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

Report

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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July 18, 2011 103-89649

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

RE: APPLICATION FOR AIR PERMIT REVISION
CUTRALE CITRUS JUICES USA, INC., AUBURNDALE FACILITY
FACILITY ID NO. 1050023

Project No: 1050023-026-AC ✓
1050023-027-AV ✓

Dear Mr. DeAngelo:

Enclosed please find one original and three copies of an application for concurrent processing of revisions to the current Title V air permit, 1050023-024-AV, for the Cutrale Citrus Juices USA, Inc. (Cutrale) Auburndale Facility, as well as for the underlying air construction permits, 1050023-020-AC and 1050023-025-AC, upon which they were based. This permit revision application incorporates the provisions of Permit Nos. 1050023-020-AC and 1050023-025-AC, and, therefore, requires changes to conditions of the current Title V Air Operation Permit No. 1050023-024-AV to incorporate these new requirements. Permit Nos. 1050023-020-AC and 1050023-025-AC authorized the replacement of the current Solar turbines (EU 008 and EU 009) with new, more efficient and lower-emitting Solar Centaur 50 units (EU 019 and EU 020). The new combustion turbines were designed to be integrated with the existing duct burners and heat recovery steam generators. Permit No. 1050023-020-AC permits the existing duct burner No. 1 (99MMBtu/hr) 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 No. 1, 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 Auburndale 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 Corkum, Cutrale

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

REPORT

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

Submitted To: Air Quality Division
Department of Environmental Protection
2600 Blair Stone Road
MS 5000
Tallahassee, FL 32399 USA

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Table of Contents

PART I

FDEP APPLICATION REPORT

INTRODUCTION

This permit revision application incorporates the provisions of the Cutrale Citrus Juices USA, Inc. (Cutrale) Auburndale Facility Permit Nos. 1050023-020-AC and 1050023-025-AC, and, therefore, requires changes to conditions of the current Title V (TV) Air Operation Permit No. 1050023-024-AV to incorporate these new requirements. Permit Nos. 1050023-020-AC and 1050023-025-AC authorized the replacement of the current Solar turbines (EU 008 and EU 009) with new, more efficient and lower-emitting Solar Centaur 50 units (EU 019 and EU 020). Permit No. 1050023-025-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 turbines were designed to be integrated with the existing duct burners and heat recovery steam generators.

PROJECT DESCRIPTION

In order to comply with FDEP directives, the Cutrale Auburndale Facility proposed to replace the current Solar turbines (EU 008 and EU 009) with new, more efficient and lower-emitting Solar Centaur 50 units (EU 019 and EU 020). The new combustion turbines (CTs) were designed to be integrated with the existing duct burners and heat recovery steam generators. The new CTs and existing duct burners No. 1 (99MMBtu/hr) and No. 2 (33.1 MMBtu/hr) will fire natural gas only. Permit No. 1050023-020-AC permits the existing duct burner No. 1 (99MMBtu/hr) 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 No. 1, 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. 1050023-020-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. 1050023-020-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 CA-FI-C1 identifies applicable requirements with respect to the construction project. Attachment CA-FI-C2 provides a summary list of previously submitted compliance demonstration reports/records. Attachment CA-FI-C3 provides Solar Turbine's predicted engine performance data on the Centaur 50-6200S. Attachment CA-FI-C4 provides a summary list of previously submitted status and progress reports with respect to Permit Nos. 1050023-020-AC and 1050023-025-AC.

PART II

FDEP APPLICATION FOR AIR PERMIT

RECEIVED
JUL 20 2011
BUREAU OF
AIR REGULATION

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Cutrale Citrus Juices USA, Inc.**	
2. Site Name: **Cutrale Citrus Juices USA, Inc. – Auburndale Facility**	
3. Facility Identification Number: **1050023**	
4. Facility Location... Street Address or Other Locator: **602 McKean Street** City: **Auburndale** County: **Polk** Zip Code: **33823**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

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

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 7-20-11	3. PSD Number (if applicable):
2. Project Number(s): 1050023-026-AC	4. Siting Number (if applicable):

1050023-027-AV

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

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

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

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

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

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

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

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

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

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

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

Application Comment

This application is for concurrent processing of revisions to the current Title V air permit, 1050023-024-AV, for the Cutrale Citrus Juices USA, Inc. (Cutrale) Auburndale Facility, as well as for the underlying air construction permits, 1050023-020-AC and 1050023-025-AC, upon which they were based. This permit revision application incorporates the provisions of Permit Nos. 1050023-020-AC and 1050023-025-AC, and, therefore, requires changes to conditions of the current Title V Air Operation Permit No. 1050023-024-AV to incorporate these new requirements. Permit Nos. 1050023-020-AC and 1050023-025-AC authorized the replacement of the current Solar turbines (EU 008 and EU 009) with new, more efficient and lower-emitting Solar Centaur 50 units (EU 019 and EU 020). The new combustion turbines were designed to be integrated with the existing duct burners and heat recovery steam generators. Permit No. 1050023-020-AC permits the existing duct burner No. 1 (99MMBtu/hr) 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 No. 1, 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.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
019	New Cogen System Turbine #1 w/ Existing Duct Burner #1	AV02	NA
020	New Cogen System Turbine #2 w/ Existing Duct Burner #2	AV02	NA

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

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

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   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**

APPLICATION INFORMATION

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.

P. C...

Signature

7/15/11

Date

APPLICATION INFORMATION

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

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

Signature Date 7/18/11

(seal)

SCOTT OSBOURN LICENSE NO. 57557 STATE OF FLORIDA PROFESSIONAL ENGINEER

*** Board of Professional Engineers Certificate of Authorization No. 00001670**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **421.6** North (km) **3103.7**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **20**	6. Facility SIC(s): **2037**
7. Facility Comment : The facility consists of a citrus juice products and animal feed processing plant. The plant has two wet peel dryers with associated waste heat evaporators, three pelletizers, five citrus peel/pellet collers, one boiler, and two cogeneration systems each with a gas turbine and duct burner.			

Facility Contact

1. Facility Contact Name: **Ed Priest**
2. Facility Contact Mailing Address... Organization/Firm: **Cutrale Citrus Juices USA, Inc.** Street Address: **602 McKean Street** City: **Auburndale** State: **FL** Zip Code: **33823**
3. Facility Contact Telephone Numbers: Telephone: **(352) 552-9036** ext. Fax: **(352) 552-9066**
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."

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:

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:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM/PM_{10}	**A**	**N**
NOx	**A**	**N**
SO_2	**A**	**N**
CO	**A**	**N**
VOC	**A**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

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

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

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date: **7/16/07**
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: **9/9/08**
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: **7/16/07**

Additional Requirements for Air Construction Permit Applications-- NA

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

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)

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: **CA-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

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

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

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a CAIR source)

Additional Requirements Comment

Attachment CA-FI-C2 provides the documentation for demonstration of compliance.

Attachment CA-FI-C3 provides Solar Turbine's predicted engine performance data on the Centaur 50-6200S.

Attachment CA-FI-C4 provides a summary list of previously submitted status and progress reports with respect to 1050023-020-AC and 1050023-025-AC.

ATTACHMENT CA-FI-C1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT CA-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 1050023-020-AC (PSD-FL-365);
- TV Air Operation Permit 1050023-024-AC; and
- TV Air Construction Permit 1050023-025-AC (PSD-FL-365A).

Title V Core List Effective: 03/01/02

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

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

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

State: ***(description)***

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Miscellaneous:

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

Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

February 22, 2011

Sent by Electronic Mail – Received Receipt Requested

Aaron P. Corkum, Manager of Environmental Affairs
Cutrale Citrus Juices USA, Inc.
602 McKean Street
Auburndale, FL 33823-4070

Re: Extension of Air Construction Permit Expiration Date
Cutrale Citrus Juices USA, Inc. - Auburndale Facility
Project No. 1050023-025-AC, PSD-FL-365A
Extension of Original Air Permit No. 1050023-020-AC, PSD-FL-365

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. 1050023-020-AC for the Auburndale Facility located in Polk County at 602 McKean Street in Auburndale, Florida. Cutrale requests the additional time to complete work authorized under this air construction permit issued by the Department on June 4, 2008. The facility received its initial Title V permit (1050023-021-AV) on July 30, 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 98% 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.

#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.

Executed in Tallahassee, Florida.

For Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/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 2/22/11 to the persons listed below.

Aaron P. Korcum, Cutrale Citrus Juices USA, Inc. (acorkum@cutrale.com)
Scott Osbourn, Golder Associates (Scott_Osbourn@golder.com)
Mara Nasca, DEP Southwest District Office (mara.nasca@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.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) 2/22/11 (Date)

Cutrale Citrus Juices USA, Inc.
Auburndale Facility
Facility ID No.: 1050023
Polk County

Title V Air Operation Permit Revision

FINAL Permit No.: 1050023-024-AV
Revision to Title V Air Operation Permit No.: 1050023-021-AV

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

Compliance Authority:
State of Florida
Florida Department of Environmental Protection
Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/632-7600
Fax: 813/632-7668

Title V Air Operation Permit Revision

FINAL Permit No.: 1050023-024-AV
Revision to Title V Air Operation Permit No.: 1050023-021-AV

Table of Contents

Permittee:
Cutrale Citrus Juices USA, Inc.
602 McKean Street
Auburndale, Florida 33823

FINAL Permit No.: 1050023-024-AV
Facility ID No.: 1050023
SIC No(s).: 2037
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of air construction permit, No. 1050023-023-AC, for the addition of a backup feed cooler to the facility's existing peel/pellet coolers. This facility is located at 602 McKean Street, Auburndale, Polk County; UTM Coordinates: Zone 17, 421.6 km East and 3103.7 km North; and, Latitude: 28° 3' 28" North and Longitude: 81° 47' 52" West.

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

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06 with AOR and Renewal updates 11/10/2008.
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96

Initial Effective Date: July 29, 2008
Revision Effective Date: January 12, 2010
Renewal Application Due Date: December 16, 2012
Expiration Date: July 29, 2013

Mara Grace Nasca
District Air Program Administrator
Southwest District

MGN/DS/pp

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of a citrus juice products and animal feed processing plant. The plant has two wet peel dryers with associated waste heat evaporators (WHEs), three pelletizers, five citrus peel/pellet coolers, one boiler and two cogeneration systems each with a gas turbine and duct burner.

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

Based on the Title V Air Operation Permit Revision application received July 23, 2009, 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).

E.U. ID No.	Brief Description
-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-010	Pelletizer w/ Vertical Cooler
-018	Boiler No. 1
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2
-021	Backup Feed Cooler

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

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:
Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1: Permit History
Statement of Basis

These documents are on file with the 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 18, 2007
Additional Information Request dated August 16, 2007
Additional Information Response received November 13, 2007
Waiver of the 90 day permitting clock until February 29, 2008 received February 7, 2008
Additional Information received March 14, 2008
Application for a Title V Air Operation Permit Revision received July 23, 2009

{**Permitting Note:** The effective date of the following facility-wide and emissions Unit specific conditions is July 29, 2008, as shown on Page 1 of this permit, unless otherwise noted.}

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 a 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.]

Documents on file with USEPA
The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

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 10162
Fairfax, VA 22038
Telephone: 703/227-7650

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

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.]

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-6, 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 Construction Permit 1050023-020-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.]

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 Southwest District office.

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

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 30303-8960

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.]

FACILITY LIMITS

13. Fruit Throughput Limited: The owner or operator shall not process more than 38.0 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 10^{th} day of each following month.
[Rule 62-4.070(3), F.A.C. and Construction Permit 1050023-020-AC]

14. VOC Emission Limits and Oil Recovery: VOC emissions will be limited by achieving 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.

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.

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.

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

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 Construction Permit 1050023-020-AC]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F

Emissions Unit I.D. -001 is the No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F. Citrus Peel Dryer 1 has a design water removal capacity of 60,000 lbs/hr, and a maximum process input rate of 55 tons/hr of pressed peel. The peel dryer's furnace is fired at a maximum heat input rate of 90.0 MMBtu/hr.

Emissions Unit I.D. -003 is the No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F. Citrus peel dryer 2 has a design water removal capacity of 60,000 lbs/hr, and a maximum process input rate of 55 tons/hr of pressed peel. The peel dryer's furnace is fired at a maximum heat input rate of 90.0 MMBtu/hr.

The exhaust gas from both peel dryers is sent via a common manifold to WHEs. Each WHE functions as an indirect heat exchanger to drive moisture from the press liquor (from the peel presses), and also acts as a particulate scrubber control device.

{Permitting note(s): These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; and, the applicable requirements of 1050023-020-AC.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. 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, Construction Permit 1050023-020-AC]

A.2. Methods of Operation - (i.e., Fuels). Only natural or No. 2 fuel oil with a maximum sulfur content of 0.1 percent by weight shall be fired in these units.
[Rule 62-213.410, F.A.C.; and, Construction Permit 1050023-020-AC]

A.3. Hours of Operation. These emissions units are allowed to operate, as necessary, to process 38.0 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, Construction Permit 1050023-020-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/PM_{10} emissions from each dryer shall not exceed 15.0 pounds per hour. [Construction Permit 1050023-020-AC and 62-212.400 (BACT), F.A.C.]

A.5. Visible Emissions. Visible emissions from each unit shall not exceed 20 percent opacity. [Construction Permit 1050023-020-AC]

Excess Emissions

A.6. This emissions unit is subject to conditions **F.1. and F.3.** contained in **Subsection F. Common Conditions.**

Test Methods and Procedures

A.7. PM/PM10. The test method for PM/PM_{10} 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.8. Visible emissions. 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.9. 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.]

A.10. Test Procedures. This emissions unit is also subject to conditions **G.1. through G.6.** contained in **Subsection G. Common Conditions.**

Monitoring of Operations

A.11. This emissions unit is subject to condition **F.4.** contained in **Subsection F. Common Conditions.**

Recordkeeping and Reporting Requirements

A.12. 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.13. 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.14. Test Reports. This emissions unit is subject to condition **G.7.** contained in **Subsection G. Common Conditions.**

A.15. 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.16. All recorded data shall be maintained on file by the Source at the facility for a period of five years.
[Rule 62-213.440, F.A.C.]

Best Management Practices

A.17. 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;
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.

[Construction Permit 1050023-020-AC]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-010	Pelletizer w/ Vertical Cooler
-021	Backup Feed Cooler

Pelletizer w/ Horizontal Cooler No. 1N (Emissions Unit I.D. -005), has a maximum process input rate of 16 tons/hr. of dried pellets.

Pelletizer w/ Horizontal Cooler No. 2C (Emissions Unit I.D. -006), has a maximum process input rate of 16 tons/hr. of dried pellets.

Peel Cooler No. 3S (Emissions Unit I.D. -007), receives only dried citrus pulp from either or both citrus dryers at a maximum process input rate of 16 tons/hr.

Pelletizer w/ Vertical Cooler (Emissions Unit I.D. -010), receives dried citrus pulp from either or both citrus dryers at a maximum total process input rate of 15 tons/hr. **OR** receives pellets from the pellet mill associated with either or both Emission Unit Nos. 005 and 006 at a maximum total process input rate of 27 tons/hr.

Backup Feed Cooler (Emissions Unit I.D. -021), has a maximum process input rate of 26.8 tons/hr. of dried pellets or flakes and may be used as a backup cooler in the event one of the other pellet/peel coolers (i.e. E.U. 005, 006, 007, or 010) is out of service.

The emissions from each cooler are controlled by its own cyclone. Emissions from the cyclones discharge to the atmosphere through a common stack used by the coolers.

{Permitting note(s): These emissions units are regulated under Rule 62-210.300, F.A.C., Permits required, and the applicable requirements of 1050023-020-AC, 1050023-22-AC and 1050023-23-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 coolers are determined by the capacity of the citrus peel dryers.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permits 1050023-020-AC and 1050023-023-AC]

{Permitting note: The pellet coolers inputs are equal to the output of dried peel from the peel dryers.}

B.2. Hours of Operation.

A. Emissions units no. 005, 006, 007 and 010 are allowed to operate, as necessary, to process 38.0 million boxes of citrus fruit in any consecutive 12 month period.

B. Emissions unit no. 021 hours of operation are limited to a maximum of 5,880 hours per any consecutive 12 month period.

[Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400 (BACT), F.A.C.; Construction Permits 1050023-020-AC and 1050023-023-AC]

{Permitting note: For emission calculations, the operation of each of these 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/PM_{10} emissions from each cooler shall not exceed 5.0 pound per hour.
[Construction Permits 1050023-020-AC and 1050023-023-AC]

B.4. Visible Emissions. Visible emissions from each cooler shall not exceed 5 percent opacity.
[Construction Permits 1050023-020-AC and 1050023-023-AC]

Excess Emissions

B.5. This emissions unit is subject to conditions **F.1. through F.3.** contained in **Subsection F. Common Conditions.**

Test Methods and Procedures

B.6. 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 Construction Permit 1050023-020-AC]

B.7. Visible emissions. 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.]

B.8. Test Procedures. This emissions unit is also subject to conditions **G.1. through G.6.** contained in **Subsection G. Common Conditions.**

Monitoring of Operations

B.9. This emissions unit is subject to condition **F.4.** contained in **Subsection F. Common Conditions.**

Recordkeeping and Reporting Requirements

B.10. Daily Recordkeeping:

(a) The permittee shall maintain daily records on dates when compliance tests are performed.

