0	1333	-16
4/1/2011	1014	1.249	0.407	0.579	96.6	1.469	0.167	0.033	0.032	0.011	0.006	0.012	0.009	0.004	0		-15
3/31/2011	1014	1.25	0.411	0.579	96.593	1.48	0.165	0.032	0.032	0.01	0.005	0.011	0.008	0.004	0	1333	-17
3/30/2011	1014	1.267	0.416	0.579	96.599	1.446	0.171	0.033	0.033	0.01	0.006	0.009	0.007	0.003	0	1332	-21
3/29/2011	1014	1.277	0.379	0.579	96.707	1.366	0.165	0.034	0.033	0.011	0.006	0.011	0.008	0.004	0	1332	-17
3/28/2011	1014	1.278	0.378	0.579	96.717	1.358	0.162	0.033	0.033	0.011	0.006	0.012	0.009	0.004	0	1332	-15
3/27/2011	1014	1.279	0.379	0.579	96.714	1.357	0.163	0.033	0.033	0.011	0.006	0.012	0.009	0.004	0	1332	-14
3/26/2011	1014	1.306	0.392	0.58	96.6	1.407	0.178	0.036	0.036	0.012	0.007	0.013	0.009	0.005	0	1332	-12
3/25/2011	1014	1.3	0.393	0.58	96.576	1.431	0.181	0.037	0.037	0.012	0.007	0.012	0.009	0.005	0	1332	-13
3/24/2011	1014	1.304	0.401	0.58	96.549	1.441	0.184	0.038	0.037	0.012	0.007	0.013	0.01	0.005	0	1332	-12
3/23/2011	1014	1.281	0.392	0.58	96.625	1.406	0.182	0.038	0.037	0.013	0.007	0.009	0.006	0.003	0	1332	-21
3/21/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
3/20/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
3/19/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006			-5
3/18/2011	101 <u>6</u>		0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006			-5
3/17/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	. 0.012	0.006			-5
3/16/2011	1016		0.387	0.58	96.541	1.487	0.18	0.038	. 0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
3/15/2011	101 <u>6</u>		0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013							
3/14/2011	101 <u>6</u>		0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013							
3/13/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007			0.006			-5
3/12/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0		-5
3/11/2011	1016		0.387	0.58		1.487	0.18	0.038			0.007						-5
3/10/2011	1016		0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02					
3/9/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5

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Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	C8	C9	Wobbe	CHDP
3/8/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0		
3/7/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
3/6/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0		
3/5/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0		
3/4/2011	1016	1.256	0.386	0.58	96.539	1.49	0.179	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0		
3/3/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
3/2/2011	1016	1.256	0.386	0.58	96.539	1.49	0.179	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	
3/1/2011	1018	1.197	0.363	0.58	96.469	1.665	0.17	0.036	0.034	0.012	0.007	0.017	0.01	0.005	0	1336	-9
2/28/2011	1016	1.257	0.387	0.58	96.541	1.487	0.18	0.038	0.036	0.013	0.007	0.02	0.012	0.006	0	1334	-5
2/27/2011	1017	1.258	0.374	0.581	96.475	1.524	0.208	0.047	0.042	0.017	0.008	0.02	0.012	0.006	0	1335	-4
2/26/2011	1016	1.267	0.372	0.58	96.594	1.441	0.185	0.041	0.038	0.014	0.008	0.02	0.012	0.006	0	1334	-5
2/25/2011	1017	1.214	0.374	0.58	96.522	1.586	0.171	0.035	0.034	0.012	0.007	0.018	0.011	0.005	0	1335	-8
2/24/2011	1018	1.222	0.376	0.581	96.343	1.758	0.178	0.036	0.034	0.011	0.006	0.016	0.01	0.005	0	1336	-11
2/13/2011	1017	1.234	0.441	0.581	96.321	1.643	0.218	0.045	0.043	0.015	0.008	0.015	0.011	0.005	0	1334	-8
2/12/2011	1017	1.236	0.427	0.581	96.383	1.596	0.219	0.045	0.042	0.014	0.008	0.014	0.01	0.005	0	1334	-10
2/11/2011	1018	1,2	0.418	0.581	96.412	1.609	0.223	0.045	0.043	0.015	0.006	0.013	0.01	0.005	0	1335	-11
2/10/2011	1018	1.166	0.413	0.581	96.429	1.631	0.219	0.046	0.046	0.018	0	0.016	0.012	0.006	0	1336	-7
2/9/2011	1018	1.166	0.413	0.581	96.429	1.631	0.219	0.046	0.046	0.018	0	0.016	0.012	0.006	0	1336	-7
2/7/2011	1016	1.191	0.428	0.58	96.548	1.503	0.209	0.042	0.041	0.013	0	0.012	0.009	0.004	0	1334	-15
2/6/2011	1015	1.185	0.417	0.579	96.714	1.387	0.186	0.038	0.037	0.012	0.001	0.011	0.009	0.004	0	1334	-15
2/5/2011	1015	1.144	0.408	0.578	96.825	1.339	0.178	0.037	0.035	0.012	0.001	0.01	0.008	0.004	0	1335	-18
2/4/2011	1015	1.088	0.377	0.577	96.973	1.279	0.172	0.037	0.036	0.012	0.001	0.012	0.009	0.004	0	1336	-13
2/3/2011	1016	1.095		0.578	96.856	1.352	0.185	0.038	0.038	0.013	0.002	0.012	0.009	0.004	0	1336	-14
2/2/2011	1016	1.117	0.409	0.578	96.749	1.425	0.185	0.038	0.038	0.013	0.001	0.012	0.009	0.004	0	1336	-14
2/1/2011	1016	1.156	0.416	0.579	96.677	1.433	0.195	0.04	0.04	0.014	0.002	0.013	0.01	0.005	0	1335	-12
1/31/2011	1015	1.157	0.443	0.579	96.644	1.448	0.193	0.038	0.038	0.013	0.002	0.012	0.009	0.004	0	1335	-14
1/30/2011	1016	1.142	0.448	0.579	96.606	1.49	0.196	0.038	0.038	0.013	0.003	0.012	0.009	0.004	0	1335	-14
1/29/2011	1015	1.155		0.579	96.638	1.439	0.195	0.038	0.038	0.012	0.004	0.012	0.009	0.004	0	1334	-14
1/28/2011	1015	1.138	0.445	0.579	96.689	1.417	0.191	0.038	0.037	0.013	0.005	0.013	0.009	0.005	0	1335	-12
1/27/2011	1015	1.161	0.441	0.579	96.642	1.444	0.194	0.038	0.037	0.013	0.004	0.012	0.009	0.004	0	1334	-13
1/26/2011	1016	1.17	0.44	0.579	96.597	1.469	0.198	0.039	0.038	0.014	0.008	0.013	0.009	0.005	0	1335	-12
1/25/2011	1015	1.113	0.433	0.579	96.729	1.403	0.19	0.039	0.036	0.016	0.01	0.014	0.011	0.006	0	1336	-7
1/24/2011	1015	1.227	0.47	0.581	96.436	1.542	0.196	0.038	0.037	0.016	0.01	0.013	0.01	0.005	0	1333	-10
1/23/2011	1015	1.189		0.58	96.479	1.542	0.195	0.039	0.038	0.017	0.011	0.015	0.01	0.005	0	1334	-10
1/22/2011	1015	1,222	0.414	0.58	96.589	1.451	0.198	0.041	0.039	0.018	0	0.013	0.01	0.005	0	1334	-11
1/21/2011	. 1015	1.222	0.414	0.58	96.589	1.451	0.198		0.039	0.018	0	0.013	0.01	0.005	0	1334	-11
1/20/2011	1015	1.222	0.414	0.58	96.589	1.451	0.198	0.041	0.039	0.018			0.01	0.005	0	1334	
1/19/2011	1015	1.222	0.414	0.58	96.589	1.451	0.198	0.041	0.039	0.018			0.01	0.005	0	1334	
1/18/2011	1016	1.219		0.58	96:593	1.451	0.197	0.042	0.04	0.016	0.004	0.013	0.01	0.005	0	1334	-11
1/17/2011	1015	1.289		0.58	96.438	1.545	0.183		0.036	0.012	0.006	0.011	0.008	0.004	0	1332	-16
1/16/2011	1016	1.242	0.419	0.58	96.434	1.619	0.179	0.035	0.034	0.012	0.004	0.011	0.008	0.004	0	1333	-16
1/15/2011	1017	1.192	0.412	0.58	96.435	1.68	0.176	0.034	0.034	0.011	0.004	0.011	0.008	0.004	0	1335	-16
1/14/2011	1017	1.199	0.408	0.581	96.427	1.619	0.19	0.04	0.039	0.016	0.009	0.014	0.011	0.005	0	1335	-9