(b) The permittee shall also maintain daily records whenever compliance tests are performed and submitted for rates less than 90% of maximum permitted rate to demonstrate compliance with condition G.2. contained in Subsection G. Common Conditions. If this condition occurs, daily records are required until additional compliance testing has been successfully completed above 90% of the maximum permitted rate and the permittee has regained the authority to operate at the permitted capacity.

(c) Daily records shall include, but are not limited to, the following:

1. Facility Name, Facility Number (1050023), Emission Unit No. and Date;
2. The "daily average throughput' of each affected cooler.

Note: "daily average throughput" means the total daily throughput divided by the actual hours of operation.

[Rule 62-4.070(3), F.A.C.; Construction Permits 1050023-023-AC]

B.11. Monthly Log. The permittee shall maintain monthly records to document compliance with the hours of operation limitation required by Specific Condition No. B.2.B. Monthly records shall include, but are not limited to, the following:

(a) Facility Name, Facility Number (1050023), Emission Unit No. (EU-021), Month, Year;

(b) The total hours of operation of the emissions unit for the month;

(c) The total hours of operation of the emissions unit for the most recent consecutive 12 month period.

All monthly records shall be completed by the end of following month. All records required by this emission unit shall be maintained at the facility for at least five years, unless otherwise noted, and be made available to the Department for inspection upon request.

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

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-018	Boiler No. 1

Boiler No. 1 (Emissions Unit I.D. -018), is manufactured by English Boiler and Tube, Inc. The maximum operation heat input rate is 99.9 million Btu per hour and fires natural gas or 0.1 percent sulfur No. 2 fuel oil. The initial startup date was 2006.

{Permitting note(s): This emissions unit is 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 this emissions unit shall not exceed 99.9 million Btu per hour, heat input.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Construction Permit 1050023-019-AC]

C.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 No. 1.
[Rules 62-212.400 (BACT) and 62-213.410, F.A.C.]

C.3. Hours of Operation. This emissions unit is 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 by firing only 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.]

C.5. Sulfur Dioxide. Sulfur dioxide shall be limited by firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, 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 **C.9.** and **C.10.**
[Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

C.6. Visible Emissions. Visible emissions 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

C.7. This emissions unit is subject to conditions **F.1. through F.3.** contained in **Subsection F. Common Conditions.**

Test Methods and Procedures

C.8. Particulate Matter. Compliance with the particulate matter standard is demonstrated by firing only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.
[Rule 62-212.400 (BACT), F.A.C.]

C.9. Sulfur Dioxide. Compliance with the sulfur dioxide standard is demonstrated by firing only 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.
[Rule 62-296.406(3), F.A.C.]

C.10. 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.11. Visible Emissions. 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.12. Test Procedures. This emissions unit is also subject to conditions **G.1. through G.6.** contained in **Subsection G. Common Conditions.**

Monitoring of Operations

C.13. This emissions unit is subject to condition **F.4.** contained in **Subsection F. Common Conditions.**

Recordkeeping and Reporting Requirements

C.14. 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.15. 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.16. All recorded data shall be maintained on file by the Source at the facility for a . years.
[Rule 62-213.440, F.A.C.]

C.17. Test Reports. This emissions unit is subject to condition **G.7.** contained in **Subsection G. Common Conditions.**

Best Management Practices

C.18. This emissions unit is subject to condition **H.1.** contained in **Subsection H. Common Conditions.**

NSPS Requirements

Subpart A-General Provisions

C.19. This emissions unit is subject to conditions **I.1. through I.30.** contained in **Subsection I. Common Conditions.**

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

Standard for Sulfur Dioxide.

C.20. 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 SO_2 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.21. 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.22. The SO_2 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.23. 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.24. 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.25. If only oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly SO_2 emission rate (Eho) and the 30-day average SO_2 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.26. 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)]

C.27. 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.28. 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.29. The owner or operator of an affected facility shall use all valid SO_2 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.30. 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 SO_2 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.31. 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 SO_2 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)]

C.32. The owner or operator of each affected facility subject to the SO_2 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.33. 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.34. 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 60.43c 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 SO_2 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 SO_2 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 SO_2 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)]

C.35. 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.36. 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.37. 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.38. 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)]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2

New Cogen System #1 w/ Existing Duct Burner #1 consists of a Solar Centaur 50 (or equivalent) turbine with a maximum heat input rate of 62.7 million Btu per hour at 32°F and a corresponding power output of approximately 4.4 megawatts; and, an existing Coen duct burner with a maximum heat input rate of 99.9 million Btu per hour.

New Cogen System #2 w/ Existing Duct Burner #2 consists of a Solar Centaur 50 (or equivalent) turbine with a maximum heat input rate of 62.7 million Btu per hour at 32°F and a corresponding power output of approximately 4.4 megawatts; and, an existing Coen duct burner with a maximum heat input rate of 33.1 million Btu per hour.

Construction of the new turbines is expected to commence within 18 months of the issuance of 1050023-020-AC. See conditions 22 and 23 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. Permitted Capacity. The maximum heat input to each Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the No. 1 duct burner shall not exceed 99.9 million Btu per hour. The maximum heat input to the No. 2 duct burner shall not exceed 33.1 million Btu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Construction Permit 1050023-020-AC]

D.2. Emissions Unit Operating Rate Limitation After Testing. See condition **G.2.** contained in **Subsection G. Common Conditions.**
[Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - (i.e., Fuels). Only natural gas shall be fired in the turbines; 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 No. 1 duct burner; and, only natural gas shall be fired in the No. 2 duct burner.
[Construction Permit 1050023-020-AC]

D.4. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Construction Permit 1050023-020-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.}

D.5. Particulate Matter. Particulate matter emissions from the duct burners 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. Nitrogen Oxides. The maximum allowable NOx concentration from each turbine shall not exceed 25 ppmvd, corrected to 15% O_2.
[Rule 62-212.400 (BACT), F.A.C.]

{Permitting Note: Each turbine is also subject to a limit based on useful output by the NSPS, see Specific Condition **D.26.**}

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.12.** and **D.13.**
[40CFR60.4330 and Rules 62-212.400 (BACT) and 62-296.406(2), F.A.C.]

D.8. Visible Emissions. Visible emissions shall not exceed 20 percent opacity.
[Construction Permit 1050023-020-AC]

Excess Emissions

D.9. This emissions unit is subject to conditions **F.1. through F.3.** contained in **Subsection F. Common Conditions.**

Test Methods and Procedures

D.10. 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.
[Construction Permit 1050023-020-AC]

D.11. 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.12. 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.
[Construction Permit 1050023-020-AC]

D.13. 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.14. Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9.
[Construction Permit 1050023-020-AC]

D.15. Test Procedures. This emissions unit is also subject to conditions **G.1. through G.6.** contained in **Subsection G. Common Conditions.**

Monitoring of Operations

D.16. This emissions unit is subject to condition **F.4.** contained in **Subsection F. Common Conditions.**

Recordkeeping and Reporting Requirements

D.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.]

D.18. Test Reports. This emissions unit is subject to condition **G.7.** contained in **Subsection G. Common Conditions.**

D.19. 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 daily record logs 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.20. All recorded data shall be maintained on file by the Source at the facility for a period of five years.
[Rule 62-213.440, F.A.C.]

Miscellaneous Requirements

D.21. Definitions. 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.22. Quarterly Progress Reports. Provide a quarterly report to the Department's Tallahassee office describing the progress made in completing construction of the new turbines 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.
[Construction Permit 1050023-020-AC]

D.23. If construction of the new turbine does not commence within 18 months of the issuance of permit 1050023-020-AC, the existing cogeneration system can continue operation under the permanent restrictions cited in **Section III. Subsection E.** of this permit.
[Construction Permit 1050023-020-AC]

Best Management Practices

D.24. This emissions unit is subject to condition **H.1.** contained in **Subsection H. Common Conditions.**

NSPS Requirements

Subpart A-General Provisions

D.25. This emissions unit is subject to conditions **I.1. through I.14. and I.25. through I.30.** contained in **Subsection I. Common Conditions.**

Subpart KKKK-Standards of Performance for Stationary Gas Turbines

Emission Limits.

D.26. 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]

D.27. 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 SO_2 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 SO_2/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.28. 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.29. 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.30. 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 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 SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO_2/J (0.42 lb SO_2/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.31. 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.

(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.32. 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.33. How are excess emissions and monitoring downtime defined for SO_2?

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 obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

[40CFR60.4385]

D.34. 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.35. 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:

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

Where:

E = NO_X emission rate, in lb/MWh
1.194 x 10^{-7} = conversion constant, 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. 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 ± 10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than 5ppm or ± 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 ± 3ppm or ± 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 ± 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.36. 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]

D.37. 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 SO_2 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.

(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 SO_2 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 SO_2 emission rate:

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

Where:

E = SO_2 emission rate, in lb/MWh
1.664 x 10^{-7} = conversion constant, in lb/dscf-ppm
(SO2)c = average SO_2 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]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2

Cogeneration System No. 1 w/ Coen Duct Burner & ERI Waste Heat Boiler consists of a Solar Centaur Model H turbine with a maximum heat input rate of 62.7 million Btu per hour; a duct burner with a maximum heat input rate of 99.9 million Btu per hour; and, an electrical generator with a nameplate rating of 4 megawatts. The cogeneration system began operation in 1988.

Cogeneration System No. 2 w/ Coen Duct Burner & ERI Waste Heat Boiler consists of a Solar Centaur Model H turbine with a maximum heat input rate of 62.7 million Btu per hour; a duct burner with a maximum heat input rate of 33.1 million Btu per hour; and, an electrical generator with a nameplate rating of 4 megawatts. 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 each Gas Turbine shall not exceed 62.7 million Btu per hour. The maximum heat input to the duct burner No. 1 shall not exceed 99.9 million Btu per hour. The maximum heat input to the duct burner No. 2 shall not exceed 33.1 million Btu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 1050023-020-AC]

E.2. Emissions Unit Operating Rate Limitation After Testing. See condition **G.2.** contained in **Subsection G. Common Conditions.**
[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 turbines addressed in the preceding subsection does not commence within 18 months following issuance of permit 1050023-020-AC, the turbines and the duct burners shall fire only natural gas.
[1050023-020-AC and Rule 62-210.200(BACT), F.A.C.]

E.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. If construction of the new turbines addressed in the preceding subsection does not commence within 18 months following issuance of permit 1050023-020-AC, the combined annual hours of operation of the two turbines shall not exceed 750 hours per year; and, the annual operation of each duct burner shall not exceed 5,000 hours per year.
[1050023-020-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.}

E.5. Particulate Matter. Particulate matter emissions from the duct burners are limited by the combustion of natural gas or No. 2 fuel oil with a maximum sulfur content of 0.1 percent, by weight.
[Construction Permit 1050023-020-AC]

E.6. Nitrogen Oxides. The maximum allowable NOx concentration from each turbine shall not exceed 168 ppmvd, corrected to 15% O_2.
[Construction Permit 1050023-020-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.12.** and **E.13.**
[Construction Permit 1050023-020-AC]

E.8. Visible Emissions. Visible emissions from each turbine and duct burner shall not exceed 20 percent opacity.
[Construction Permit 1050023-020-AC]

Excess Emissions

E.9. This emissions unit is subject to conditions **F.1. through F.3.** contained in **Subsection F. Common Conditions.**

Test Methods and Procedures

E.10. 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.
[Construction Permit 1050023-020-AC]

E.11. Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted using Environmental Protection Agency Method 20 or 7E.
[Construction Permit 1050023-020-AC]

E.12. 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.13. 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.14. Opacity Testing. Tests for visible emissions shall be conducted using United States Environmental Protection Agency Method 9.
[Construction Permit 1050023-020-AC]

E.15. Test Procedures. This emissions unit is also subject to conditions **G.1. through G.6.** contained in **Subsection G. Common Conditions.**

Monitoring of Operations

E.16. This emissions unit is subject to condition **F.4.** contained in **Subsection F. Common Conditions.**

Recordkeeping and Reporting Requirements

E.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.]

E.18. Test Reports. This emissions unit is subject to condition **G.7.** contained in **Subsection G. Common Conditions.**

E.19. 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 daily record logs 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.20. All recorded data shall be maintained on file by the Source at the facility for a period of five years.
[Rule 62-213.440, F.A.C.]

Miscellaneous Requirements

E.21. Definitions. 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.22. 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.23. If construction of the new turbines addressed in the preceding subsection do not commence within 18 months following issuance of permit 1050023-020-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.24. This emissions unit is subject to condition **H.1.** contained in **Subsection H. Common Conditions.**

NSPS Requirements

Subpart A-General Provisions

E.25. This emissions unit is subject to conditions **I.1. through I.14. and I.25. through I.30.** contained in **Subsection I. Common Conditions.**

Subpart GG-Standards of Performance for Stationary Gas Turbines

Standard for Nitrogen Oxides.

E.26. 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)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04(N)
$0.1 < N \leq 0.25$	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.27. 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.28. 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.29. 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.30. 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.

E.31. 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.32. 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.33. 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.34. 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)]

Test Methods and Procedures.

E.35. 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.36. 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.37. 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:

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

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.38. 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)]

E.39. 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.40. 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)]

Subsection F. Common Conditions.

-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2
-010	Pelletizer w/ Vertical Cooler
-018	Boiler No. 1
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2
-021	Backup Feed Cooler

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.}

F.1. 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.]

F.2. 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.]

F.3. 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.]

Monitoring of Operations

F.4. 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.]

Subsection G. Common Conditions – Test Procedures

E.U. ID No.	Brief Description
-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B. C. D. E and F
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-010	Pelletizer w/ Vertical Cooler
-018	Boiler No. 1
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2
-021	Backup Feed Cooler

Test Methods and Procedures

G.1. 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.]

G.2. 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.]

G.3. 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.]

G.4. 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.]

G.5. 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.]

G.6. 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
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) Special Compliance Tests. 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]

Reporting Requirements

G.7. 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.
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.]

Subsection H. Common Conditions – Best Management Practices

E.U. ID No.	Brief Description
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2
-018	Boiler No. 1
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2

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

Best Management Practices

H.1. 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.

[Construction Permits 1050023-019-AC & 1050023-020-AC]

Subsection I. Common Conditions - NSPS

E.U. ID No.	Brief Description
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2
-018	Boiler No. 1
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2

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

40 CFR 60, Subpart A - General Provisions Requirements

I.1. 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)]

I.2. 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)]

I.3. 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)]

I.4. 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)]

I.5. 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)]

I.6. 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)]

I.7. 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)]

I.8. 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)]

I.9. 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)]

I.10. 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)]

I.11. 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)]

I.12. 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)]

I.13. 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)]

I.14. 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]

I.15. 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)]

I.16. 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)]

I.17. 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)]

I.18. (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 photo detector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.
[40 CFR 60.13(d)]

I.19. 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)]

I.20. 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)]

I.21. 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)]

I.22. 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)]

I.23. 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)]

I.24. 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)]

I.25. 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)]

I.26. 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)]

I.27. 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)]

I.28. 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)]

I.29. 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)]

I.30. 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)]

PERMITTEE:

Cutrale Citrus Juices USA, Inc.
602 McKean Street
Auburndale, Florida 33823

Responsible Official:
Hugh W. Thompson III, President

Auburndale Facility
DEP File No.: 1050023-020-AC (PSD-FL-365)
Facility ID No.: 1050023
SIC Nos.: 2037
Permit Expires: May 31, 2010

PROJECT AND LOCATION

This permit establishes federally enforceable emissions limits for the Auburndale 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 two cogeneration systems at the Auburndale facility currently operated by Cutrale without obtaining a PSD construction permit located at 602 McKean Street, Auburndale, Polk County; UTM Coordinates: Zone 17, 421.6 km East and 3103.7 km North; Latitude: 28°3'28" North and Longitude 81°47'52" 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.

CONTENTS

Joseph Kahn, Director
Division of Air Resource Management

(Date)

FACILITY AND PROJECT DESCRIPTION

This facility consists of a citrus juice products and animal feed processing plant. The plant has two wet peel dryers with associated waste heat evaporators (WHEs), four citrus peel/pellet coolers, one boiler and two cogeneration systems each with a gas turbine.

E.U. ID No.	Brief Description
-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-010	Pelletizer w/ Vertical Cooler
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2

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.

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

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

NESHAP: 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. Permitting Authority: 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. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Florida Department of Environmental Protection (DEP) Southwest District Office at 13051 N. Telecom Parkway, Temple Terrace, Florida 33637-0926.

3. Appendices: 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. Modifications: 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. Title V Permit: 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. Initial Compliance Demonstration Required: 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;

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 38.0 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. VOC Emission Limits and Oil Recovery: 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

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-001 and -003 –Citrus Peel Dryers

This section of the permit addresses the following emissions units.

E.U. ID No.	Brief Description
-001	No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F
-003	No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F

Emissions Unit I.D. -001 is the No. 1 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F. Citrus Peel Dryer 1 has a design water removal capacity of 60,000 lbs/hr, and a maximum process input rate of 55 tons/hr of pressed peel. The peel dryer's furnace is fired at a maximum heat input rate of 90.0 MMBtu/hr. The exhaust gas from both peel dryers is sent via a common manifold to waste heat evaporators (WHEs). Each WHE functions as an indirect heat exchanger to drive moisture from the press liquor (from the peel presses), and also acts as a particulate scrubber control device.

Emissions Unit I.D. -003 is the No. 2 Citrus Peel Dryer w/ Waste Heat Evaporators A, B, C, D, E and F. Citrus peel dryer 2 has a design water removal capacity of 60,000 lbs/hr, and a maximum process input rate of 55 tons/hr of pressed peel. The peel dryer's furnace is fired at a maximum heat input rate of 90.0 MMBtu/hr. The exhaust gas from both peel dryers is sent via a common manifold to WHEs. Each WHE functions as an indirect heat exchanger to drive moisture from the press liquor (from the peel presses), and also acts as a particulate scrubber control device.

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

Essential Potential to Emit (PTE) Parameters

1. Permitted Capacity. 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 or No. 2 fuel oil with a maximum sulfur content of 0.1 percent by weight shall be fired in these units. [Rule 62-213.410, F.A.C.; and, Requested by Applicant]

3. Hours of Operation. These emissions units are allowed to operate, as necessary, to process 38.0 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. PM/PM10. PM/PM_{10} emissions from each dryer shall not exceed 15.0 pounds per hour. [Requested by Applicant and 62-212.400 (BACT), F.A.C.]

5. Visible Emissions. 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.]

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. PM/PM10. The test method for PM/PM_{10} 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. Visible emissions. 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. 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.]

12. 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.]

13. 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.]

14. 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.]

15. 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.]

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:

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) Special Compliance Tests. 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

17. 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

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. 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.]

20. 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.
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.]

21. 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 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.]

22. 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

23. 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;
    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, -006, -007 and -010 – Pellet Coolers

This section of the permit addresses the following emissions units.

E.U. ID No.	Brief Description
-005	Pelletizer w/ Horizontal Cooler No. 1N
-006	Pelletizer w/ Horizontal Cooler No. 2C
-007	Peel Cooler No. 3S
-010	Pelletizer w/ Vertical Cooler

Pelletizer w/ Horizontal Cooler No. 1N (Emissions Unit I.D. -005), has a maximum process input rate of 16 tons/hr. of dried pellets. The emissions from each cooler are controlled by its own cyclone, which returns product to the cooler.

Pelletizer w/ Horizontal Cooler No. 2C (Emissions Unit I.D. -006), has a maximum process input rate of 16 tons/hr. of dried pellets. The emissions from each cooler are controlled by its own cyclone, which returns product to the cooler.

Peel Cooler No. 3S (Emissions Unit I.D. -007), receives only dried citrus pulp from either or both citrus dryers at a maximum process input rate of 16 tons/hr. The emissions from cooler are controlled by a cyclone, which returns product to the cooler.

Pelletizer w/ Vertical Cooler (Emissions Unit I.D. -010), receives dried citrus pulp from either or both citrus dryers at a maximum total process input rate of 15 tons/hr. **OR** receives pellets from the pellet mill associated with either or both Emission Unit Nos. 005 and 006 at a maximum total process input rate of 27 tons/hr. The emissions from the cooler are controlled by its own cyclone, which returns product to the cooler.

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

Essential Potential to Emit (PTE) Parameters

1. Permitted Capacity. The capacity of the pellet coolers are determined by the capacity of the citrus peel dryers. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]

   {Permitting note: The pellet coolers inputs are equal to the output of dried peel from the peel dryers.}

2. Hours of Operation. These emissions units are allowed to operate, as necessary, to process 38.0 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 these emissions units is estimated not to exceed 5,880 hours per year.}

Emission Limitations and Standards

3. PM/PM10. PM/PM_{10} emissions from each cooler shall not exceed 5.0 pounds per hour. [Requested by Applicant]

4. Visible Emissions. Visible emissions from each pellet cooler 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.]

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

9. Visible emissions. 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. 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.]

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.]

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.]

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) Special Compliance Tests. 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

15. 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.]

C. EU-019 and -020– New Cogeneration System Turbines & Existing Duct Burners

This section of the permit addresses the following emissions unit.

E.U. ID No.	Brief Description
-019	New Cogen System Turbine #1 w/ Existing Duct Burner #1
-020	New Cogen System Turbine #2 w/ Existing Duct Burner #2

New Cogen System #1 w/ Existing Duct Burner #1 consists of a Solar Centaur 50 (or equivalent) turbine with a maximum heat input rate of 62.7 million Btu per hour at 32°F and a corresponding power output of approximately 4.4 megawatts; and, an existing Coen duct burner with a maximum heat input rate of 99.9 million Btu per hour.

New Cogen System #2 w/ Existing Duct Burner #2 consists of a Solar Centaur 50 (or equivalent) turbine with a maximum heat input rate of 62.7 million Btu per hour at 32°F and a corresponding power output of approximately 4.4 megawatts; and, an existing Coen duct burner with a maximum heat input rate of 33.1 million Btu per hour.

Construction of the new turbines 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. Permitted Capacity. The maximum heat input to each Gas Turbine shall not exceed 62.7 million Btu per hour at 32°F. The maximum heat input to the No. 1 duct burner shall not exceed 99.9 million Btu per hour. The maximum heat input to the No. 2 duct burner shall not exceed 33.1 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]

2. Emissions Unit Operating Rate Limitation After Testing. 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 turbines; 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 No. 1 duct burner; and, only natural gas shall be fired in the No. 2 duct burner. [Requested by Applicant]

4. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Requested by Applicant]

Emission Limitations and Standards

5. Particulate Matter. Particulate matter emissions from the duct burners 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. Nitrogen Oxides. The maximum allowable NOx concentration from each turbine shall not exceed 25 ppmvd, corrected to 15% O_2. [Rule 62-210.200(BACT), F.A.C.]

{Permitting Note: Each 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 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. Visible Emissions. 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. 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]

13. Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted annually using Environmental Protection Agency Method 20 or 7E. [Requested by Applicant]

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]

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.]

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 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. 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.]

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 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, 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.]

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.
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) Special Compliance Tests. 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 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.
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 1., the permittee shall monitor and maintain daily record logs 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. Definitions. 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 turbines 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 1050023-020-AC, the existing cogeneration system can continue operation under the permanent restrictions cited in Section 3.D. of this permit. [Requested by Applicant]

Best Management Practices

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)]

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.
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. 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)]

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. 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)]

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]

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 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

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 (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 SO_2 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 SO_2/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?
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 SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO_2/J (0.42 lb SO_2/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]

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.

(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 SO_2?
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 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:

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

Where:

E = NO_X emission rate, in lb/MWh
1.194 x 10^{-7} = conversion constant, 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. 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 ± 10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than 5ppm or ± 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 ± 3ppm or ± 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 ± 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 SO_2 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.
(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 SO_2 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 SO_2 emission rate:

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

Where:

E = SO_2 emission rate, in lb/MWh
1.664 x 10^{-7} = conversion constant, in lb/dscf-ppm
(SO2)c = average SO_2 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]

D. EU-008and -009 – Existing Cogeneration Systems w/ Duct Burners

This section of the permit addresses the following emissions unit.

E.U. ID No.	Brief Description
-008	Existing Cogeneration System #1 w/ Duct Burner #1
-009	Existing Cogeneration System #2 w/ Duct Burner #2

Cogeneration System No. 1 w/ Coen Duct Burner & ERI Waste Heat Boiler consists of a Solar Centaur Model H turbine with a maximum heat input rate of 62.7 million Btu per hour; a duct burner with a maximum heat input rate of 99.9 million Btu per hour; and, an electrical generator with a nameplate rating of 4 megawatts. The cogeneration system began operation in 1988.

Cogeneration System No. 2 w/ Coen Duct Burner & ERI Waste Heat Boiler consists of a Solar Centaur Model H turbine with a maximum heat input rate of 62.7 million Btu per hour; a duct burner with a maximum heat input rate of 33.1 million Btu per hour; and, an electrical generator with a nameplate rating of 4 megawatts. 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. Permitted Capacity. The maximum heat input to each Gas Turbine shall not exceed 62.7 million Btu per hour. The maximum heat input to the duct burner No. 1 shall not exceed 99.9 million Btu per hour. The maximum heat input to the duct burner No. 2 shall not exceed 33.1 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Requested by Applicant]

2. Emissions Unit Operating Rate Limitation After Testing. 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 turbines addressed in the preceding subsection does not commence within 18 months following issuance of permit 1050023-020-AC, the turbines and the duct burners shall fire only natural gas. [Requested by Applicant and Rule 62-210.200(BACT), F.A.C.]

4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. If construction of the new turbines addressed in the preceding subsection does not commence within 18 months following issuance of permit 1050023-020-AC, the combined annual hours of operation of the two turbines shall not exceed 750 hours per year; and, the annual operation of each duct burner shall not exceed 5,000 hours per year. [Requested by Applicant and Rule 62-210.200(BACT), F.A.C.]

Emission Limitations and Standards

5. Particulate Matter. Particulate matter emissions from the duct burners 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. Nitrogen Oxides. The maximum allowable NOx concentration from each turbine shall not exceed 168 ppmvd, corrected to 15% O_2. [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]

8. Visible Emissions. Visible emissions from each turbine and duct burner 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. 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]

13. Nitrogen Oxides Testing. Tests for nitrogen oxides shall be conducted using Environmental Protection Agency Method 20 or 7E. [Requested by Applicant]

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]

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.]

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 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. 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.]

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 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, 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.]

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.

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) Special Compliance Tests. 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 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.
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 1., the permittee shall monitor and maintain daily record logs 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. Definitions. 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 turbines addressed in the preceding subsection do not commence within 18 months following issuance of permit 1050023-020-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

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)]

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.
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. 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)]

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. 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)]

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]

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 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 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)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04(N)
$0.1 < N \leq 0.25$	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)]

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:
(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:

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

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)]

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)]

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) Permanent Test Facilities. 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) Temporary Test Facilities. 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.

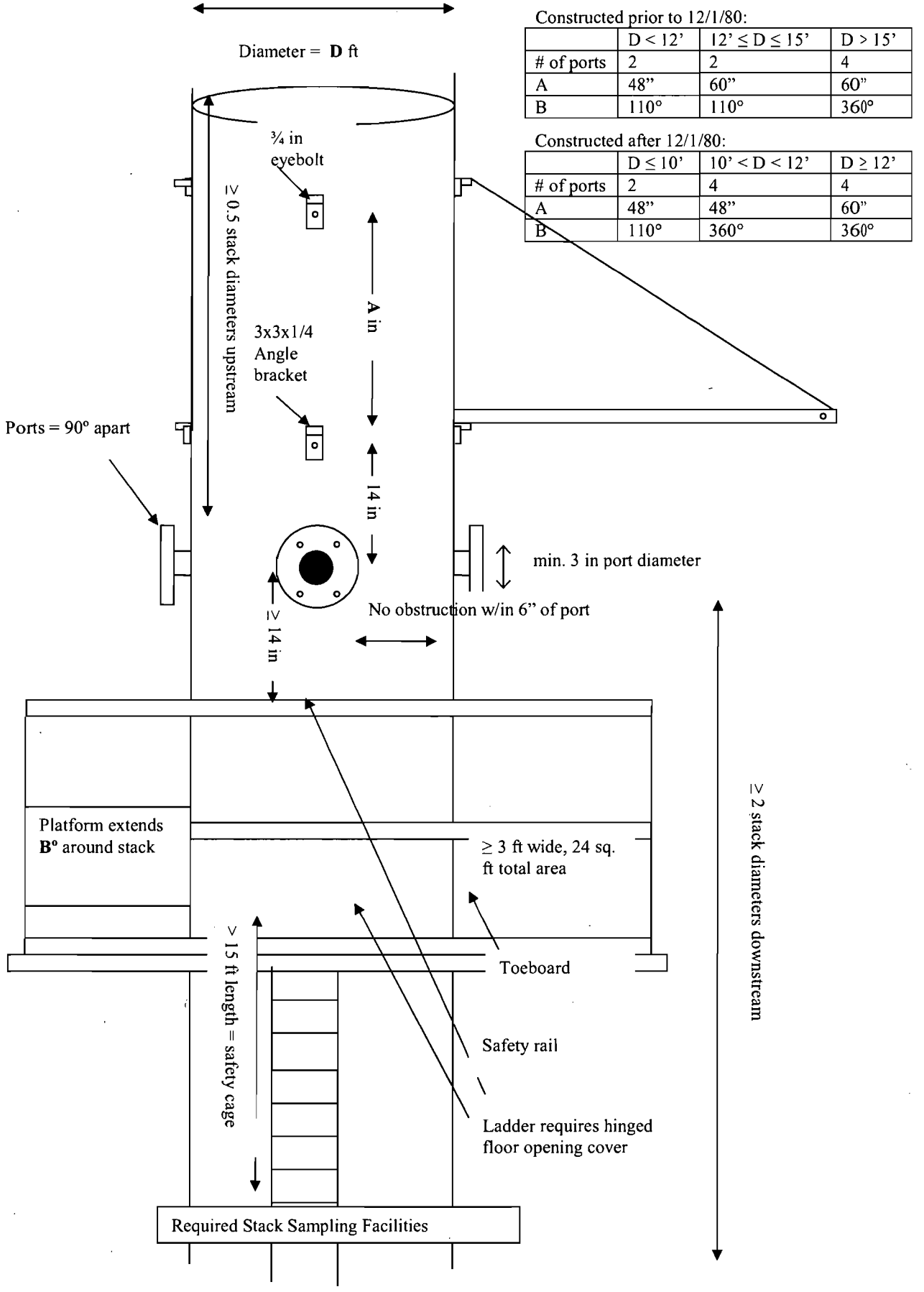
(f) Electrical Power.

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.

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 × 3 inch × 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.]



Constructed prior to 12/1/80:

	D < 12'	12' ≤ D ≤ 15'	D > 15'
# of ports	2	2	4
A	48"	60"	60"
B	110°	110°	360°

Constructed after 12/1/80:

	D ≤ 10'	10' < D < 12'	D ≥ 12'
# of ports	2	4	4
A	48"	48"	60"
B	110°	360°	360°

ATTACHMENT CA-FI-C2

COMPLIANCE DEMONSTRATION REPORTS/NOTIFICATIONS

ATTACHMENT CA-FI-C2
Compliance Demonstration Reports/Records

EU-019 New Cogen System Turbine #1 with Existing Duct Burner #1 EU-020 New Cogen System Turbine #2 with Existing Duct Burner #2 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 2/4/11, 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 2/4/11; see Attachment B.	In compliance
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.]	Compliance testing conducted on 2/4/11; see Attachment B.	In compliance

EU-019 New Cogen System Turbine #1 with Existing Duct Burner #1 EU-020 New Cogen System Turbine #2 with Existing Duct Burner #2 Test Methods and Procedures			
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 2/4/11; 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 2/4/11; 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 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, attached to this permit. See attachment TABLE 297.310-1, CALIBRATION SCHEDULE. [Rule 62-297.310(4), F.A.C.]	Compliance testing conducted on 2/4/11; 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 2/4/11; Attachment B.	In compliance

EU-019 New Cogen System Turbine #1 with Existing Duct Burner #1 EU-020 New Cogen System Turbine #2 with Existing Duct Burner #2 Test Methods and Procedures			
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. 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) Special Compliance Tests. 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]	Compliance testing conducted on 2/4/11; 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.
This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

	Perry 36" Stream #1		Perry 30" Stream #2		Perry 24" Stream #3			
	FGT.LIS.CMP		FGT.LIS.CMP.LINPERRY30		FGT.LIS.CMP.LINPERRY24		FGT.LIS.GRO	
Gas Day	Avg ppm	Avg Grains/hcf	Avg ppm	Avg Grains/hcf	Avg ppm	Avg Grains/hcf	Avg ppm	Avg 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
[illegible]/08/2011	0.159	0.010	0.730	0.046	0.722	0.045	3.001	0.188
[illegible]/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	0.299	0.019	1.222	0.076	1.204	0.075	0.615	0.038
03/31/2011	0.298	0.019	1.185	0.074	1.166	0.073	0.615	0.038
03/30/2011	0.289	0.018	1.265	0.079	1.254	0.078	0.615	0.038
03/29/2011	0.340	0.021	1.583	0.099	1.561	0.098	0.615	0.038
03/28/2011	0.264	0.016	1.542	0.096	1.497	0.094	0.615	0.038
03/27/2011	0.210	0.013	1.480	0.093	1.577	0.099	0.615	0.038
03/26/2011	0.098	0.006	1.081	0.068	1.091	0.068	0.615	0.038
03/25/2011	0.245	0.015	1.383	0.086	1.442	0.090	0.615	0.038
03/24/2011	0.189	0.012	1.434	0.090	1.408	0.088	0.615	0.038
03/23/2011	0.264	0.016	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	0.092	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
[illegible]/12/2011	0.377	0.024	1.130	0.071	1.226	0.077	0.615	0.038
[illegible]/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