ATTACHMENT B
COMPLIANCE TEST REPORT

AIR COMPLIANCE TEST REPORT

PERMIT NO. 0690002-013-AV EU ID: 007

COMBINED CYCLE GAS TURBINE

CUTRALE CITRUS JUICES USA, INC.

LEESBURG, FLORIDA

JANUARY 28, 2011

ATC



AIR TESTING & CONSULTING

333 FALKENBURG ROAD, SUITE B-214 TAMPA, FLORIDA 33619

ATC



AIR TESTING & CONSULTING

333 FALKENBURG ROAD, SUITE B-214 TAMPA, FLORIDA 33619

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

Kenneth E. Given, P.E.

Date

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1.0 INTRODUCTION

1.0 INTRODUCTION

On January 28, 2011, Air Testing & Consulting, Inc. conducted compliance testing on the combined cycle gas turbine generator at the Cutrale Citrus Juices, USA facility located in Leesburg, Lake County, Florida:

- 1) Oxides of Nitrogen (NOx) (EPA Method 20)
- 2) Oxygen (O₂) (EPA Method 3A)
- 3) Visible Emissions (EPA Method 9)

These tests were performed to meet compliance specifications of Permit Numbers 0690002-013-AV and to determine if this facility was operating within the limits of compliance as per requirements of the Florida Department of Environmental Protection (FDEP).

Testing by EPA Method 20 (NOx) was conducted using a Thermo-Electron Model 42 C Chemiluminescent NOx Analyzer. EPA Method 3A (O₂) was determined using a Teledyne Model 320 oxygen analyzer.

2.0 SUMMARY OF RESULTS

2.0 SUMMARY OF RESULTS

The combined cycle gas turbine generator system was found to be operating within the emission compliance limits for NOx. Results of the tests are provided in Table I. NOx emissions averaged 7.95 ppmv at 15% O₂, ISO ambient conditions. The allowable emission concentration is 25 ppmvd @ 15% O₂.

The observed NOx ppmv values were first adjusted to 15% oxygen and then to ISO ambient conditions using the following equation:

NOx Corrected to ISO Ambient Conditions

 $NOx = (NOx_0) [P_R/P_0] 0.5 e^{19(H_0 - 0.00633)} [288^{\circ}K/T_{AMB}]^{1.53}$

Where NOx = concentration of NOx at 15% O2 and ISO ambient conditions, ppmv

P_R = reference combuster inlet absolute pressure at 101.3 kilopascals ambient pressure, in Hg

P_O = measured combuster inlet absolute pressure at test ambient pressure
(Actual barometric pressure, in Hg, used)

Ho = specific humidity of ambient air, gm H₂O/gm air

e = 2.718

T_{AMB} = temperature of ambient air at test, ^OK

The total mass emission rate in pounds per hour (lbs/hr) was determined using a stack material balance based on gas usage and stack emissions measured concurrently with the NOx testing. The average for NOx emissions was 1.581 lbs/hr with NOx emissions in pounds per heat input calculated to be 0.027 lbs per

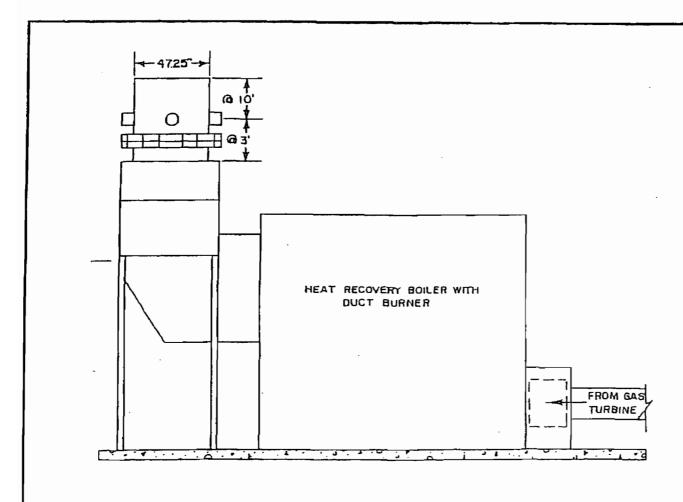
million BTU (lbs/MMBTU). Visible Emissions (VE), for the highest six-minute period, averaged 0% opacity. Since each unit was fired on natural gas, there was no check for SO₂ emissions. Visible Emissions (VE) on Boiler #4, highest six-minute period, averaged 0% opacity.

3.0 PROCESS DESCRIPTION AND OPERATION

3.0 PROCESS DESCRIPTION AND OPERATION

The unit is a 4 MW generation system consisting of a Solar Centaur "H" combined cycle gas turbine generator; an ERI waste heat boiler to produce 23,000 lbs/hr of 240 psig saturated steam utilizing the heat from the turbine exhaust; and a Coen duct burner to increase the steam production to 99.9M lbs/hr. The turbine is normally fired on natural gas but can also be fired on No. 2 fuel oil. The duct burner is normally fired on natural gas but can also be fired on No. 6 fuel oil.

4.0 SAMPLING POINT LOCATION



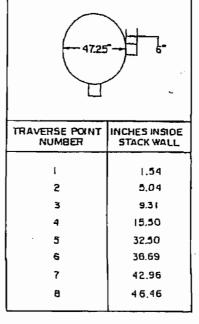


FIGURE I - SAMPLING POINT SCHEMATIC GAS TURBINE SYSTEM

5.0 FIELD AND ANALYTICAL PROCEDURES

5.0 FIELD AND ANALYTICAL PROCEDURES

The sampling train is shown in Figure 2. A sample was drawn from the stack at approximately 5 SCFH. A heated stainless steel probe and filter assembly was followed by a three-way stainless steel motorized valve. Immediately following the valve was an ice cooled knock-out bottle which allowed condensation and removal of stack gas moisture without the opportunity for potential reaction (NOx absorption) with the stack gases. The sample was pumped through a heated 3/8" O.D. Teflon sampling line approximately 100' long to instrumentation near the bottom of the stack. Calibration gases were introduced at the sampling interface (the three-way valve) through another 3/8" O.D. Teflon heated line. The calibration gas cylinders were also housed near the bottom of the stack.