Stream History

Gas Day	Perry 36" Stream #1		Perry 30" Stream #2		Perry 24" Stream #3			
	FGT.UIS.CMP		FGT.UIS.CMP.LINPERRY36		FGT.UIS.CMP.LINPERRY24		FGT.UIS.CRC	
	Avg ppm	Avg Grains/hcf	Avg ppm	Avg Grains/hcf	Avg ppm	Avg Grains/hcf	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	0.022	0.941	0.059	1.625	0.102	0.033	0.002
02/19/2011	0.359	0.022	0.804	0.050	1.405	0.088	0.019	0.001
02/18/2011	0.508	0.032	1.521	0.095	1.579	0.099	1.178	0.074
02/17/2011	0.435	0.027	1.741	0.109	1.762	0.110	3.284	0.205
02/16/2011	0.506	0.032	1.615	0.101	1.589	0.099	2.579	0.161
02/15/2011	0.623	0.039	1.592	0.099	1.609	0.101	2.324	0.145
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
02/12/2011	0.725	0.045	1.010	0.063	1.097	0.069	1.221	0.076
02/11/2011	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	0.028	0.506	0.032	0.642	0.040	1.387	0.087
01/29/2011	0.443	0.028	1.062	0.066	1.277	0.080	1.697	0.106
01/28/2011	0.409	0.026	1.249	0.078	1.247	0.078	2.012	0.126
01/27/2011	0.342	0.021	0.998	0.062	1.052	0.066	1.987	0.124
01/26/2011	0.399	0.025	1.298	0.081	1.345	0.084	1.618	0.101
01/25/2011	0.434	0.027	1.849	0.116	1.774	0.111	2.268	0.142
01/24/2011	0.436	0.027	0.925	0.058	0.947	0.059	2.097	0.131
01/23/2011	0.394	0.025	0.799	0.050	0.797	0.050	1.317	0.082
01/22/2011	0.779	0.049	1.423	0.089	1.527	0.095	1.532	0.096

Date	BTU	CO2	N2	Grav	Methan	Ethane	Propan	Ibutan	Nbutan	Ipenta	Npenta	C6	C7	C8	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	0.004	0	1331	-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	0.004	0	1330	-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	0.005	0	1329	-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	0.004	0	1330	-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	1329	-13
4/20/2011	1013	1.431	0.379	0.581	96.495	1.404	0.173	0.036	0.036	0.013	0.007	0.012	0.009	0.004	0	1329	-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	0.004	0	1330	-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	0.005	0	1331	-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	0	1329	-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	0.013	0.009	0.005	0	1329	-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	0.011	0.009	0.004	0	1330	-15
4/14/2011	1013	1.394	0.406	0.581	96.408	1.508	0.173	0.034	0.033	0.011	0.006	0.013	0.009	0.005	0	1329	-13
4/13/2011	1014	1.392	0.398	0.581	96.428	1.496	0.174	0.034	0.033	0.012	0.007	0.013	0.009	0.005	0	1330	-13
4/12/2011	1013	1.417	0.406	0.581	96.415	1.476	0.172	0.034	0.035	0.012	0.006	0.013	0.009	0.005	0	1329	-12
4/11/2011	1013	1.423	0.417	0.581	96.377	1.493	0.176	0.035	0.035	0.012	0.007	0.012	0.009	0.004	0	1329	-14
4/10/2011	1014	1.423	0.403	0.582	96.294	1.56	0.2	0.038	0.038	0.012	0.007	0.012	0.009	0.004	0	1329	-14
4/9/2011	1014	1.336	0.368	0.58	96.501	1.522	0.162	0.033	0.034	0.012	0.007	0.012	0.009	0.004	0	1332	-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	0.007	0.013	0.01	0.005	0	1331	-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	1.263	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	1333	-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	0	1334	-5
3/18/2011	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
3/17/2011	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	0	1334	-5
3/16/2011	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
3/15/2011	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
3/14/2011	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
3/13/2011	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
3/12/2011	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	1334	-5
3/11/2011	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
3/10/2011	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
3/9/2011	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

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	1334	-5
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	1334	-5
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	1334	-5
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	1334	-5
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	-5
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	0.397	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	0.454	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	0.46	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	0.041	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	0.013	0.01	0.005	0	1334	-11
1/19/2011	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
1/18/2011	1016	1.219	0.412	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	0.432	0.58	96.438	1.545	0.183	0.037	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. 1050023-024-AV

COMBINED CYCLE GAS TURBINES #1 & #2
EU ID: 008 & 009

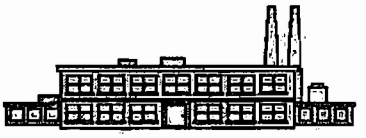
CUTRALE CITRUS JUICES USA, INC.

AUBURNDALE, FLORIDA
FEBRUARY 4, 2011

ATC

AIR TESTING & CONSULTING
333 FALKENBURG ROAD, SUITE B-214
TAMPA, FLORIDA 33619

ATC



AIR TESTING & CONSULTING

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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

Kenneth E. Given, P.E.

3-3-11

Date

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.0 INTRODUCTION

On February 4, 2011 Air Testing & Consulting, Inc. conducted compliance testing on the #1 and #2 combined cycle gas turbine generators at the Cutrale Citrus Juices USA facility located in Auburndale, Polk County, Florida:

1) Oxides of Nitrogen (NOx) (EPA Method 7E)
2) Flow Rate and Moisture (EPA Methods 1, 2, 4)
3) Oxygen (O_2) (EPA Method 3A)
4) Visible Emissions (EPA Method 9)

These tests were performed to meet compliance specifications of 40 CFR 60 Subpart GG 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 7E (NOx) was conducted using a Thermo Electron Model 42 Chemiluminescent NOx Analyzer. EPA Method 3A (O_2) was determined using a Teledyne Model 320 oxygen analyzer.

2.0 SUMMARY OF RESULTS

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The combined cycle gas turbine generator systems were found to be operating within the emission compliance limits for NOx. NOx emissions on #1 averaged 5.37 ppmv and #2 averaged 11.03 ppmv, each at 15% O_2, ISO ambient conditions. The allowable emission concentration is 25 ppmvd @ 15% O_2.

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

$$NOx = (NOx_O)\,[P_R/P_O]^{0.5}\, e^{19(Ho - 0.00633)}\, [288^oK/T_{AMB}]^{1.53}$$

Where NOx = concentration of NOx at 15% O_2 and ISO ambient conditions, ppmv

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

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

Ho = specific humidity of ambient air, gm H_2O/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 EPA Methods 1, 2 & 4 taken concurrently with the NOx testing. The average for #1 was 0.957 lbs/hr with emissions in pounds per heat input calculated to be 0.018 lbs per million BTU (lbs/MMBTU). The average for #2 was 1.924 lbs/hr with

emissions in pounds per heat input calculated to be 0.036 lbs per million BTU (lbs/MMBTU). Visible Emissions (VE), for the highest six minute period, averaged 0% opacity on both units. Since each unit was fired on natural gas, there was no check for SO_2 emissions.

SUMMARY OF TEST DATA

PLANT : CUTRALE UNIT : COGEN No. 1 RUN NUMBERS :1, 2, 3

TEST DATE : 2/4/11

	#1	#2	#3	AVERAGES
DATE	2/4/11	2/4/11	2/4/11	
START TIME	11:52	13:00	15:02	
END TIME	12:52	14:00	16:02	
STACK DIAMETER (INCHES)	47.25	47.25	47.25	
NOZZLE DIAMETER (INCHES)	0.250	0.250	0.250	
TEST TIME (MINUTES)	1:00	1:00	1:00	
NUMBER OF TEST POINTS PER RUN	24	24	24	
STACK GAS TEMPERATURE (^{o}F)	366.0	366.0	366.0	
STACK GAS MOISTURE (%)	4.39	4.39	4.39	
STACK GAS MOLECULAR WEIGHT	29.47	29.47	29.47	
STACK GAS VOLUME SAMPLED (CUBIC FEET)	163.300	163.300	163.300	
VOLUME SAMPLED (SCF @ 68^{o}F)	164.005	164.005	164.005	
STACK GAS VELOCITY (FEET PER SECOND)	51.56	51.56	51.56	
STACK GAS FLOW RATE (DSCFM @ 68^{o}F)	33357.7	33357.7	33357.7	**33357.7**
NOx CONCENTRATION (PPMV)	3.8	4.2	4.0	**4.00**
NOx CONCENTRATION (PPMV), @ 15% O_2, ISO	4.96	5.79	5.36	**5.37**
NOx MASS RATE (LBS/HOUR)	0.909	1.004	0.957	**0.957**
NOx MASS RATE (LBS/MMBTU)	0.017	0.018	0.018	**0.018**
NOx MASS RATE (LBS/MMCF)	17.5	19.4	18.4	**18.4**

FIELD DATA AND SAMPLES UNDER THE CONTROL OF: ATC

SUMMARY OF TEST DATA

PLANT : CUTRALE UNIT : COGEN #2 RUN NUMBERS :1, 2, 3

TEST DATE : 2/4/11

	#1	#2	#3	AVERAGES
DATE	2/4/11	2/4/11	2/4/11	
START TIME	7:25	8:45	10:27	
END TIME	8:25	9:45	11:27	
STACK DIAMETER (INCHES)	47.25	47.25	47.25	
NOZZLE DIAMETER (INCHES)	0.260	0.260	0.260	
TEST TIME (MINUTES)	1:00	1:00	1:00	
NUMBER OF TEST POINTS PER RUN	24	24	24	
STACK GAS TEMPERATURE (°F)	338.3	338.3	338.3	
STACK GAS MOISTURE (%)	5.45	5.45	5.45	
STACK GAS MOLECULAR WEIGHT	29.35	29.35	29.35	
STACK GAS VOLUME SAMPLED (CUBIC FEET)	146.330	146.330	146.330	
VOLUME SAMPLED (SCF @ 68°F)	147.114	147.114	147.114	
STACK GAS VELOCITY (FEET PER SECOND)	46.34	46.34	46.34	
STACK GAS FLOW RATE (DSCFM @ 68°F)	30969.2	30969.2	30969.2	**30969.2**
NOx CONCENTRATION (PPMV)	8.5	8.5	9.0	**8.67**
NOx CONCENTRATION (PPMV), @ 15% O_2, ISO	10.81	10.81	11.45	**11.03**
NOx MASS RATE (LBS/HOUR)	1.887	1.887	1.998	**1.924**
NOx MASS RATE (LBS/MMBTU)	0.035	0.035	0.037	**0.036**
NOx MASS RATE (LBS/MMCF)	37.1	37.1	39.3	**37.8**

FIELD DATA AND SAMPLES UNDER THE CONTROL OF: ATC

3.0 PROCESS DESCRIPTION AND OPERATION

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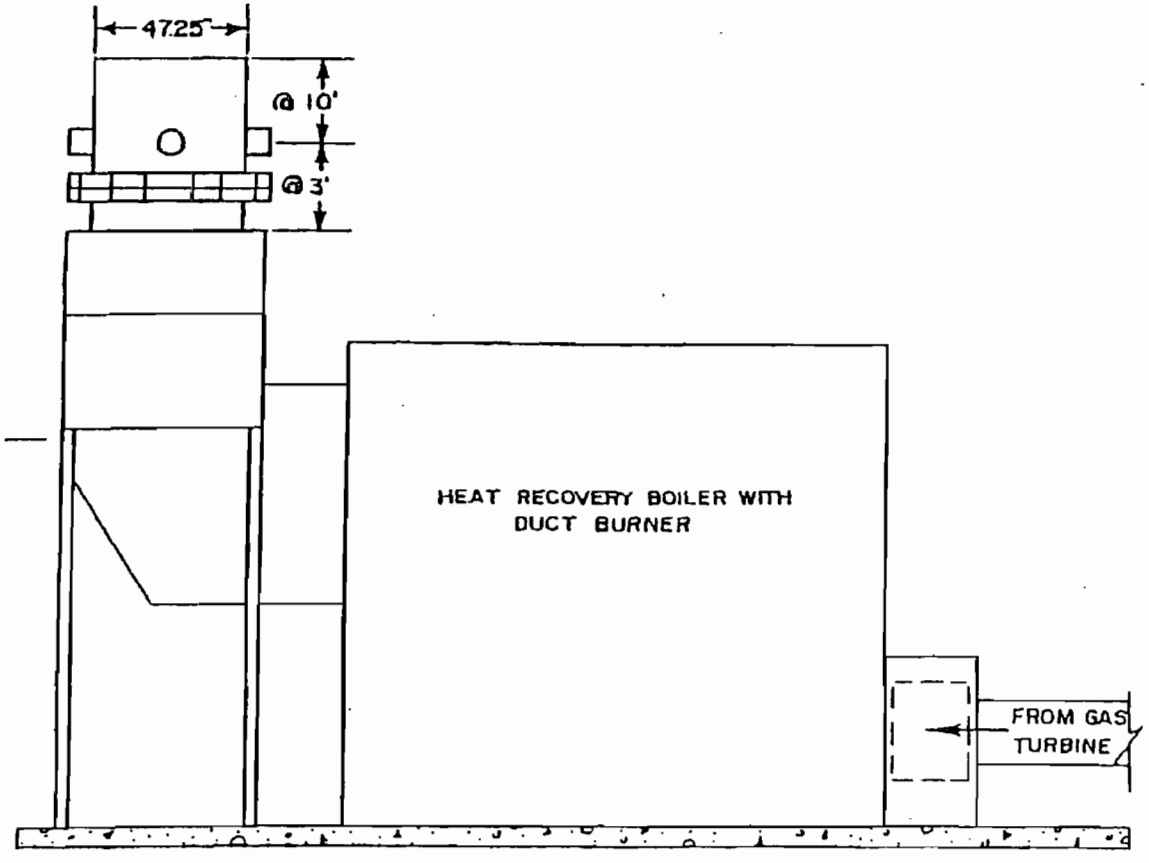
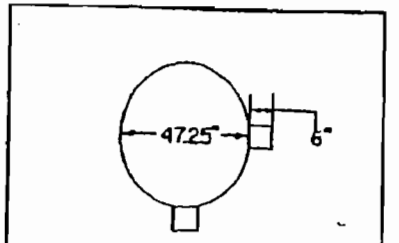
Each unit is a 4 MW generation system consisting of a Solar Centaur "H" combined cycle gas turbine generator; an ERI waste heat boiler to produce 23,000 lbs/hr of 240 psig saturated steam utilizing the heat from the turbine exhaust; and a Coen duct burner to increase the steam production; #1 unit to 99.9M lbs/hr and #2 unit to 50M lbs/hr. Each turbine is normally fired on natural gas but can also be fired on No. 2 fuel oil. The duct burners are normally are fired on natural gas but #1 duct burner can also be fired on fuel oil with no greater than 0.1% sulfur.

4.0 SAMPLING POINT LOCATION





TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
1	1.54
2	5.04
3	9.31
4	15.50
5	32.50
6	38.69
7	42.96
8	46.46

FIGURE I - SAMPLING POINT SCHEMATIC GAS TURBINE SYSTEM

5.0 FIELD AND ANALYTICAL PROCEDURES

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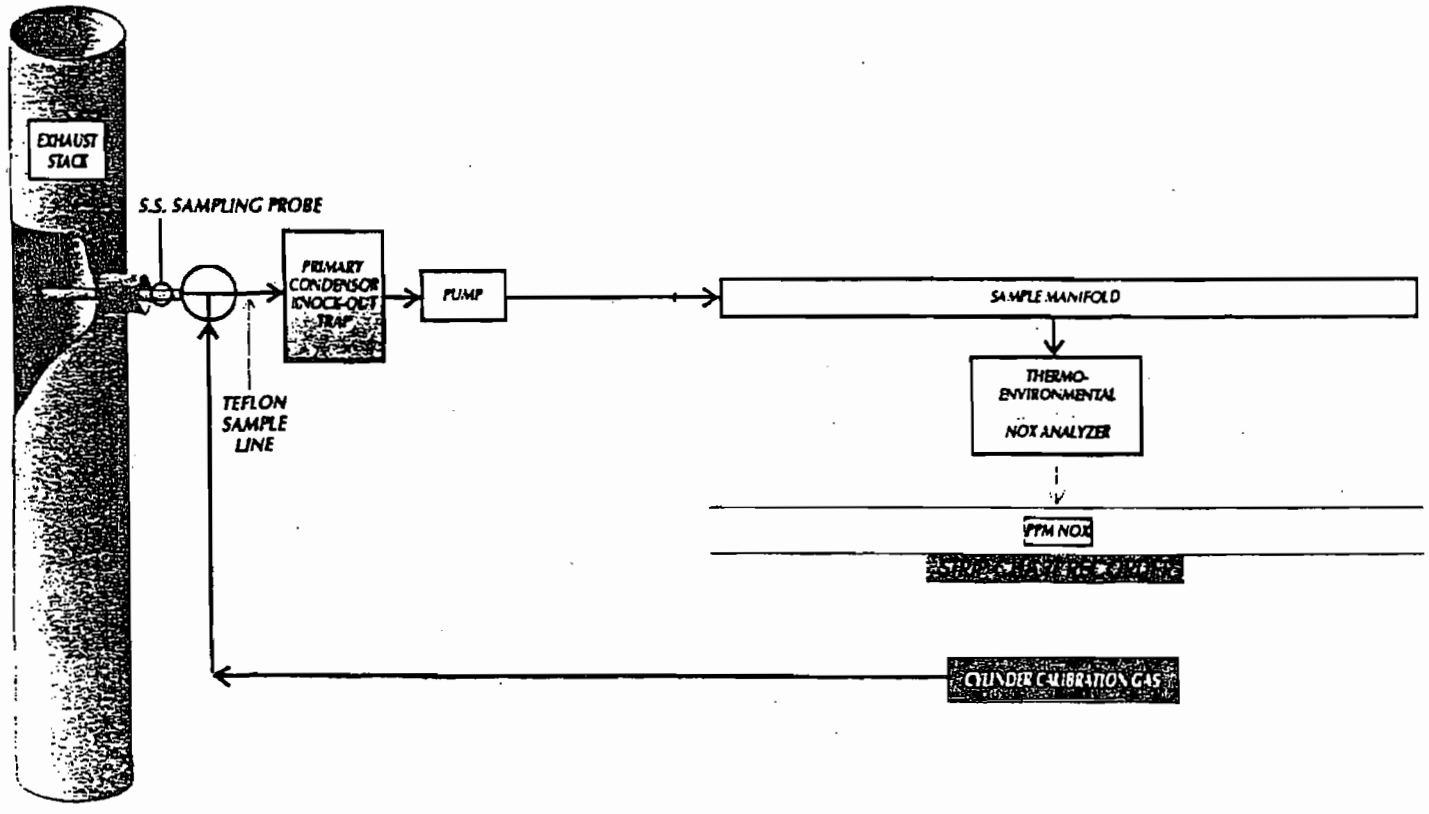
5.1 Nitrogen Oxides (NOx) (EPA Method 7E)

The sampling train is shown in Figure 2. A gas sample was drawn from the stack at approximately 2 SCFH. A heated stainless steel probe and filter assembly was followed by 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 non-heated 1/4" O.D. TEFLON sampling line approximately 100' long to instrumentation near the bottom of the stack.