Gases are induced through a sample pump with Teflon diaphragm to a sample manifold. One stream was directed to a Thermo Electron Model 42C Chemiluminescent Analyzer, converted to nitric oxide, reacted with ozone, and a chemiluminescent response measured by a photomultiplier. A second stream was directed through a Teledyne Model 320 oxygen analyzer. A third stream was dumped to ambient air. All instrument responses were recorded on strip chart recorders.

All calibration gases were certified NBS traceable. Quality assurance procedures and results are provided in the Appendices.

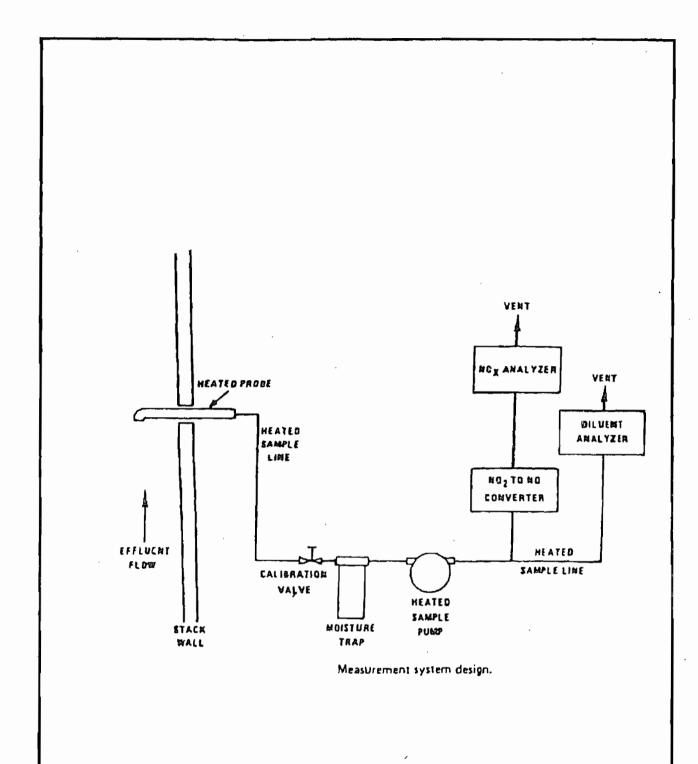
An overview of the EPA Method 20 NOx sampling procedure as adapted for Subpart GG gas turbine requirements can be easily presented. Three test runs are performed. Each of the test runs are conducted by withdrawing a sample of stack

gas from each of eight sampling locations across a stack cross-section. Each test point is analyzed for a minimum of one minute plus demonstrated instrument response time. To normalize NOx emission to a referenced standard, it is necessary to measure the oxygen content of the gases in addition to NOx; therefore, two analyzers are required for testing. As gas turbine NOx emissions consist of mostly NO, some NO₂ can be expected to be present (5-20% by volume). The 10AR is, therefore, equipped with a NO₂/NO converter for reduction of any NO₂ back to NO before analysis. This is affected by heating the gas stream to 650 °C in the presence of stainless steel.

To further ensure accuracy of the monitoring instruments, it is necessary to demonstrate linear response using National Bureau of Standards (NBS) traceable NO/N_2 and O_2/N_2 calibration gases. Three NO/N_2 and a zero NO calibration gas are required for the NOx analyzer; and two O_2 calibration gases and an O_2 zero are required for the oxygen analyzer. The analyzers must demonstrate linearity with these gases within 2% of span which is 200 ppmv for the NOx analyzer and 25% for the oxygen analyzer.

The eight points that are required to be tested for each of the three test runs necessary to constitute an emission evaluation are selected after evaluating the sampling location for potential stratification. As strip chart records for O₂ and NOx (Appendices) indicate, no stratification is present. The only differences in concentrations of either parameter are as a result of instrument drift and/or minor load fluctuations and are not test point dependent.

The results of accuracy and response time testing are included in the Q/A section of the Appendices.



EPA METHOD 20 CEM SAMPLING SCHEMATIC

APPENDICES

A. FIELD DATA

EMISSION SUMMARY

TEMP, ^oF: <u>63</u> Pb, in Hg <u>30.09</u>

%RH: <u>58</u>

PLANT: CUTRALE - LEESBURG

SOURCE: COGEN SYSTEM

DATE: 1/28/11

TIME	POINT	%O ₂	NOx, PPMV
1100	1 - 1	10.0	16.2
1103	1 - 2	11.5	10.97
1106	1 - 3	12.0	11.46
1109	1 - 4	11.0	12.4
1112	1 - 5	11.5	12.58
1115	1 - 6	11.5	12.29
1118	1 - 7	11.0	13.42
1121	1 - 8	12.0	11.84
1135	2 - 1	11.0	12.29
1138	2 - 2	11.5	12.51
1141	2 - 3	11.5	13.56
1144	2 - 4	11.5	13.62
1147	2 - 5	11.0	14.22
1150	2 - 6	11.0	14
1153	2 - 7	12.5	10.97
1156	2 - 8	12.5	12.47
,			
1210	3 - 1	12.5	11.59
1213	3 - 2	11.0	13.78
1216	3 - 3	11.0	14.21
1219	3 - 4	11.5	13.34
1222	3 - 5	12.0	12.49
1225	3 - 6	10.0	14.97
1228	3 - 7	10.0	16.78
1231	3 - 8	9.5	18.28

EMISSION SUMMARY

TEM	P, °F	
Dh i	n Un	

PLANT: CUTRALE - LEESBURG

%RH

SOURCE: COGEN SYSTEM

DATE: 1/28/11

TIME	POINT	%O ₂	NOx, PPMV
11.00	1 - 1	10.0%	16,20
1103	1 - 2	11.5%	10,97
1106	1 - 3	12.0%	11.46
1109	1 - 4	11,0%	12.40
11/17	1 - 5	11.5%	12.58
1115	1 - 6	11.5%	12.29
11/8	1 - 7	11.0%	13,42
1121	1 - 8	12,0%	11.84
		4. 9.	
1/35	2 - 1	11 0%	12,29
1138	2 - 2	11.5%	1251
1141	2 - 3	11.5%	13.56
1144	2 - 4	11.5%	13 62
1147	2 - 5	11.0%	14.22
1150	2 - 6	11.0%	14.00
11.53	2 - 7	12.5%	10.97
1156	2 - 8	17.5%	12.47
1210	3 - 1	12.5%	11.59
1213	3 - 2	11.0%	13.78
1216	3 - 3	11.0%	14,21
1219	3 - 4	11.5%	15.34
1222	3 - 5	12.0%	12,49
12 25	3 - 6	10.0%	121.97
12 28	3 - 7	10,0%	14.78
1231	3 - 8	9,5%	18.28

B. SUMMARY OF TEST DATA

SUMMARY OF TEST DATA

PLANT : CUTRALE - LEESBURG

UNIT : TURBINE

RUN NUMBERS :1, 2, 3

TEST DATE : 1/28/11

1EST DATE : 1/20/11	#1	#2	#3	AVERAGES
DATE	1/28/11	1/28/11	1/28/11	
START TIME	11:00	11:35	12:10	
END TIME	11:24	11:59	12:34	
STACK DIAMETER (INCHES)	47.25	47.25	47.25	
NOZZLE DIAMETER (INCHES)	N/A	N/A	N/A	
TEST TIME (MINUTES)	0:24	0:24	0:24	
NUMBER OF TEST POINTS PER RUN	8	8	8	
STACK GAS FLOW RATE (DSCFM @ 68°F)	17067.0	17067.0	17067.0	17067
NOx CONCENTRATION (PPMV)	12.6	13.0	13.2	12.93
NOx CONCENTRATION (PPMV), @ 15% O2, ISO	7.81	8.21	7.83	7.95
NOX MASS RATE (LBS/HOUR)	1.547	1.585	1.612	1.581
NOx MASS RATE (LBS/MMBTU)	0.027	0.027	0.028	0.027
NOX MASS RATE (LBS/MMCF)	28.1	28.8	29.3	28.8
FIELD DATA AND SAMPLES UNDER THE CONTROL OF:	_	ATC		

C. TURBINE OPERATING DATA

CUTRALE CITRUS JUICES USA, INC.

LEESBURG FACILITY COGENERATION SYSTEM

DATE 1/28/11

		TURBINE	INLET	RPM	T5
TIME	KW	GAS, MCFH	TEMP, OF	%	TEMP, OF
1105	4265	55	62.0	100	1250
1120	4247	55	61.0	100	1249
1135	4217	55	64.0	100	1250
1150	4215	55	62.0	99.9	1249
1205	4186	55	65.0	99.9	1251
1225	4194	_ 55	64.0	100	1250
		-			
AVG	4221	55.0	63	100	1250

CUTRALE CITRUS JUICES USA, INC.

LEESBURG FACILITY

COGENERATION SYSTEM

DATE 1/28/11

MCFH

		TURBINE	INLET	RPM	T5
TIME	KW	GAS, @郭宁	TEMP, OF	%	TEMP, OF
1105	4265	55	62	100.0	1250
1120	4247	55	61	100.0	1249
1135	4217	55	64	100.0	1250
1150	4215	55	62	99.9	1249
1205	4186	55	65	99.9	1251
1225	4194	55	64	100.0	1250
	· · · · · · · · · · · · · · · · · · ·				

D. CALCULATIONS

TERMS USED FOR CALCULATIONS

Dh - average pressure on the limiting orifice, inches H₂O

Dp - average pressure on pitot tube, inches H₂O

Ts - average temperature of stack, °R

Tm - average temperature of meter, °R

Vm - volume of dry gas meter, actual cubic feet

Vm_{std} - volume of dry gas meter, dry standard cubic feet

Vwc - volume of water collected from impingers and silica gel, standard cubic feet

Θ - total time of test run, minutes

An - area of nozzle tip, ft²

As - cross sectional area of stack, ft²

Pb - barometric pressure, inches Hg

Pm - pressure at meter, inches Hg

Ps - pressure at stack, inches Hg

Bwo - moisture in flue gas

Md - molecular weight of dry flue gas, lbs/lb-mole

Md - molecular weight of flue gas, lbs/lb-mole

Vs - velocity of flue gas, feet per second

Qs - volumetric flow of flue gas, cubic feet per minute

Qs_{std} - volumetric flow of flue gas, dry standard cubic feet per minute

Cp - pitot tube coefficient, 0.84

Kp - pitot tube constant, 85.49 ft/sec [(lb/lb-mole) (in Hg) / (°R) (in H₂O)] 1/2

%I - percent of theoretical ideal sampling rate, % isokinetics

DERIVATION OF CALCULATIONS

- A) Volume of water vapor collected, cubic feet $Vwc = (0.0471) \text{ ft}^3/\text{gm x gms, mls water collected}$
- B) Volume of air metered at 68°F, 29.92 inches Hg, dry standard cubic feet Vm_{std} = (17.64) x Y x Vm x Pm / Tm

÷,

- C) Moisture content of flue gas, $\% H_2O$ Bwo = Vwc / (Vwc + Vm_{std})
- Dry gas molecular weight
 Md = 0.44 x %CO₂ + 0.32 x %O₂ + 0.28 x (%N₂ + %CO)
 Assume 29 for ambient sources, 30 for combustion sources
- E) Stack gas molecular weight, lbs/lb-mole

 Ms = Md x (1-Bwo) + 18 (Bwo)
- F) Stack gas velocity, feet per second $Vs = Kp \times Cp \times Dp^{1/2} \times [Ts / Ps \times Ms]^{1/2}$
- G) Stack gas flow rate, cubic feet per minute

 Qs = Vs x As x (60 sec/min)
- H) Stack gas flow rate, dry standard cubic feet per minute $Qs_{sid} = [17.64 \times Qs \times Ps \times (1-Bwo)] / Ts$
- Isokinetic sampling rate%I = 0.0945 x [Ts x Vm_{sid} / Ps x Vs x An x theta x (1-Bwo)]
- J) Concentration, grains per dry standard cubic foot= [(15.43 grains/gram) x (Wt collected)] / Vm_{std}
- K) Emission rate, pounds per hour= (0.00857) x (grains/dscf) x Qs_{std}
- L) Pm Pressure at meter, inches Hg = Pb + Dh/13.6
- M) Ps Pressure at stack, inches Hg = Pb + static pressure/13.6

CALCULATIONS COGEN SYSTEM

<u>NOx</u>

	<u>RUN #1</u>	RUN #2	RUN #3
Pb, "Hg =	30.09	30.09	30.09
% O ₂ =	11.31	11.56	
NOx, ppmv =			
MCFH =			
MMBtu/hr =	57.8	57.8	57.8
	<u>RUN #1</u>	<u>RUN #2</u>	RUN #3
A) Stack gas flowrate,DSCFM = Material Balance	17067.0	17067.0	17067.0
B) O ₂ FACTOR =	0.6154	0.6319	0.5922
(20.9 - 15.0) / (20.9 - %O ₂)			
C) NOx @ 15% O ₂ =	7.78	8.19	7.80
NOx X O₂ FACTOR			
D) NOx @ 15% O ₂ , ISO =	7.81	8.21	7.83
$(NOx_0)(P_R/P_0)^{0.5}e^{19(Ho-0.00633)}(288^O$	K/T _{AMB}) ^{1.53}		
E) Emission rate, lbs/hr =	1.547	1.585	1.612
NOx(ppmv) x E ⁻⁶ x MW(NOx) x DSCFM x 60 min/hr x lb-mole/385	dscf		٠
F) Emissions, lb/MMBTU =	0.027	0.027	0.028
G) Emissions, lb/MMCF =	28.13	28.82	29.31

TABLE I - NOX EMISSION SUMMARY

NOx EMISSION SUMMARY COGEN UNIT CUTRALE LEESBURG January 28, 2011

RUN NUMBER	1 - 3		
POINT	%O ₂	NOx PPM	NOx @ 15% O ₂
1 - 1	10	16.2	8.8
1 - 2	11.5	10.97	6.9
1 - 3 _.	12	11.46	7.6
. 1 - 4	11	12.4	7.4
1 - 5	11.5	12.58	7.9
1 - 6	11.5	12.29	7.7
1 - 7	11	13.42	8.0
1 - 8	12	11.84	7.8
AVERAGES	11.3	12.6	7.8
POINT	%O ₂	NOx PPM	NOx @ 15% O ₂
2 - 1	11	12	7.3
2 - 2	11.5	13	7.9
2 - 3	11.5	14	8.5
2 - 4	11.5	14	8.5
2 - 5	. 11	14	8.5
2 - 6	11	14	8.3
2 - 7	12.5	11	7.7
2 - 8	12.5	12	8.8
AVERAGES	11.6	13	8.2
POINT	%O₂	NOx PPM	NOx @ 15% O₂
3 - 1	12.5	12	8.1
3 - 2	11	14	8.2
3 - 3	11	14	8.5
3 - 4	11.5	13	8.4
3 - 5	12	12	8.3
3 - 6	10	15	8.1
3 - 7	10	17	9.1
3 - 8	9.5	18	9.5
AVERAGES	10.9	13.2	8.5