Gases were induced through a sample pump with TEFLON diaphragm to a sample manifold. One stream was directed to a Thermo Electron Model 10AR Chemiluminescent Analyzer, converted to nitric oxide, reacted with ozone, and a chemiluminescent response measured by a photomultiplier. A second stream was dumped to ambient air. The instrument response was recorded on a strip chart recorder.

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

An overview of the EPA Method 7E NOx sampling is presented. Three test runs are performed. Each of the test runs are conducted by withdrawing a sample of stack gas from each of four sampling locations across a stack cross-section. As NOx emissions consist of mostly NO, some NO_2 can be expected to be present (5-20% by volume). The 10AR is, therefore, equipped with a NO_2/NO converter for



EPA METHOD 7E CEM SAMPLING SCHEMATIC

reduction of any NO_2 back to NO before analysis. This is effected by heating the gas stream to 650 ^{o}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 calibration gases. Three NO/N_2 and a zero NO calibration gas are required for the NOx analyzer. The analyzers must demonstrate linearity with these gases within 2% of span which is 1000 ppmv for the NOx analyzer.

The results of accuracy and response time testing are included in the Q/A section of the Appendices. A NO2bto NO conversion check or 30 minutes showed a deviation of 1.3%, less than allowed 2%.

5.2 Oxygen (O_2) (EPA METHOD 3A)

Oxygen was measured using a Teledyne 320 oxygen analyzer (Method 3A) so a continuous reading could be determined. The calibration was determined using pure Nitrogen (0% O_2), a 12.06% EPA Protocol Standard and atmospheric air (20.9% O_2).

APPENDICES

A. FIELD DATA

PLANT :	CUTRALE	OPERATOR :	CAPELLE/BECKER	DATE :	2/4/11	RUN # :	3
UNIT :	COGEN No. 1	PROBE HTR, °F :	250	BAROM PRESS, "Hg :	30.13	STACK DIA, " :	47.25
PROBE # :	6'SS	HTR BOX, °F :	250	"Y" FACTOR :	1.000	NOZZLE DIA, " :	0.250
AS MSTR :	4%	PITOT CORR :	0.84	METER BOX DHa :	1.731	STATIC PRESS :	0.28
FILTER # :	0.2492	# POINTS :	24	C" FACTOR :	2.47	WATER, ML :	160

- PITOT TUBE -

STRT TME :	11:52	IMPACT :	3"	15 SEC :
END TIME :	16:02	STATIC :	3"	15 SEC :

- METER BOX -

BEFORE:	0	cfm @	15	"Hg
AFTER:	0	cfm @	10	"Hg

TRAVERSE POINT #	SAMPLING TIME Θ	STACK TEMP °F (Ts)	VELOCITY HEAD (Dp)	VELOCITY HEAD $(Dp)^{0.5}$	ORIFICE PRESS (Dh)	GAS VOLUME SAMPLED (Vm) ft^3	GAS METER TEMPERATURE (Tm) INLET	GAS METER TEMPERATURE (Tm) OUT	SAMPLE BOX TEMP, °F	TEMP OF LAST IMPING	PUMP VACUUM (INCHES OF Hg)
1	0	344	0.52	0.72	1.28	374.420	66	66	250	61	2
2	10	367	0.75	0.87	1.85		72	65	250	35	3
3	20	354	0.60	0.77	1.48		76	65	250	34	4
4	30	358	0.56	0.75	1.38		78	65	250	33	4
5	40	351	0.58	0.76	1.43		78	65	250	32	4
6	50	358	0.57	0.75	1.41		78	65	250	32	4
7	60	359	0.62	0.79	1.53		78	65	250	32	4
8	70	361	0.55	0.74	1.36		78	65	250	33	4
9	80	368	0.52	0.72	1.28		78	65	250	35	4
10	90	362	0.50	0.71	1.24		77	65	250	35	4
11	100	350	0.45	0.67	1.11		78	65	250	35	4
12	110	350	0.45	0.67	1.11		78	65	250	32	4
13	120	363	0.62	0.79	1.53		69	65	250	35	4
14	130	378	0.64	0.80	1.58		75	65	250	32	4
15	140	353	0.65	0.81	1.61		78	65	250	32	4
16	150	356	0.65	0.81	1.61		79	65	250	32	4
17	160	361	0.67	0.82	1.65		79	65	250	32	4
18	170	360	0.65	0.81	1.61		75	66	250	33	4
19	180	358	0.55	0.74	1.36		78	66	250	34	4
20	190	363	0.55	0.74	1.36		79	66	250	34	4
21	200	367	0.48	0.69	1.19		79	66	250	35	4
22	210	366	0.45	0.67	1.11		78	66	250	35	4
23	220	367	0.45	0.67	1.11		78	66	250	36	4
24	230	366	0.45	0.67	1.11		78	66	250	36	4
	240					537.720					
	240	360.0	AV SQ RT =	0.747	1.387	163.300	AV TEMP :	71.00	250.0	61	4

AIR TESTING & CONSULTING - FIELD DATA SHEET

PLANT: CUTRALE - AUBURNDALE
UNIT: COGEN SYSTEM #1
OPERATOR: CAPELLE/BECKER

STACK DIAMETER: 47.25
NO. OF POINTS: 24
ASSUMED MOISTURE: 4%
PITOT CORR. FACTOR: 0.84

BAROM PRESS, "Hg: 30.13
PROBE NO.: 6'SS
PROBE SETTING: 250 °F
BOX SETTING: 250 °F

RUN #: 3
NOZZLE DIA, ": .250
METER BOX DHA: 1.731
Y" FACTOR: 1.000

PM

DATE: 2-4-11
START TIME: 11:52
END TIME: 4:02

PITOT TUBE:
IMPACT: 3 "for 15 SEC: ✓
STATIC: 3 "for 15 SEC: ✓

METER BOX:
BEFORE: 0 cfm @ 15 " of Hg
AFTER: 0 cfm @ 10 " of Hg

FILTER NUMBER.: .2492
STATIC PRESSURE: .28

	TRAVERSE POINT #	SAMPLING TIME Θ	STACK TEMP °F (Ts)	VELOCITY HEAD (Dp)	VELOCITY HEAD $(Dp)^{0.5}$	ORIFICE PRESS (Dh)	GAS VOLUME SAMPLED (Vm) ft^3	GAS METER TEMPERATURE (Tm) INLET	GAS METER TEMPERATURE (Tm) OUT	SAMPLE BOX TEMP, °F	TEMP OF LAST IMPINGER	PUMP VACUUM (INCHES of Hg)	F=	F = 1570 x (A x C)/B A = (F.D.A. x Dn^2)^2 B = (F.D.A. + 1.6) x Ts C = (Tm x DHa)
	1	0	344	.52	.72	1.28	374.428	66	66	250	61	2	2.47	
	2	10	367	.75	.87	1.85	380.82	72	65	250	35	3		Ts = 360
	3	20	354	.60	.77	1.48	388.58	76	65	250	34	4		Tm = 70
	4	30	358	.56	.75	1.38	395.63	78	65	250	33	4		
	5	40	351	.56	.76	1.43	402.57	78	65	250	32	4		F =
	6	50	358	.50	.75	1.41	409.27	78	65	250	32	4		
	7	60	359	.62	.79	1.53	416.12	78	65	250	32	4		
	8	70	361	.55	.74	1.36	423.31	78	65	250	33	4		
	9	80	368	.52	.72	1.28	430.09	78	65	250	33	4		
	10	90	362	.50	.71	1.24	436.65	77	65	250	35	4		
	11	100	350	.45	.67	1.11	443.11	78	65	250	35	4		
	12	110	350	.45	.67	1.11	449.31	78	65	250	35	4		
1	13	120	363	.62	.79	1.53	455.48	69	65	250	32	4		
2	14	130	378	.64	.80	1.58	462.64	75	65	250	35	4		
3	15	140	353	.65	.81	1.61	469.96	78	65	250	32	4		
4	16	150	356	.65	.81	1.61	477.32	79	65	250	32	4		
5	17	160	361	.67	.82	1.65	484.68	79	65	250	32	4		
6	18	170	360	.65	.81	1.61	492.03	75	66	250	33	4		
7	19	180	358	.55	.74	1.36	499.42	74	66	250	34	4		
8	20	190	363	.55	.74	1.36	506.21	79	66	250	34	4		
9	21	200	367	.48	.69	1.19	512.96	79	66	250	35	4		
10	22	210	366	.45	.67	1.11	519.31	78	66	250	35	4		
11	23	220	367	.45	.67	1.11	525.44	78	66	250	36	4		V.W.C. = 1600
12	24	230	366	.45	.67	1.11	531.56	78	66	250	36	4		
		240					537.720							
		240	360	AV SQ RT = .7471			163.300	AV TEMP = 71.00						

PLANT :	CUTRALE	OPERATOR :	CAPELLE/BECKER	DATE :	2/4/11	RUN # :	3
UNIT :	COGEN #2	PROBE HTR, °F :	250	BAROM PRESS, "Hg :	30.13	STACK DIA, " :	47.25
PROBE # :	6'SS	HTR BOX, °F :	250	"Y" FACTOR :	1.000	NOZZLE DIA, " :	0.260
AS MSTR :	4%	PITOT CORR :	0.84	METER BOX DHa :	1.731	STATIC PRESS :	0.25
FILTER # :	0.2510	# POINTS :	24	C" FACTOR :	2.53	WATER, ML :	180

		- PITOT TUBE -			- METER BOX -			
STRT TME :	7:25	IMPACT :	3"	15 SEC :	BEFORE:	0	cfm @	15 "Hg
END TIME :	11:27	STATIC :	3"	15 SEC :	AFTER:	0	cfm @	10 "Hg

TRAVERSE POINT #	SAMPLING TIME #PEΦ!	STACK TEMP °F (Ts)	VELOCITY HEAD (Dp)	VELOCITY HEAD $(Dp)^{0.5}$	ORIFICE PRESS (Dh)	GAS VOLUME SAMPLED (Vm) ft^3	GAS METER TEMPERATURE (Tm) INLET	GAS METER TEMPERATURE (Tm) OUT	SAMPLE BOX TEMP, °F	TEMP OF LAST IMPING	PUMP VACUUM (INCHES OF Hg)
1	0	342	0.38	0.62	0.96	227.610	68	67	250	63	2
2	10	344	0.44	0.66	1.11		74	65	250	53	2
3	20	341	0.46	0.68	1.16		76	64	250	48	2
4	30	344	0.45	0.67	1.14		77	63	250	46	3
5	40	348	0.40	0.63	1.01		78	63	250	46	3
6	50	342	0.40	0.63	1.01		78	63	250	44	3
7	60	343	0.37	0.61	0.94		77	63	250	42	3
8	70	345	0.38	0.62	0.96		77	63	250	39	3
9	80	337	0.36	0.60	0.91		77	63	250	38	3
10	90	336	0.35	0.59	0.89		76	63	250	38	3
11	100	326	0.30	0.55	0.76		76	63	250	37	3
12	110	330	0.30	0.55	0.76		75	63	250	35	3
13	120	332	0.55	0.74	1.39		71	63	250	34	3
14	130	335	0.60	0.77	1.52		76	63	250	33	3
15	140	339	0.65	0.81	1.64		78	63	250	33	3
16	150	342	0.65	0.81	1.64		80	64	250	33	4
17	160	338	0.62	0.79	1.57		80	64	250	33	4
18	170	338	0.45	0.67	1.14		80	64	250	33	4
19	180	337	0.38	0.62	0.96		78	65	250	34	3
20	190	339	0.51	0.71	1.29		76	64	250	35	3
21	200	334	0.55	0.74	1.39		77	64	250	35	3
22	210	336	0.55	0.74	1.39		77	64	250	34	4
23	220	336	0.57	0.75	1.44		78	65	250	36	4
24	230	336	0.55	0.74	1.39		78	65	250	39	4
	240					373.940					
	240	338.3	AV SQ RT =	0.679	1.183	146.330	AV TEMP =	70.19	250.0	63	4

AIR TESTING & CONSULTING - FIELD DATA SHEET

PLANT : CUTRALE - AUBURNDALE
UNIT : COGEN SYSTEM #2
OPERATOR : CAPELLE/BECKER

STACK DIAMETER: 47.25
NO. OF POINTS: 24
ASSUMED MOISTURE: 4%
PITOT CORR. FACTOR: 0.84

BAROM PRESS, "Hg : 30.13
PROBE NO.: 6'SS
PROBE SETTING: 250 °F
BOX SETTING: 250 °F

RUN # : 3
NOZZLE DIA, " : .260
METER BOX DHA: 1.731
Y" FACTOR: 1.000

PM

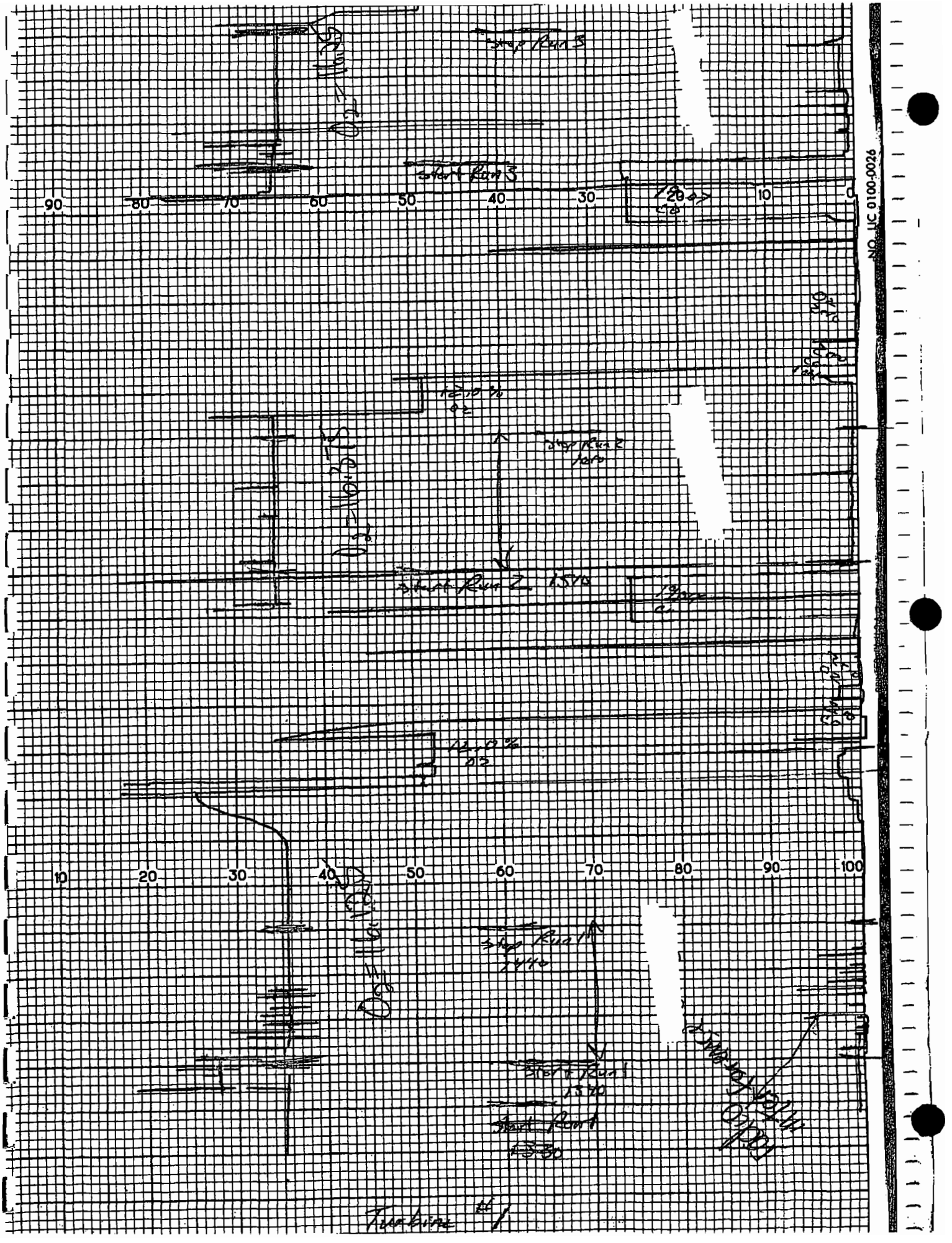
DATE: 2-4-11
START TIME : 7:25
END TIME : 11:27