STACK MATERIAL BALANCE

Basis: 1. Natural gas as fuel. Assume fuel is methane (CH₄)

- 2. Moles $N_2 = 79.1/20.9 \text{ x moles } N_2 = 3.785 \text{ x moles } O_2$
- 3. H₂O not included in flue gas analysis
- 4. let $X = \text{moles } O_2$

$$CH_4 + 2O_2 + N_2 + XO_2 => CO_2 + XO_2 + N_2$$

moles 1 2 (2+X)3.785 X 1 X (2+X)3.785

Total flue gas = 1 + X + (2+X)3.785 = 1 + X + 7.57 + 3.785 X= 8.57 + 4.785 X per mole CH₄

COGENERATION SYSTEM #1

	MOLS	%	DSCFH	DSCFM	MMBTU/HR
CH₄	142.86		55000.0	916.7	57.75
CO2	142.86	5.37	55000.0	916.7	
O_2	300	11.28	115500.0	1925	•
N_2	2216.93	83.35	853517.5	14225	
TOTAL	2659.79	100	1024017.5	17067	

MMBTU/HR X 10^6 / 1050 BTU/CF = DSCFH / 60 = DSCFM MOLES CH₄ = DSCFH/385 CF = MOLES CO₂ MOLES N₂ = 3.785 X (2 X MOLES CH₄ + MOLES O₂) SET MOLES O₂ SO THAT %O₂ = MEASURED NUMBER

E. VISIBLE EMISSION

AIR TESTING & CONSULTING, INC.

(813) 651-0878

	Facility Name CUTRALE	Permit Number 0690002-0			-	vation			Start.	Time	_	Stop	Time_	5
	Source CITRUS PROCESSOR			I.D. No. 007	SEC	0	15	30	45	SEC	0	15	30	45
İ	Address 11 CLOUD STREET	_			1.	0	0	0	\hat{C}	MIN 31.	0		0	Ó
	City LEESBURG	County LAKE		Zip 34748	2.	Ö		0	Q.	32. 33.	0	0	0	0
İ	Contact ED PRIEST		Phone 352-552	2-9036	4.	0	00	0	0	34.	0	8	$\frac{0}{2}$	\bigcirc
[Process Equipment		Operati	ng Rate	5.	0			\bigcirc	35.	Ó	Ö	Ŏ	Ď
	Control Equipment		Operati	ing Mode	6. 7.	0	0			, 36. (0	0	<u>C</u>	<u>Q</u> _
	N/A Fuel Type/Rate	Material Type	/Rate		8.	\mathcal{E}	<u>()</u>	0	8	38.	0	0	0	
	NATURAL GAS	STEAM			9.	0	0	Û	Q	39.	0	0	0	
	Describe Emission Point Start STACK EXIT				10.	00				40.	0	$\frac{\mathcal{O}}{\mathcal{O}}$	$\frac{1}{2}$	$\frac{\mathcal{O}}{\mathcal{O}}$
	Height Above Ground Level Start A 3 O Stop	Helght Relativ Start んんし	y Stop	4	12.	Ŏ	0		0	42.	0	<u>)</u> ()	0	5
	Distance from Observer Start A 4 Stop	Direction from Start	Observer Stop		13. 14.	$\dot{\circ}$) 			43. 44,	\bigcirc			
[Describe Emissions Start N	Stop	. /		15.	8	8		$\frac{O}{C}$	44.		00	\mathcal{C}	0
ĺ	Emission Color	Plume Type	<u></u>	· ^ _	16.	Z	Ŏ	0	Ó	46.		Ö	Ó	C
	Start N A Stop Water Droplets Present	o Continuous o Intermittent Water Droplet	Nume.	<u> </u>	17. 18.				9	47. 48.	\bigcirc	0	Q	
	oNo o Yes	o Altached	o De	lached	19.	8	6	8	<u>()</u>	49.	δ	8	8	0
' [Point in the Plume at which Opacit Start	y was determine	Stop		20		O	Q		50.	\bigcirc	0		Č,
	Describe Background Start Stop	Ambient Temp	o ジ Stop		21. 22.	2	<u>()</u>		9	51. 52.	0			
ŀ	Background Color Start Color Stop	Sky Condition	5 ₆	op U	23.	8	6	0		53.		0		
	Wind Speed Start () - 15 Stop	Wind Direction	<u>,</u>)	_	24. 25.	(7)		9		54. 55.	9	0	0	
Ţ		Start SUC	<u></u>	orth Arrow	26.	\forall		S		56.	(A)	$\frac{O}{O}$		<u>ن</u>
	with Plume	OUT SKETCH	Diaw N	Anow	27.			0		57.	Ó	Ŏ	Ŏ	
	Sun Wind		(4>1	28. 29.	2	2	$\frac{\circ}{\sim}$	\mathcal{C}	58. 59.		2		읬
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	I certify the above process rate date SIGNATURE	a is true to the b	est of my	knowledge.		<u>D</u>	B ^		30	2				
'	Tille		•	Date			<i></i>							

AIR TESTING & CONSULTING, INC. (813) 651-0878

	Facility Name CUTRALE		Permit Number 0690002-013-AV		Observation Date		Start Time		-	Stop Time				
	Source CITRUS PROCESSOR			I.D. No. 004	SEC	0	15	30	45	SEC	0	15	30	45
ļ	Address 11 CLOUD STREET	-			1.	0	0	0	0	MIN 31.	0	0	0	<u>a</u>
Ì	City LEESBURG	County LAKE		Zip 34748	2. 3.	(C)	0	0	S	32.	0	Ö	O	S
ŀ	Contact ED PRIEST		Phone 352-552		4.	3	90	00	$\frac{9}{2}$	33. 34.	0	0	0	8
[Process Equipment		Operati	ng Rate	5.	0	Ō		Ŏ	35.	Ø	Ŏ	8	Ö
ŀ	BOILER #4 Control Equipment			ing Mode	6. 7.	<u>0</u>	0	30	Q	36. 37.	Q	0	0	Q
Į	N/A Fuel Type/Rale	Material Type	/Pato		8.	00	$\frac{1}{2}$	00	8	38.	00	0	0	70
	NATURAL GAS	STEAM	rrate	,4:2:	9.	Ó	0	Ò	Ŏ	39.	O_	Ø	Ŏ	ð
	Describe Emission Point Start STACK EXIT				10.	00	20	0	8	40. 41.	0	0	0	<u>\$</u>
	Height Above Ground Level Start 2 Stop	Height Relativ	e to Obse Stop		12.	ð	8	$\overline{0}$	8	42.		20	3	
	Distance from Observer Start \(\) Stop	Direction from Start	Observer Stop		13.	Ŏ	Q	0	Q	43. 44.	Ø	Q	0	
	Describe Emissions Start 0 0	Stop		,	15.	9	0	0	0	45.	90	$\Im C$		8
ŀ	Emission Color Start Stop	Plume Type	r\/	<u> </u>	16. 17.	Q	Q	Õ	Q	46.	Q	0	O	ğ
-	Water Dropfels Present	o Intermittent Water Droplet	Plume	4	18.	8	8	8	2	47. 48.	\aleph	20	<u> </u>	3
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	Start //	-	Stop		20.	Q	0	<u>Q</u>		50. 51.	Q	0		$\frac{Q}{2}$
	Describe Bankground Start Stop	Ambient Tem Start 65	Stop		22.	8	6	8	8	52.	8	0	0	5
	Start White Stop	Sky Condition	s Od Sta	op 🗸	23.	2	0	0	R	53. 54.	0	0	0	<u> </u>
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	\bigotimes	Emission Po	oint	j	30.	0	0	0	0	60.	\bigcirc	0		
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					Commi	· 1	Се	rtifie	d by	E.T	.A.	, ,	Date 8/11/1	
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)	SIGNÁTURE Title			Date			, <u></u>	•						
	, mo			2010										