PITOT TUBE:
IMPACT : 3 "for 15 SEC : ✓
STATIC : 3 "for 15 SEC : ✓

METER BOX :
BEFORE: 0 cfm @ 15 " of Hg
AFTER: 0 cfm @ 10 " of Hg

FILTER NUMBER. : .2510
STATIC PRESSURE : .25

	TRAVERSE POINT #	SAMPLING TIME Θ	STACK TEMP °F (Ts)	VELOCITY HEAD (Dp)	VELOCITY HEAD $(Dp)^{0.5}$	ORIFICE PRESS (Dh)	GAS VOLUME SAMPLED (Vm) ft³	GAS METER TEMPERATURE (Tm) INLET	GAS METER TEMPERATURE (Tm) OUT	SAMPLE BOX TEMP. °F	TEMP OF LAST IMPINGER	PUMP VACUUM (INCHES of Hg)	F=	F = 1570 x (A x C)/B A = (F.D.A. x Dn²)² B = (F.D.A. + 1.6) x Ts C = (Tm x DHa)
	1	0	342	.38	.62	.96	227.610	68	67	250	63	2	2.53	
	2	10	344	.44	.66	1.11	233.06	74	65	250	53	2		Ts = 340
	3	20	341	.46	.68	1.16	238.83	76	64	250	48	2		Tm = 70
	4	30	344	.45	.67	1.14	244.81	77	63	250	46	3		
	5	40	348	.40	.63	1.01	250.73	78	63	250	46	3		F =
	6	50	342	.40	.63	1.01	256.35	78	63	250	44	3		
	7	60	343	.37	.61	.94	261.96	77	63	250	43	3		
	8	70	345	.38	.62	.96	267.42	77	63	250	39	3		
	9	80	337	.36	.60	.91	272.93	77	63	250	38	3		
	10	90	336	.35	.59	.89	278.33	76	63	250	38	3		
	11	100	326	.30	.55	.76	283.68	76	63	250	37	3		
	12	110	330	.30	.55	.76	288.58	75	63	250	35	3		
1	13	120	332	.55	.74	1.39	293.51	71	63	250	34	3		
2	14	130	335	.60	.77	1.52	300.09	76	63	250	33	3		
3	15	140	339	.65	.81	1.64	306.96	78	63	250	33	3		
4	16	150	342	.65	.81	1.64	314.08	80	64	250	33	4		
5	17	160	338	.62	.79	1.57	321.28	80	64	250	33	4		
6	18	170	338	.45	.67	1.14	328.31	80	64	250	33	4		
7	19	180	337	.38	.62	.96	334.31	78	65	250	34	3		
8	20	190	339	.51	.71	1.29	339.87	76	64	250	35	3		
9	21	200	334	.55	.74	1.39	346.42	77	64	250	35	3		
10	22	210	336	.55	.74	1.39	353.85	78	65	250	34	4		
11	23	220	336	.57	.75	1.44	360.07	78	65	250	36	4		V.W.C. = 180
12	24	230	336	.55	.74	1.39	367.03	78	65	250	39	4		
		240					373.940							
		240	383.3	AV SQ RT = .679		1.183	146.330	AV TEMP = 70.19						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80
70
60
50
40
30
20
10
0
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20
30
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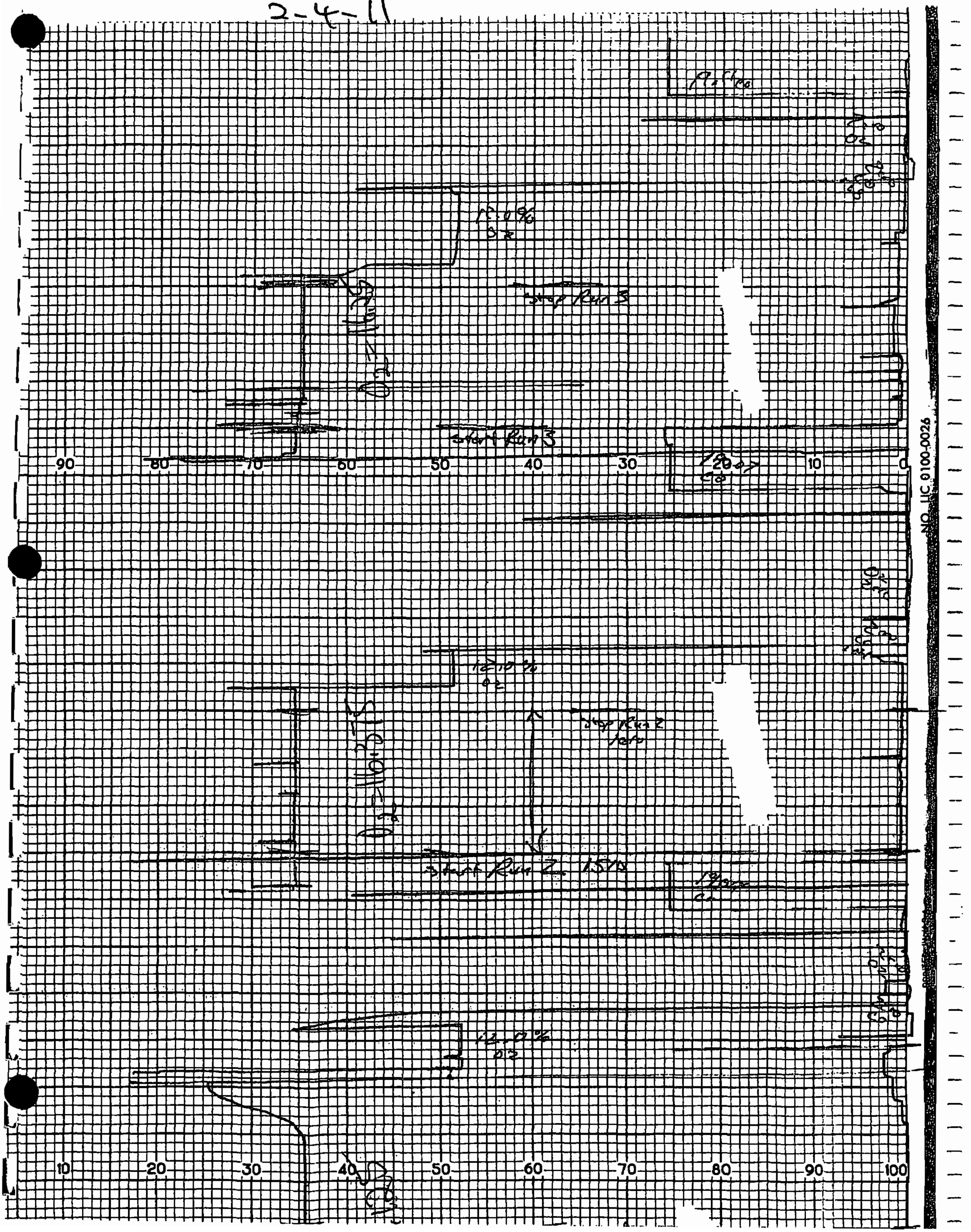
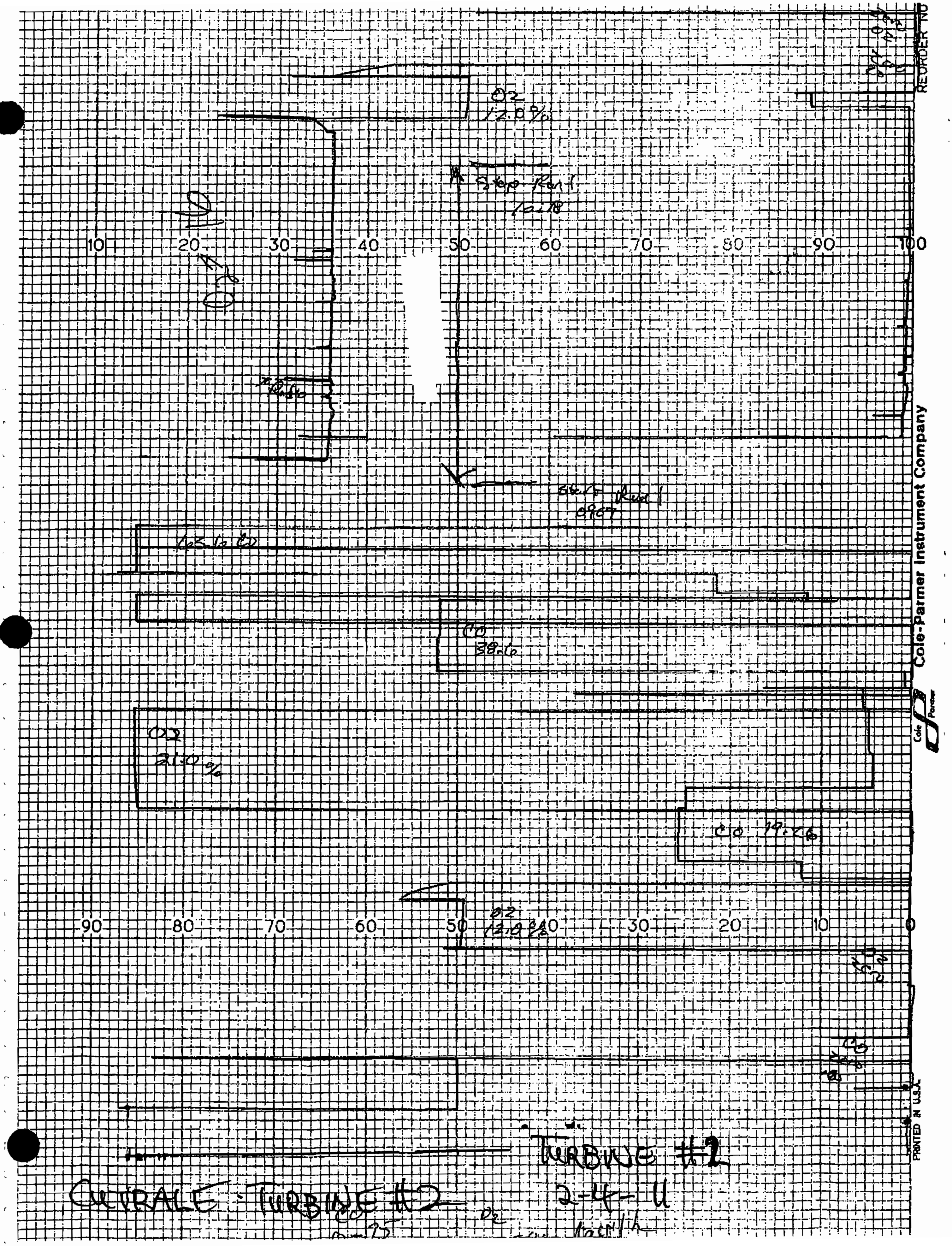
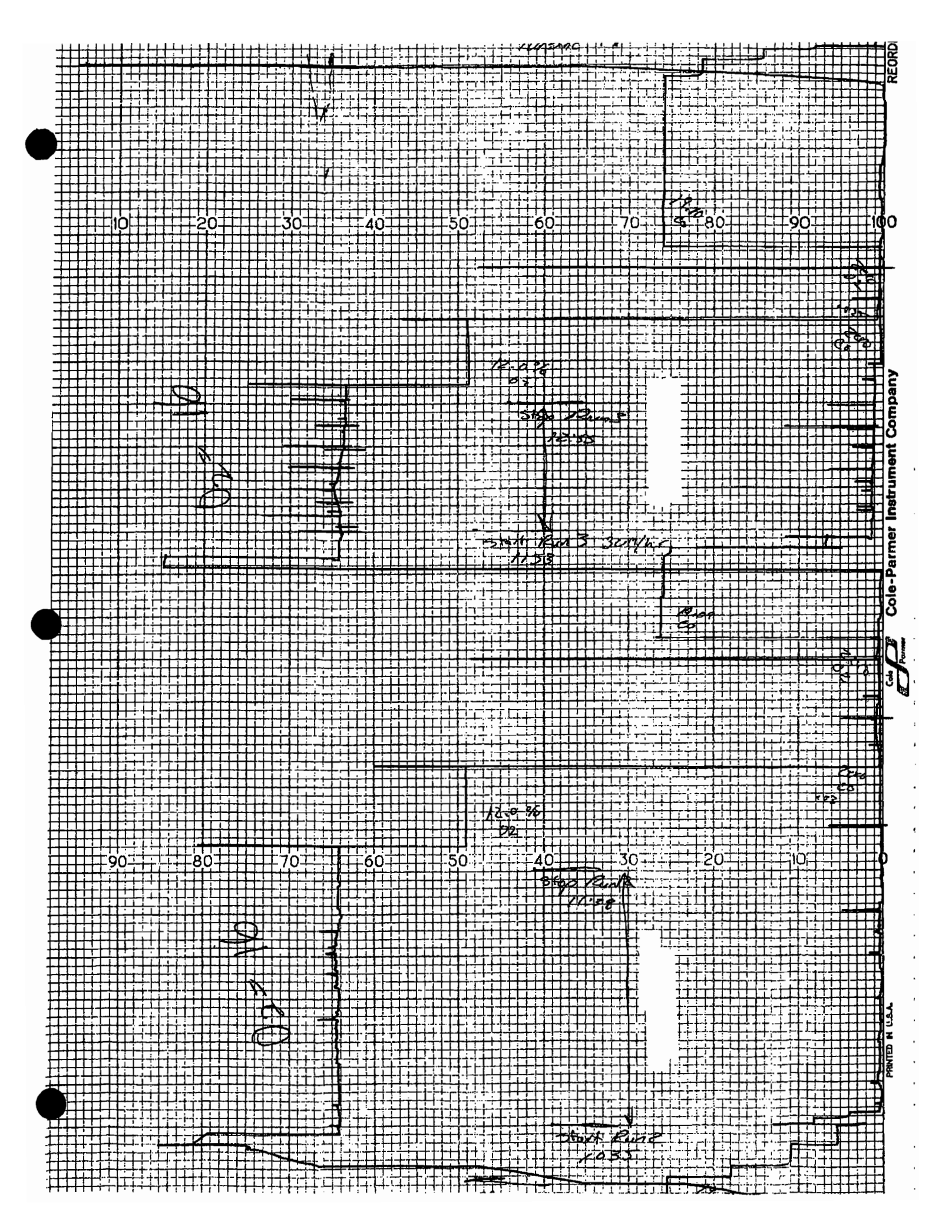
60
70
80
90
100

CUTRALE Turbine # 1 O_2 - 0-25%

2-4-11




REORDER NO
O2 12.0%
Stop Run 1
12:18
10 20 30 40 50 60 70 80 90 100
38.6 Run 1
0907
63.6 CO
CO 38.6
O2 21.0%
CO 19.26
90 80 70 60 50 40 30 20 10 0
O2 12.0%
Cole-Parmer Instrument Company
PRINTED IN U.S.A.
TURBINE #2
CUTRALE TURBINE #2
2-4-11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20
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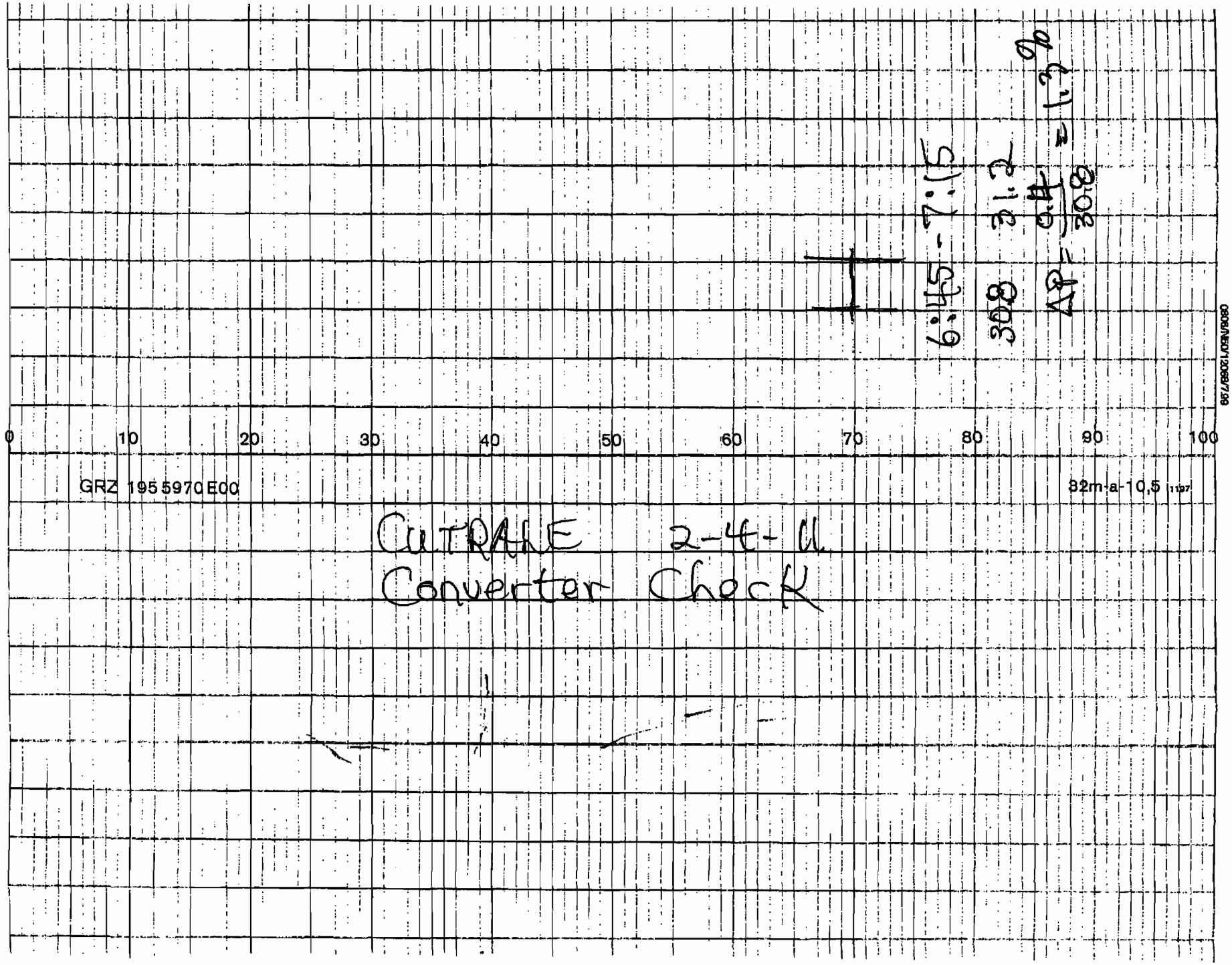
Cole-Parmer Instrument Company
PRINTED IN U.S.A.



CUTRALE 2-4-M
Converter Check

CONTINUOUS MONITOR Q/A
LINEARITY and DRIFT DATA
SOURCE: TURBINE

PLANT: CUTRALE - AUBURNDALE
DATE: 2/4/11
UNIT: COGEN #1

GAS I.D.	NOx	GAS I.D.	O_2
CEM	THERMO MODEL 42C	CEM	TELEDYNE 320
RANGE	0 - 100 PPMV	RANGE	0 - 25%
SPAN	61.1 PPMV	SPAN	12.05 %

LINEARITY

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
61.1	61.1	0	0.00
93.5	93.0	0.5	0.82

LINEARITY

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	0.05	0.41
20.9	20.9	0	0.00

1

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
61.1	60.3	0.8	1.31

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	0.05	0.41

2

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
61.1	60.3	0.8	1.31

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	0.05	0.41

3

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
61.1	60.5	0.6	0.98

GAS VALUE	CEM	DIFF	% SPAN
0	0	0	0.00
12.05	12.00	0.05	0.41

UPSCALE RESPONSE: 35
DOWNSCALE RESPONSE: 40

CONTINUOUS MONITOR Q/A
LINEARITY and DRIFT DATA
SOURCE: TURBINE

PLANT: CUTRALE - AUBURNDALE
DATE: 2/4/11
UNIT: COGEN #2

GAS I.D.	NOx	GAS I.D.	O_2
CEM	THERMO MODEL 42C	CEM	TELEDYNE 320
RANGE	0 - 100 PPMV	RANGE	0 - 25%
SPAN	61.1 PPMV	SPAN	12.05 %

LINEARITY

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
61.1	61.1	0	0.00
93.5	93.0	0.5	0.82

LINEARITY

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
12.05	12.00	0.05	0.41
20.9	21	-0.1	-0.83

1

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
61.1	60.3	0.8	1.31

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
12.05	12.00	0.05	0.41

2

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
61.1	60.4	0.7	1.15

GAS VALUE	CEM	DIFF	% RANGE
0	0.03	-0.03	-0.25
12.05	12.00	0.05	0.41

3

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
61.1	60.3	0.8	1.31

GAS VALUE	CEM	DIFF	% RANGE
0	0	0	0.00
12.05	12.00	0.05	0.41

UPSCALE RESPONSE: 40
DOWNSCALE RESPONSE: 45

B. TURBINE OPERATING DATA

CUTRALE CITRUS JUICES USA, INC.

AUBURNDALE FACILITY

COGENERATION SYSTEM #1

DATE 2/4/11

TIME	KW	GAS MMBTU/HR	INLET TEMP, °F	RUN %	T5 TEMP, °F
12:00	3944	50.89			
12:15	3822	49.32			
12:30	4023	51.91			
12:45					
1:00	3997	51.57			
1:15	4009	51.73			
1:30					
1:45	4952	63.90			
2:00	3860	49.81			
2:15	3992	51.51			
2:30					
2:45	3967	51.19			
3:00	3998	51.59			
3:15	3958	51.07			
3:30	3930	50.71			
3:45	3953	51.01			
4:00	3956	51.05			
AVG	4026	51.95			

CUTRALE CITRUS JUICES USA, INC.

AUBURNDALE FACILITY

COGENERATION SYSTEM #2

DATE 2/4/11

TIME	KW	GAS MMBTU/HR	INLET TEMP,°F	RPM %	T5 TEMP,°F
730	4007	51.70			
745	3891	50.21			
800	3936	50.79			
815	4158	53.65			
830	4158	53.65			
845	4110	53.03			
900	3885	50.13			
915	3997	51.57			
930	3921	50.59			
945	3817	49.25			
1000	3810	49.16			
1015	3706	47.82			
1030					
1045					
1100	3981	51.37			
1115					
1130	3818	49.26			
AVG	3943	50.87			

C. CALCULATIONS

TERMS USED FOR CALCULATIONS

Dh - average pressure on the limiting orifice, inches H_2O

Dp - average pressure on pitot tube, inches H_2O

Ts - average temperature of stack, ^oR

Tm - average temperature of meter, ^oR

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, ft^2

As - cross sectional area of stack, ft^2

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) / (^oR) (in H_2O)] $^{1/2}$

%I - percent of theoretical ideal sampling rate, % isokinetics

DERIVATION OF CALCULATIONS

A) Volume of water vapor collected, cubic feet

$Vwc = (0.0471)\ ft^3/gm \times$ gms, mls water collected

B) Volume of air metered at $68^{O}F$, 29.92 inches Hg, dry standard cubic feet

$Vm_{std} = (17.64) \times Y \times Vm \times Pm / Tm$

C) Moisture content of flue gas, % H_2O

$Bwo = Vwc / (Vwc + Vm_{std})$

D) Dry gas molecular weight

$Md = 0.44 \times \%CO_2 + 0.32 \times \%O_2 + 0.28 \times (\%N_2 + \%CO)$

Assume 29 for ambient sources, 30 for combustion sources

E) Stack gas molecular weight, lbs/lb-mole

$Ms = Md \times (1\text{-}Bwo) + 18\ (Bwo)$

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

$Qs = Vs \times As \times (60\ sec/min)$

H) Stack gas flow rate, dry standard cubic feet per minute

$Qs_{std} = [17.64 \times Qs \times Ps \times (1\text{-}Bwo)] / Ts$

I) Isokinetic sampling rate

$\%I = 0.0945 \times [Ts \times Vm_{std} / Ps \times Vs \times An \times theta \times (1\text{-}Bwo)]$

J) Concentration, grains per dry standard cubic foot

$= [(15.43\ grains/gram) \times (Wt\ collected)] / Vm_{std}$

K) Emission rate, pounds per hour

$= (0.00857) \times (grains/dscf) \times Qs_{std}$

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 #1

NOx

	RUN #1	RUN #2	RUN #3
('Dp)$^{0.5}$ =	0.747	0.747	0.747
Dh, "$H_2$0 =	1.387	1.387	1.387
Ts, ^{o}F =	360.0	360.0	360.0
Tm, ^{o}F =	71.0	71.0	71.0
Vm, ft^3 =	163.300	163.300	163.300
Y =	1.000	1.000	1.000
time, min =	240	240	240
Nozzle, in. =	0.250	0.250	0.250
An, ft^2 =	0.000428	0.000428	0.000428
Stack, in. =	47.25	47.25	47.25
As, ft^2 =	12.177	12.177	12.177
Pb, "Hg =	30.13	30.13	30.13
Cp =	0.84	0.84	0.84
wc, ml =	160	160	160
SP,"H_2O =	0.28	0.28	0.28
Md, lbs/mole =	30	30	30
Pm, "Hg =	30.23	30.23	30.23
Ps, "Hg =	30.15	30.15	30.15
% O_2 =	16.125	16.375	16.25
NOx, ppmv =	3.8	4.2	4.0
MCFH =	51.9	51.9	51.9
MMBtu/hr =	54.5	54.5	54.5

	RUN #1	RUN #2	RUN #3
A) Volume of water vapor, ft^3 Vwc = (0.0471)(wc)ml,gm	7.54	7.54	7.54
B) Volume of air metered to 68^{o}F, 29.92" Hg, dry Vmstd = $\frac{(17.64)(Y)(Vm)(Pm)}{Tm}$	164.01	164.01	164.01
C) Moisture content of flue gas Bwo = Vwc/(Vwc+Vmstd)	0.0439	0.0439	0.0439

D) Dry Gas Molecular Weight Md = 29 for ambient air, 30 for combustion gases	30	30	30
E) Stack gas molecular weight, lbs/lb-mole $Ms = Md(1 - Bwo) + (18)(Bwo)$	29.47	29.47	29.47
F) Stack gas velocity, ft/sec $Vs = KpCp(Dp)^{0.5}(Ts/PsMs)^{0.5}$	51.56	51.56	51.56
G) Stack gas flowrate, ACFM Qs = (60 sec/min)(As)(Vs)	37671	37671	37671
H) Stack gas flowrate, DSCFM = $Qsstd = \frac{(17.64)(Qs)(Ps)(1-Bwo)}{(Ts)}$	23360.0	23360.0	23360.0
I) Stack gas flowrate, DSCFM = Material Balance	33357.7	33357.7	33357.7
J) O_2 FACTOR = $(20.9 - 15.0) / (20.9 - \%O_2)$	1.2356	1.3039	1.2688
K) NOx @ 15% O_2 = NOx X O_2 FACTOR	4.70	5.48	5.08
L) NOx @ 15% O_2, ISO = $(NOx_O)(P_R/P_O)^{0.5}e^{19(Ho-0.00633)}(288^oK/T_{AMB})^{1.53}$	4.96	5.79	5.36
M) Emission rate, lbs/hr = NOx(ppmv) x E^{-6} x MW(NOx) x DSCFM x 60 min/hr x lb-mole/385 dscf	0.909	1.004	0.957
N) Emissions, lb/MMBTU =	0.017	0.018	0.018
O) Emissions, lb/MMCF =	17.51	19.35	18.43

CALCULATIONS
COGEN SYSTEM #2

NOx

	RUN #1	RUN #2	RUN #3
('Dp)$^{0.5}$ =	0.679	0.679	0.679
Dh, "$H_2$0 =	1.183	1.183	1.183
Ts, ^{o}F =	338.3	338.3	338.3
Tm,^{o}F =	70.2	70.2	70.2
Vm, ft^3 =	146.330	146.330	146.330
Y =	1.000	1.000	1.000
time, min =	240	240	240
Nozzle, in. =	0.260	0.260	0.260
An, ft^2 =	0.000341	0.000341	0.000341
Stack, in. =	47.25	47.25	47.25
As, ft^2 =	12.177	12.177	12.177
Pb, "Hg =	30.13	30.13	30.13
Cp =	0.84	0.84	0.84
wc, ml =	180	180	180
SP,"H_2O =	0.25	0.25	0.25
Md, lbs/mole =	30	30	30
Pm, "Hg =	30.22	30.22	30.22
Ps, "Hg =	30.15	30.15	30.15
% O_2 =	16.0	16.0	16.0
NOx, ppmv =	8.5	8.5	9.0
MCFH =	50.9	50.9	50.9
MMBtu/hr =	53.4	53.4	53.4

	RUN #1	RUN #2	RUN #3
A) Volume of water vapor, ft^3 Vwc = (0.0471)(wc)ml,gm	8.48	8.48	8.48
B) Volume of air metered to 68^{o}F, 29.92" Hg, dry Vmstd = $\frac{(17.64)(Y)(Vm)(Pm)}{Tm}$	147.11	147.11	147.11
C) Moisture content of flue gas Bwo = Vwc/(Vwc+Vmstd)	0.0545	0.0545	0.0545

D) Dry Gas Molecular Weight Md = 29 for ambient air, 30 for combustion gases	30	30	30
E) Stack gas molecular weight, lbs/lb-mole $Ms = Md(1 - Bwo) + (18)(Bwo)$	29.35	29.35	29.35
F) Stack gas velocity, ft/sec $Vs = KpCp(Dp)^{0.5}(Ts/PsMs)^{0.5}$	46.34	46.34	46.34
G) Stack gas flowrate, ACFM Qs = (60 sec/min)(As)(Vs)	33854	33854	33854
H) Stack gas flowrate,DSCFM = $Qsstd = \frac{(17.64)(Qs)(Ps)(1-Bwo)}{(Ts)}$	21323.5	21323.5	21323.5
I) Stack gas flowrate,DSCFM = Material Balance	30969.2	30969.2	30969.2
J) O_2 FACTOR = $(20.9 - 15.0) / (20.9 - \%O_2)$	1.2041	1.2041	1.2041
K) NOx @ 15% O_2 = NOx X O_2 FACTOR	10.23	10.23	10.84
L) NOx @ 15% O_2, ISO = $(NOx_O)(P_R/P_O)^{0.5}e^{19(Ho-0.00633)}(288^{O}K/T_{AMB})^{1.53}$	10.81	10.81	11.45
M) Emission rate, lbs/hr = NOx(ppmv) x E^{-6} x MW(NOx) x DSCFM x 60 min/hr x lb-mole/385 dscf	1.887	1.887	1.998
N) Emissions, lb/MMBTU =	0.035	0.035	0.037
O) Emissions, lb/MMCF =	37.10	37.10	39.28

STACK MATERIAL BALANCE

Both units meet compliance for NOx at 15% O_2 and at ISO ambient conditions. The units are almost identical, firing at the same natural gas rate and running approximately the same % O_2 in the exhaust stream. The exhaust stacks are short and subject to an uneven flow pattern. This is shown by the difference in the exhaust flows using a pitot tube to measure the flows. Therefore, in order to determine a more accurate flow, a material balance was made for each based on the fuel firing rate and the % O_2 in the exhaust streams. The purpose for this is to determine the emission rate in lbs NOx per MMBTU.

STACK MATERIAL BALANCE

Basis: 1. Natural gas as fuel. Assume fuel is methane (CH_4)

2. Moles N_2 = 79.1/20.9 x moles N_2 = 3.785 x moles O_2

3. H_2O not included in flue gas analysis

4. let X = moles O_2

	CH_4	+ $2O_2$ +	N_2	+ X O_2	=> CO_2	+ X O_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 + 4.785X per mole CH_4

COGENERATION SYSTEM #1

	MOLS	%	DSCFH	DSCFM	MMBTU/HR
CH_4	134.81		51900.0	865.0	54.495
CO_2	134.81	2.59	51900.0	865.0	
O_2	845	16.25	325325.0	5422.1	
N_2	4218.80	81.15	1624238.1	27071	
TOTAL	5198.61	100	2001463.1	33358	

MMBTU/HR X 10^6 / 1050 BTU/CF = DSCFH / 60 = DSCFM

MOLES CH_4 = DSCFH/385 CF = MOLES CO_2

MOLES N_2 = 3.785 X (2 X MOLES CH_4 + MOLES O_2)

SET MOLES O_2 SO THAT $\%O_2$ = MEASURED NUMBER

COGENERATION SYSTEM #2

	MOLS	%	DSCFH	DSCFM	MMBTU/HR
CH_4	132.13		50870.0	847.8	53.41
CO_2	132.13	2.74	50870.0	847.8	
O_2	772	16.00	297220.0	4953.7	
N_2	3922.24	81.27	1510063.6	25168	
TOTAL	4826.37	100	1858153.6	30969	

MMBTU/HR X 10^6 / 1050 BTU/CF = DSCFH / 60 = DSCFM

MOLES CH_4 = DSCFH/385 CF = MOLES CO_2

MOLES N_2 = 3.785 X (2 X MOLES CH_4 + MOLES O_2)

SET MOLES O_2 SO THAT $\%O_2$ = MEASURED NUMBER

D. VISIBLE EMISSION

AIR TESTING & CONSULTING, INC.
(813) 651-0878

Facility Name	Permit Number		
CUTRALE	1050023-021-AV		
Source	Neds No.	I.D. No.	
CITRUS PROCESSOR	0023	009	
Address			
602 McKEAN STREET			
City	County	Zip	
AUBURNDALE	POLK	33823	
Contact	Phone		
ED PRIEST	352-552-9036		

Process Equipment	Operating Rate
BOILER #1	90%
Control Equipment	Operating Mode
N/A	