VISIBLE EMISSIONS EVALUATOR

This is to certify that

KEN GIVEN

met the specifications of Federal Reference Method 9 and qualifies as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7 5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, NC. This certificate is valid for six months from date of issue

386575

CERTINUMBER

8/11/2010

TAMPA, FL

2/10/2011
CERTIFICATION EXP DATE:

GIV583223

Jody Monk

—Director of Training

EASTERN TECHNICAL ASSOCIATES

KEN GIVEN

GIV583223 STUDENT ID NUMBER

met the specifications of Federal Reference Method 9 and qualifies as a visible emissions avaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associatos of Rafelgn, NC. This certificate is valid for six months from date of issue and expires on the date below

TAMPA, FL

8/11/2010

386575

SCHOOL LOCATION

DATE OF SCHOOL

CERT NUMBER

TMPS08

2/10/2011

LAST LECTURE

CERTIFICATION EXP DATE

BEARER

Customer Support Debbie Scalise 919-878-3188

www.eta-is-opacity.com

F. CALIBRATION INFORMATION

TABLE 297.310-1 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001"mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point:	Spirometer or calibrated wet test or dry gas test meter	2%
	Semiannually 3. Check after each test series	Comparison check	5%

CONTINUOUS MONITOR Q/A LINEARITY and DRIFT DATA

SOURCE: TURBINE

PLANT: CUTRALE - LEESBURG

DATE: 1/28/11 UNIT: COGEN

GAS I.D.

NOx

GAS I.D.

 O_2

CEM

THERMO MODEL 42C

CEM

TELEDYNE 320

RANGE

0 - 200 PPMV

RANGE

0 - 25%

%

SPAN

61.1

SPAN

25.00

LINEARITY

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
61.1	61.1	0	0,00
93.5	92.7	-0.8	-1.31
174.2	175.1	0.9	1.47

LINEARITY

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	-0.05	-0.20
20.9	21	0.1	0.40

GAS VALUE	CEM	DIFF	% SPAN
0	0.2	0.2	0.33
61.1	60.6	-0.5	-0.82

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	-0.05	-0.20

2

GAS VALUE	CEM	DIFF	% SPAN
0	0.2	0.2	0.33
61.1	60.6	-0.5	-0.82
		, i	_

GAS VALUE	CEM	DIFF	% SPAN
0	0	. 0	0.00
12.05	12.00	-0.05	-0.20
		-	

3

GAS VALUE	CEM	DIFF	% SPAN
0	0.2	0.2	0.33
61.1	60.6	-0.5	-0.82

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	-0.05	-0.20

UPSCALE RESPONSE:

35

DOWNSCALE RESPONSE:

40

CONTINUOUS MONITOR Q/A LINEARITY and DRIFT DATA

SOURCE: TURBINE

PLANT: CUTRALE - LEESBURG

DATE: 1/28/11 UNIT: COGEN

GAS I.D.

NOx

GAS I.D.

 O_2

CEM

THERMO MODEL 42C

CEM

TELEDYNE 320

RANGE

0 - 200 PPMV

RANGE SPAN

0 - 25% 12.05%

SPAN

LINEARITY

L	.11	ΝĿ	:/	١	Κ.	1	Y
$\overline{}$	_	$\overline{}$	$\overline{}$,	_		11

GAS VALUE	CEM	DIFF	% RANGE
0	0		
61.1	101-1		
93.5	92.7		
174.2	175.1		

GAS VALUE	CEM	DIFF	% RANGE
0	0		
12.05	12,0		
20.9	210		

GAS VALUE	CEM	DIFF	% RANGE
0	0.2		
601.1	60,6		

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	
12.05	12.0		

GAS	VALUE	CEM	DIFF	% RANGE
	0	0.2		
61.	1	60:6		

GAS VALUE	CEM	DIFF	% RANGE
0	0		
12.05	12.0		

3

GAS VALUE	CEM	DIFF	% RANGE
0	0,2		
601.1	6006		,——————————————————————————————————————

GAS VALUE	CEM	DIFF	% RANGE
0	0		
12.05	IZ.U		

UPSCALE RESPONSE:

DOWNSCALE RESPONSE: 40

Certificate Of Analysis

Date Of Analysis: 7/12/2005

Reference Number: 21-110860320-2

Customer Name: Air Testing & Consulting

NI UHP300 Part Number:

Lot #:

21-110860320-2

Product:

NITROGEN UHP GR 5.0 SIZE

300CGA 580

CYLINDER TESTED	COMPONENT		SPECIFICATION		ACTUAL
252800	THC	<	0.5 PPM	<	0.5 PPM
	CO + CO2	<	1 PPM	<	1 PPM
	Moisture	<	1 PPM		0.98 PPM
	Oxygen	<	1 PPM		0.96 PPM
	Total Purity:		99.999%		99.999%

Notes

Impurities verified against Analytical Standards traceable to NIST by weight and/or analysis.

Signature On File

Approval Signature

Page 1

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer

Air Testing & Consulting (Tampa, FL)

Date

May 19, 2009

Delivery Receipt

DR-24761

Gas Standard

12.0% Oxygen/Nitrogen - EPA PROTOCOL

Final Analysis Date

May 19, 2009

Expiration Date

May 19, 2012

Cylinder Data

Cylinder Serial Number:

CC-231482

Cylinder Outlet:

CGA 590

DO NOT USE BELOW 150 psig

Cylinder Volume:

140 Cubic Feet

Cylinder Pressure:

2000 psig, 70°F

Expiration Date:

May 19, 2012

Analytical Data

EPA Protocol, Section No. 2.2, Procedure G-1

Replicate Concentrations

Oxygen: 12.05% +/- 0.12%

Nitrogen: Balance

Reference Standard(s):

SRM/GMIS:

GMIS

GMIS :

Cylinder Number:

CC-166423

CC-85458

Concentration:

10.1% Oxygen/Nitrogen

20.97% Oxygen/Nitrogen

Expiration Date:

March 04, 2011

April 15, 2011

Certification Instrumentation

Component:

Oxygen

Make/Model:

Servomex 244a

Serial Number:

1847

Principal of Measurement:

Paramagnetic

Last Calibration:

May 07, 2009

Analytical uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by:

Mike Duncon

Date:

May 19, 2009

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer

Air Testing & Consulting (Tampa, Florida)

<u>Date</u>

December 23, 2008

Delivery Receipt

DR-23355

Gas Standard

90.0 ppm Nitric Oxide/Nitrogen - EPA PROTOCOL

Final Analysis Date

December 23, 2008

Expiration Date

December 23, 2010

DO NOT USE BELOW 150 psig

Cylinder Data

Cylinder Serial Number:

CC-251486

Cylinder Outlet:

CGA 660

Cylinder Volume:

140 Cubic Feet

Cylinder Pressure:

2000 psig, 70°F

Expiration Date:

December 23, 2010

Analytical Data

EPA Protocol, Section No. 2.2, Procedure G-1

Replicate Concentrations

Nitric Oxide: 93.5 ppm +/- 0.93 ppm

Nitrogen: Balance

Total Oxides of Nitrogen: 93.7 ppm

** NOx for reference Use Only **

Reference Standard(s):

SRM/GMIS:

GMIS

GMIS

Cylinder Number:

CC-125597

CC-165602

Concentration:

57.2 ppm NO/Nitrogen

103.1 ppm NO/Nitrogen

Expiration Date:

April 05, 2009

February 26, 2010

Certification Instrumentation

Component:

Nitric Oxide

Make/Model:

Nicolet - NEXUS 470

Serial Number:

AEP99000154

Principal of Measurement:

FTIR

Last Calibration:

December 02, 2008

Analytical uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by:

Date:

December 23, 2008

Unmatched Excellence

Industry Leader in Specialty Gases, Equipment and Service Certificate of Analysis

EPA PROTOCOL GAS -

Customer

TECO - Air Services Group (Tampa, Florida)

Date

August 17, 2009

Delivery Receipt

DR-25710

Gas Standard

60.0 ppm Nitric Oxide/Nitrogen - EPA PROTOCOL

Folio Number:

RDS01

Final Analysis Date

August 14, 2009

Expiration Date

August 14, 2011

Component

Nitric Oxide

Balance Gas

Nitrogen

Analytical Data:

DO NOT USE BELOW 150 psig

EPA Protocol, Section No. 2.2, Procedure G-1

Reported Concentrations

Nitric Uxide: 61.1 ppm 1/ 0.01 ppm

Merogen: Budance

Total Oxides of Nitrogen: of 1 ppm

** Total NOX for Reference Use Only **

Reference Standards:

SRM/GMIS:

GMIS

GMIS

Cylinder Number:

CC-231538

CC-184193

Concentration:

24.41 ppm NO/Nitrogen

100.87 ppm NO/Nitrogen

Expiration Date:

June 24, 2011

April 17, 2011

Certification Instrumentation

Component:

Nitric Oxide

Make/Model:

Nicolet-NEXUS 470

Serial Number:

AEP99000154

Principal of Measurement:

FTIR

Last Calibration:

July 04, 2009

Cylinder Data

Cylinder Sepat Number:

CC-231431

Cylinder Outlet:

CGA 660

Cylinder Volume:

140 Cubic Feet

Cylinder Pressure:

2000 psig, 70°F

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

High a spele

Certified by:

Mike Duncan

Unmatched Excellence

Industry Leader in Specialty Gases, Equipment and Service Certificate of Analysis

- EPA PROTOCOL GAS -

** Re-certification **

<u>Customer</u>

Air Testing & Consulting (Tampa, Florida)

Date

December 14, 2009

Delivery Receipt

DR-26998

Gas Standard

180.0 ppm Nitric Oxide/Nitrogen - EPA PROTOCOL

Final Analysis Date

December 08, 2009

Expiration Date

December 08, 2011

DO NOT USE BELOW 150 psig

Cylinder Data

Cylinder Serial Number:

CC-165626

Cylinder Outlet:

CĠA 660

Cylinder Volume:

119 Cubic Feet

Cylinder Pressure:

1700 psig, 70°F

Expiration Date:

December 08, 2011

Analytical Data

EPA Protocol, Section No. 2.2, Procedure G-1

Replicate Concentrations

Nitrie Oxide: 174.2 ppm +/- 1.7 ppm

Nitrogen: Balance

Total Oxides of Nitrogen: 176.2 ppm

** NOx for reference Use Only **

Reference Standard(s):

SRM/GMIS:

GMIS

GMIS

Cylinder Number:

EB-0016007

EB-0016008

Concentration:

173.46 ppm NO/Nitrogen

251.52 ppm NO/Nitrogen

Expiration Date:

May 18, 2011

May 14, 2011

Certification Instrumentation

Component:

Nitric Oxide

Make/Model:

Nicolet - NEXUS 470

Serial Number:

AEP99000154

Principal of Measurement:

FTIR

Last Calibration:

December 05, 2009

Analytical uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by:

Mike Duncan

Original Data:

174.1 ppm NO, 176.1 ppm NOx/Nitrogen (October 16, 2009)

Unmatched Excellence

ATTACHMENT CL-FI-C3
SOLAR TURBINES CENTAUR 50-6200S PREDICTED ENGINE PERFORMANCE

Solar Turbines

A Caterpiffar Company

PREDICTED ENGINE PERFORMANCE

Customer	· · · · · · · · · · · · · · · · · · ·	
Cutrale		
Job ID	<u></u>	
Run By	Oate Run	_
Christopher S Burns	9-Арг-07	
Engine Performance Code	Engine Performance Date	
REV. 3.40	REV. 0.1	

Model CENTAUR 50-6200S	
Package Type GSC	
Match STANDARD	
Fuel System GAS	
Fuel Type SD NATURAL GAS	

DATA FOR NOMINAL PERFORMANCE

Elevation Inlet Loss Exhaust Loss	feet in H20 In H20	80 4.0 10.0				
Engine inlet Temperature	deg F	32.0	59.0	70.0	80.0	90.0
Relative Humidity	%	60.0	60.0	60.0	60.0	60.0
Specified Load* Net Output Power* Fuel Flow Heat Rate* Therm Eff*	kW	FULL	FULL	FULL	FULL	FULL
	kW	4811	4426	4237	4044	3840
	mmBtu/hr	56.50	52.81	51.14	49.53	47.87
	Btu/kW-hr	11745	11933	12071	12248	12465
	%	29.053	28.595	28.266	27.859	27.374
Engine Exhaust Flow Exhaust Temperature	lbm/hr	157632	149491	145441	141730	137495
	deg F	942	959	966	970	980

Fuel (Volu	Gas	Com	pos	ition
(Volt	ıme	Perce	int)	

Methane (CH4)	92.79
Ethane (C2H6)	4.16
Propane (C3H8)	0.84
N-Butane (C4H10)	0.18
N-Pentane (C5H12)	0.04
Hexane (C6H14)	0.04
Carbon Dioxide (CO2)	0.44
Hydrogen Sulfide (H2S)	0.0001
Nitrogen (N2)	1.51

Nitrogen (N2)	1.51			
LHV (Btu/Scf)	939.2 Specific G	ravity 0,5970	Wobbe index at 60F	1215.6

^{*}Electric power measured at the generator terminals.

This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.

Modes

Expected Power and Heat Rate (not guaranteed)

GUARANTEED CENTAUR 50 GENERATOR SET PERFORMANCE

EMISSIONS OUTPUT

GUARANTEE SHALL BE MET INDEPENDENT OF PERFORMANCE CONDITIONS BELOW

OPERATING ON COMMERCIALY AVAILABLE NATURAL GAS IN COMPLIANCE TO SOLAR SPECIFICATION ES 9-98T

Ambient Temperature range

Greater than 0°F

Operating Range

50-100%

ppmv corrected to 15% O2 Dry, steady state operation

25 ppmv Max

CO

50 ppmv Max

UHC

25 ppmv Max

PM₁₀/TPS

.0419 lbs/MMBtu HHV (See Note 1)

PERFORMANCE CONDITIONS

The following site conditions were utilized to develop heat rate and power output guarantees:

Altitude

80 feet

Ambient Temperature

70°F

Relative Humidity

60%

Inlet Pressure Drop

4" H₂O

Exhaust Pressure Drop

10° H₂O

Turbine Operating Level

100% Continuous Duty

HEAT RATE AND POWER OUTPUT

Natural Gas (per Solar standard ES 9-98)

Heat Rate @ Full Load

12,449 Btu/kWe-Hr (LHV)

Output Power at Generator

4,108 kWe

Terminals - Full Load

NEAR FIELD NOISE DATA

NEAR FIELD - 85 dba as an average 3 ft from package at a height of 5 ft as measured at points spaced 5-10 ft apart around the enclosure when installed in a free field. These sound levels are exclusive of piping, other equipment, reflected sound or contributing site conditions.

Inquiry No. CH07-1006

24

A Caterpillar Company

Auburndale & Leesburg Florida

NOTE 1:

- 1. All Standard warranty conditions (i.e. engine warranty) apply
- 2. The PM10 warranty is valid for steady-state conditions at ambient temperatures 0°F (-20 C) and above and limited from 50 to 100% lead on gas fuel and 80 to 100% load on liquid fuel.
- Intake air quality, gas fuel, and liquid fuel shall meet ES 9-98. Natural Gas fuel sulfur content shall be no greater than 0.1%
- 4. EPA Methods 201A/202 shall be used to measure PM₁₀ emissions. EPA Method 5 may be substituted. Three test runs shall be made for a minimum of four hours each. The three test runs should be completed within a 5 calendar day period.
- 5. The PM 10 emissions warranty expires simultaneously with the engine warranty.
- Solar does not conduct PM10 testing. Any required PM10 testing is to be conducted by the customer (or its representative) at elte.
- 7. In the event the PM10 site test exceed the warranty above, Solar must be notified in time to review the test results and retest. If the second test should fail, the test result must be with +/-5% of the original test to be considered valid. In the event the second PM10 test fails, Solar will share the cost of re-permitting on a 50/50 basis up to a maximum liability to Solar of \$50,000 to remedy the air permit issue.

June 29, 2009

ATTACHMENT CL-FI-C4
NEW COGEN STATUS AND PROGRESS REPORT REQUIREMENTS



January 25, 2011

Department of Environmental Protection Division of Air Resource Management Mall Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Requirements

FDEP Permit No.0690002-013 AV

Dear FDEP:

The facility has made significant progress. The installation is approximately 96% complete. The unit is going through start up.

Next Step is anticipated to start in Jan / Feb - Phase IV is testing of the new equipment. This will be done with our annual stack testing and the dates will be notified separately.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Cc: Central District



October 21, 2010

COPY

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Cutrale Citrus Julces USA, Inc. - Leesburg, Florida
New Cogen Status and Progress Report Requirements
FDEP Permit No.0690002-013 AV

Dear FDEP:

The facility has made significant progress. The installation is approximately 70% complete.

Next Step is anticipated to start in Nov./Dec. - Phase IV is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Elm Pos

cc. Central District



COPY

October 21, 2010

Mr. Ali Kazi, P.E.
Florida Department of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Fl 32803-3767

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

Status and Progress Report Requirements FDEP Consent Order 01-1384 (Item # 24)

Dear Mr. Kazi:

The facility has not been able to operate at full production since the treatment facility was completed, except for a few weeks each season due to crop losses from hurricanes. The Department has revised the Consent Order (Dated 2/25/08) to allow for a two-year evaluation period to assess the treatment system at normal operating loads. This is to inform the Department that the operating data is being collected in order to meet the new Consent Order requirements.

Cutrale has received the Departments approval to the Contamination Assessment Plan (CAP) for MW-R6. Cutrale will proceed.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Elm Pat



July 26, 2010

COPY

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida
New Cogen Status and Progress Report Regulrements

FDEP Permit No.0690002- 013 AV

Dear FDEP:

The facility has made significant progress. The majority of the equipment has been delivered and we have started installation.

Next Step is anticipated to start in Oct./Nov. - Phase IV is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Elul Pot

Edward Priest

Environmental Coordinator



April 20, 2010

COPY

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Requirements

FDEP Permit No.0690002-013 AV

Dear FDEP:

There is no change of status from the last quarterly report.

The facility has made significant progress by completing engineering and purchasing the new turbine. The delivery of the new turbine is scheduled for June of 2010. This will complete Phase I and II.

Phase III is the installation of equipment. Phase IV – is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Sent Pot



January 21, 2010

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400 COPY

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida
New Cogen Status and Progress Report Requirements
FDEP Permit No.0690002-013 AV

Dear FDEP:

There is no change of status from the last quarterly report.

The facility has made significant progress by completing engineering and purchasing the new turbine. The delivery of the new turbine is scheduled for June of 2010. This will complete Phase I and II.

Phase III is the installation of equipment. Phase IV - is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

802 McKean Street Auburndale, FL 33823-4070 Tel. 883-985-5000



October 21, 2009

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400

COPY

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Requirements

FDEP Permit No.0690002-013 AV

Dear FDEP:

The facility has made significant progress by completing engineering and purchasing the new turbine. The delivery of the new turbine is scheduled for June of 2010. This will complete Phase I and II.

Phase III is the installation of equipment. Phase IV – is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Edd Por



July 1, 2009

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400 COPY

Subject: Cutrale Citrus Julces USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Requirements

FDEP Permit No.0690002- 013 AV

Dear FDEP:

The facility has made progress by meeting with vendors to update all equipment proposals, project specifications and engineering. We have contracted for engineering and the engineering is in process.

Cutrale has completed; Phase I - engineering and working with the vendors to approve the project specifications, evaluate the vendor proposals and selecting an engineering contractor.

These are the phases of the project to follow: Phase II – finalize equipment purchases and delivery. Phase III is installation of equipment. Phase IV – is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator



April 23, 2009

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400



Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Requirements

FDEP Permit No.0690002-013 AV

Dear FDEP:

The facility has made progress by meeting with vendors to update all processls, project specifications and engineering. We are in the process of contracting for engineering.

Cutrale anticipates the following tasks to be completed in this upcoming quarter to meet the Construction permit requirements: Phase I - engineering and working with the vendors to approve the project specifications, evaluate the vendor propostals and selecting a vendor.

These are the phases of the project to follow: Phase II – is vendor celivery of equipment. Phase III is installation of equipment. Phase IV – is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (352) 552-9036.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Edward Priest

Environmental Coordinator

Elad Pot



January 22, 2009

Department of Environmental Protection Division of Air Resource Management Mail Station #5510 2600 Blair Stone Road Tallahassee, Florida 32399-2400 COPY

Subject: Cutrale Citrus Juices USA, Inc. - Leesburg, Florida

New Cogen Status and Progress Report Regulrements

FDEP Permit No.0690002-013 AV

Dear FDEP:

The facility has made progress by meeting with vendors to update all proposals, project specifications and engineering. We are currently waiting on vendors to supply required information.

Cutrale anticipates the following tasks to be completed in this upcoming quarter to meet the Construction permit requirements: Phase I - working with the vendors to approve the project specifications, evaluate the vendor proposals and selecting a vendor.

These are the phases of the project to follow. Phase II – is vendor delivery of equipment. Phase III is installation of equipment. Phase IV – is start-up and testing of the new equipment.

If you have any questions regarding this matter, please feel free to contact me at (863) 965-5209.

Sincerely,

Cutrale Citrus Juices USA, Inc.

Aaron P. Corkum

Environmental Affairs Manager