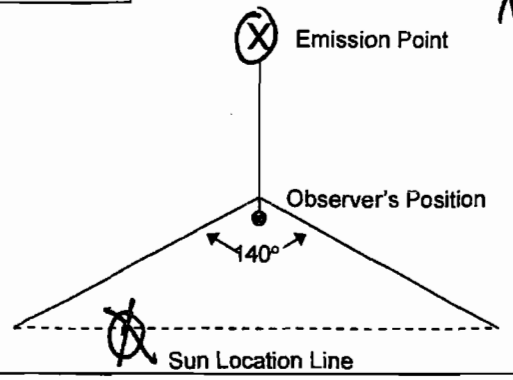
Fuel Type/Rate	Material Type/Rate
NATURAL GAS	STEAM
Describe Emission Point Start Stack Exit	Stop ✓
Height Above Ground Level Start ~30	Stop ✓ Height Relative to Observer Start ~5' Stop ✓
Distance from Observer Start ~250	Stop ✓ Direction from Observer Start N Stop

Describe Emissions Start None	Stop ✓
Emission Color Start N/A Stop ✓	Plume Type o Continuous o Intermittent N/A
Water Droplets Present oNo o Yes	Water Droplet Plume o Attached o Detached
Point in the Plume at which Opacity was determined Start	Stop

Describe Background Start SKY Stop ✓	Ambient Temp Start 77 Stop ✓
Background Color Start Blue Stop ✓	Sky Conditions Start Scattered Stop ✓
Wind Speed Start 5-6 Stop ✓	Wind Direction Start S Stop ✓

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH Draw North Arrow



I certify the above process rate data is true to the best of my knowledge.
SIGNATURE

Title Date

Observation Date	Start Time	Stop Time
2-4-11	4:05	5:05

SEC / MIN	0	15	30	45	SEC / MIN	0	15	30	45
1.	0	0	0	0	31.	0	0	0	0
2.	0	0	0	0	32.	0	0	0	0
3.	0	0	0	0	33.	0	0	0	0
4.	0	0	0	0	34.	0	0	0	0
5.	0	0	0	0	35.	0	0	0	0
6.	0	0	0	0	36.	0	0	0	0
7.	0	0	0	0	37.	0	0	0	0
8.	0	0	0	0	38.	0	0	0	0
9.	0	0	0	0	39.	0	0	0	0
10.	0	0	0	0	40.	0	0	0	0
11.	0	0	0	0	41.	0	0	0	0
12.	0	0	0	0	42.	0	0	0	0
13.	0	0	0	0	43.	0	0	0	0
14.	0	0	0	0	44.	0	0	0	0
15.	0	0	0	0	45.	0	0	0	0
16.	0	0	0	0	46.	0	0	0	0
17.	0	0	0	0	47.	0	0	0	0
18.	0	0	0	0	48.	0	0	0	0
19.	0	0	0	0	49.	0	0	0	0
20.	0	0	0	0	50.	0	0	0	0
21.	0	0	0	0	51.	0	0	0	0
22.	0	0	0	0	52.	0	0	0	0
23.	0	0	0	0	53.	0	0	0	0
24.	0	0	0	0	54.	0	0	0	0
25.	0	0	0	0	55.	0	0	0	0
26.	0	0	0	0	56.	0	0	0	0
27.	0	0	0	0	57.	0	0	0	0
28.	0	0	0	0	58.	0	0	0	0
29.	0	0	0	0	59.	0	0	0	0
30.	0	0	0	0	60.	0	0	0	0

Average Opacity for Highest 24 Consecutive Readings	Range of Opacity Readings Min	Max
0	0	0

Observer's Name (Print)	KENNETH GIVEN
Observer's Signature	Date 2-4-11
Certified by E.T.A.	Date 2/09/11
Comments	

AIR TESTING & CONSULTING, INC.

(813) 651-0878

Facility Name	Permit Number		
CUTRALE	1050023-0 -AV		
Source	Neds No.	I.D. No.	
CITRUS PROCESSOR	0023	008	
Address			
602 McKEAN STREET			
City	County	Zip	
AUBURNDALE	POLK	33823	
Contact	Phone		
ED PRIEST	352-552-9036		

Process Equipment	Operating Rate
COGEN SYSTEM No. 1	
Control Equipment	Operating Mode
N/A	

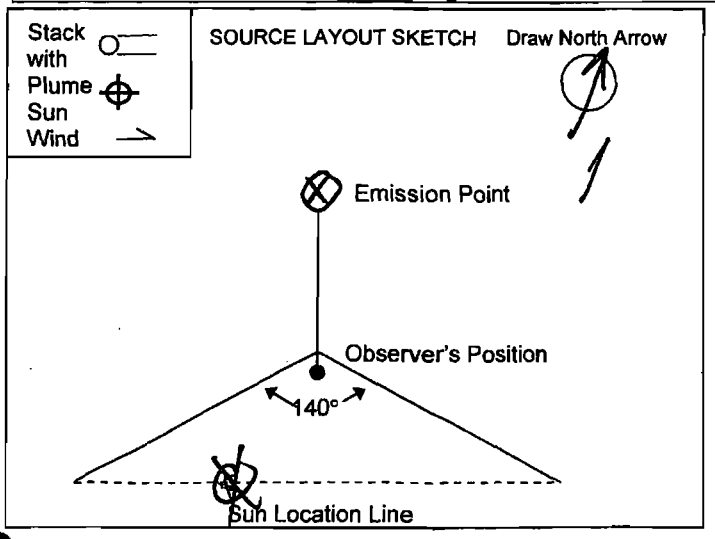
Fuel Type/Rate	Material Type/Rate
NATURAL GAS	
Describe Emission Point Start Stack	Stop ✓
Height Above Ground Level Start ~35 Stop ✓	Height Relative to Observer Start ~30 Stop ✓
Distance from Observer Start ~70 Stop ✓	Direction from Observer Start NW Stop ✓

Describe Emissions	
Start None	Stop ✓
Emission Color Start N/A Stop ✓	Plume Type o Continuous o Intermittent N/A
Water Droplets Present oNo o Yes	Water Droplet Plume o Attached o Detached
Point in the Plume at which Opacity was determined Start	Stop

Describe Background		Ambient Temp	
Start SKY	Stop ✓	Start 75	Stop ✓
Background Color Start blue	Stop ✓	Sky Conditions Start Broken	Stop ✓
Wind Speed Start 5-10	Stop ✓	Wind Direction Start S	Stop ✓

Stack with Plume ⊕ Sun Wind →

SOURCE LAYOUT SKETCH Draw North Arrow



I certify the above process rate data is true to the best of my knowledge.
SIGNATURE

Title Date

Observation Date	Start Time	Stop Time
2-4-11	10:30	11:30

SEC / MIN	0	15	30	45	SEC / MIN	0	15	30	45
1.	0	0	0	0	31.	0	0	0	0
2.	0	0	0	0	32.	0	0	0	0
3.	0	0	0	0	33.	0	0	0	0
4.	0	0	0	0	34.	0	0	0	0
5.	0	0	0	0	35.	0	0	0	0
6.	0	0	0	0	36.	0	0	0	0
7.	0	0	0	0	37.	0	0	0	0
8.	0	0	0	0	38.	0	0	0	0
9.	0	0	0	0	39.	0	0	0	0
10.	0	0	0	0	40.	0	0	0	0
11.	0	0	0	0	41.	0	0	0	0
12.	0	0	0	0	42.	0	0	0	0
13.	0	0	0	0	43.	0	0	0	0
14.	0	0	0	0	44.	0	0	0	0
15.	0	0	0	0	45.	0	0	0	0
16.	0	0	0	0	46.	0	0	0	0
17.	0	0	0	0	47.	0	0	0	0
18.	0	0	0	0	48.	0	0	0	0
19.	0	0	0	0	49.	0	0	0	0
20.	0	0	0	0	50.	0	0	0	0
21.	0	0	0	0	51.	0	0	0	0
22.	0	0	0	0	52.	0	0	0	0
23.	0	0	0	0	53.	0	0	0	0
24.	0	0	0	0	54.	0	0	0	0
25.	0	0	0	0	55.	0	0	0	0
26.	0	0	0	0	56.	0	0	0	0
27.	0	0	0	0	57.	0	0	0	0
28.	0	0	0	0	58.	0	0	0	0
29.	0	0	0	0	59.	0	0	0	0
30.	0	0	0	0	60.	0	0	0	0

Average Opacity for Highest 24 Consecutive Readings	Range of Opacity Readings Min.	Max.
0	0	0

Observer's Name (Print)	
KENNETH GIVEN	
Observer's Signature	Date 2-4-11
Certified by E.T.A.	Date 2/09/11
Comments 48 MMBTU/hr DB - 75% - 74MMBTU/hr	

AIR TESTING & CONSULTING, INC.
(813) 651-0878

Facility Name	Permit Number		
CUTRALE	1050023-017-AG		
Source	Neds No.	I.D. No.	
CITRUS PROCESSOR	0023	009	
Address			
602 McKEAN STREET			
City	County	Zip	
AUBURNDALE	POLK	33823	
Contact	Phone		
ED PRIEST	352-552-9036		

Process Equipment	Operating Rate
COGEN SYSTEM No. 2	
Control Equipment	Operating Mode
N/A	

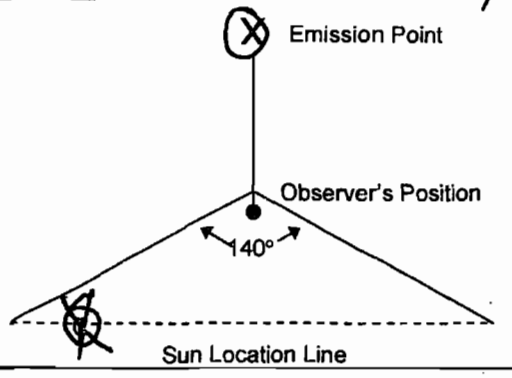
Fuel Type/Rate	Material Type/Rate
NATURAL GAS	
Describe Emission Point Start Stack Exit Stop ✓	
Height Above Ground Level Start ~75 Stop ✓	Height Relative to Observer Start ~30 Stop ✓
Distance from Observer Start ~100 Stop ✓	Direction from Observer Start NW Stop ✓

Describe Emissions Start None Stop ✓	
Emission Color Start N/A Stop ✓	Plume Type o Continuous o Intermittent N/A
Water Droplets Present oNo o Yes	Water Droplet Plume o Attached o Detached
Point in the Plume at which Opacity was determined Start	Stop

Describe Background Start Sky Stop ✓	Ambient Temp Start 77° Stop ✓
Background Color Start Blue Stop ✓	Sky Conditions Start Broken Stop ✓
Wind Speed Start 5-10 Stop ✓	Wind Direction Start S Stop ✓

Stack with Plume ⊕
Sun
Wind →

SOURCE LAYOUT SKETCH Draw North Arrow



I certify the above process rate data is true to the best of my knowledge.
SIGNATURE

Title Date

Observation Date	Start Time	Stop Time
2-4-11	1:45	2:45

SEC / MIN	0	15	30	45	SEC / MIN	0	15	30	45
1.	0	0	0	0	31.	0	0	0	0
2.	0	0	0	0	32.	0	0	0	0
3.	0	0	0	0	33.	0	0	0	0
4.	0	0	0	0	34.	0	0	0	0
5.	0	0	0	0	35.	0	0	0	0
6.	0	0	0	0	36.	0	0	0	0
7.	0	0	0	0	37.	0	0	0	0
8.	0	0	0	0	38.	0	0	0	0
9.	0	0	0	0	39.	0	0	0	0
10.	0	0	0	0	40.	0	0	0	0
11.	0	0	0	0	41.	0	0	0	0
12.	0	0	0	0	42.	0	0	0	0
13.	0	0	0	0	43.	0	0	0	0
14.	0	0	0	0	44.	0	0	0	0
15.	0	0	0	0	45.	0	0	0	0
16.	0	0	0	0	46.	0	0	0	0
17.	0	0	0	0	47.	0	0	0	0
18.	0	0	0	0	48.	0	0	0	0
19.	0	0	0	0	49.	0	0	0	0
20.	0	0	0	0	50.	0	0	0	0
21.	0	0	0	0	51.	0	0	0	0
22.	0	0	0	0	52.	0	0	0	0
23.	0	0	0	0	53.	0	0	0	0
24.	0	0	0	0	54.	0	0	0	0
25.	0	0	0	0	55.	0	0	0	0
26.	0	0	0	0	56.	0	0	0	0
27.	0	0	0	0	57.	0	0	0	0
28.	0	0	0	0	58.	0	0	0	0
29.	0	0	0	0	59.	0	0	0	0
30.	0	0	0	0	60.	0	0	0	0

Average Opacity for Highest 24 Consecutive Readings	Range of Opacity Readings Min.	Max.
0	0	0

Observer's Name (Print)
KENNETH GIVEN

Observer's Signature Kenneth Given Date 2-4-11

Certified by E.T.A. Date 2/09/11

Comments Turbine - 49 MMBTU/hr
DB - 100% - 33 MMBTU/hr

VISIBLE EMISSIONS EVALUATOR

This is to certify that

KEN GIVEN

STUDENT ID NUMBER GIV583223

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.

390907
CERT NUMBER

2/9/2011
DATE OF SCHOOL

TAMPA, FL
SCHOOL LOCATION

8/11/2011
CERTIFICATION EXP DATE

TMPS11
LAST LECTURE

Judy 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 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 and expires on the date below.

TAMPA, FL	2/9/2011	390907
SCHOOL LOCATION	DATE OF SCHOOL	CERT NUMBER
TMPS11	8/11/2011	
LAST LECTURE	CERTIFICATION EXP DATE	BEARER

Customer Support
Debbie Scalise
debbie@smokeschool.com

Want to know when we will be in your area? Join our emailing list at www.smokeschool.com

919-878-3188

E. 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: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

AIR TESTING & CONSULTING

ANNUAL METER CALIBRATION DATA FORM (English units)

Name : GH Date : 8/5/10 Meter Box : 2835296 - NUTECH II

Barometric Pressure, Pb, in Hg : 30.01 Standard Meter Number : S-275

Ys: 1.000

Orifice manometer setting, ΔH, in. H_2O	Gas Volume		Temperature				Time Θ min.	Yi	dHa
	Standard Gas Meter (Vs), ft^3	Dry gas meter (Vd) ft^3	Standard Gas Meter (Ts) °F	Dry gas meter Inlet (Ti) °F	Outlet (To) °F	Average (Td) °F			
0.5									
1.0	5.000	5.011	72	77	74	76	8.55	1.001	1.6371
1.5	5.000	5.012	72	77	75	76	7.25	1.001	1.7623
2.0	5.000	5.013	73	77	75	76	6.32	0.999	1.7923
3.0	5.000	5.010	73	78	77	78	5.05	0.999	1.7102
4.0	5.000	4.988	74	78	77	78	4.42	0.999	1.7533
								1.000	1.731

$$Yi = \frac{Vs\ Pb\ (Td + 460)}{Vd\ (Pb + dH/13.6)\ (Ts + 460)}$$

$$\Delta H = \frac{0.0317 dH\ [(Ts + 460)N]^2}{Pb\ (To + 460)\ [\ Vs\ ]^2}$$

AIR TESTING & CONSULTING

POSTTEST DRY METER CALIBRATION DATA FORM (English units)

Name : Capelle Date : 2/18/11 Nutech II

Barometric Pressure, Pb, in Hg : 30.11 2835296

Pretest Y: 1.000

Orifice manometer setting, (dH) in. H_2O	Gas Volume		Temperature		Time (theta) min.	Vacuum Setting in. Hg	Yi
	Standard Gas Meter (Vs), ft^3	Dry gas meter (Vd) ft^3	Standard Gas Meter (Ts) °F	Dry gas meter (Td) °F			
1.0	10.006	9.914	73	74	16.2	10.0	1.0087
1.0	10.006	9.995	74	75	16.2	10.0	1.0005
1.0	10.010	9.997	73	74	16.1	10.0	1.0007
							1.0033

% Allowable Tolerance = 5.00

Allowable Range = 0.95 to 1.0526

$$Yi = \frac{Vs\ Pb\ (Td + 460)}{Vd\ (Pb + dH/13.6)\ (Ts + 460)}$$

Pyrometer Calibration

Pyrometer Under Test

Pyrometer Number: Box #2 - NUTECH II
Calibration Date: May 27, 2010

Calibration Information

Calibrator Serial Number: Hart Scientific
Calibrator Type/Manufacturer: AOAO24
Date of Last Calibration: OCT. 16, 2009
Calibration Personal: TVC

Calibration Data

Calibration Point	Reference Temperature	Pyrometer Indication	Difference
1	397	395	2
2	212	211	1
3	32	32	0

Reference Points are 32 ^{O}F, 210 ^{O}F and 400 ^{O}F.

Difference is calculated as follows:

(reference temperature) - (pyrometer indication)

Calibration Point	Difference
1	Pass
2	Pass
3	Pass

Reviewer: Ken Green

Date: 5-28-10

Pyrometer Calibration

Pyrometer Under Test

Pyrometer Number: Fluke 51
Calibration Date: May 27, 2010

Calibration Information

Calibrator Serial Number: Hart Scientific
Calibrator Type/Manufacturer: AOAO24
Date of Last Calibration: OCT. 16, 2009
Calibration Personal: TVC

Calibration Data

Calibration Point	Reference Temperature	Pyrometer Indication	Difference
1	400	401	-1
2	212	213	-1
3	32	33	-1

Reference Points are 32 ^{O}F, 210 ^{O}F and 400 ^{O}F.

Difference is calculated as follows:

(reference temperature) - (pyrometer indication)

Calibration Point	Difference
1	Pass
2	Pass
3	Pass

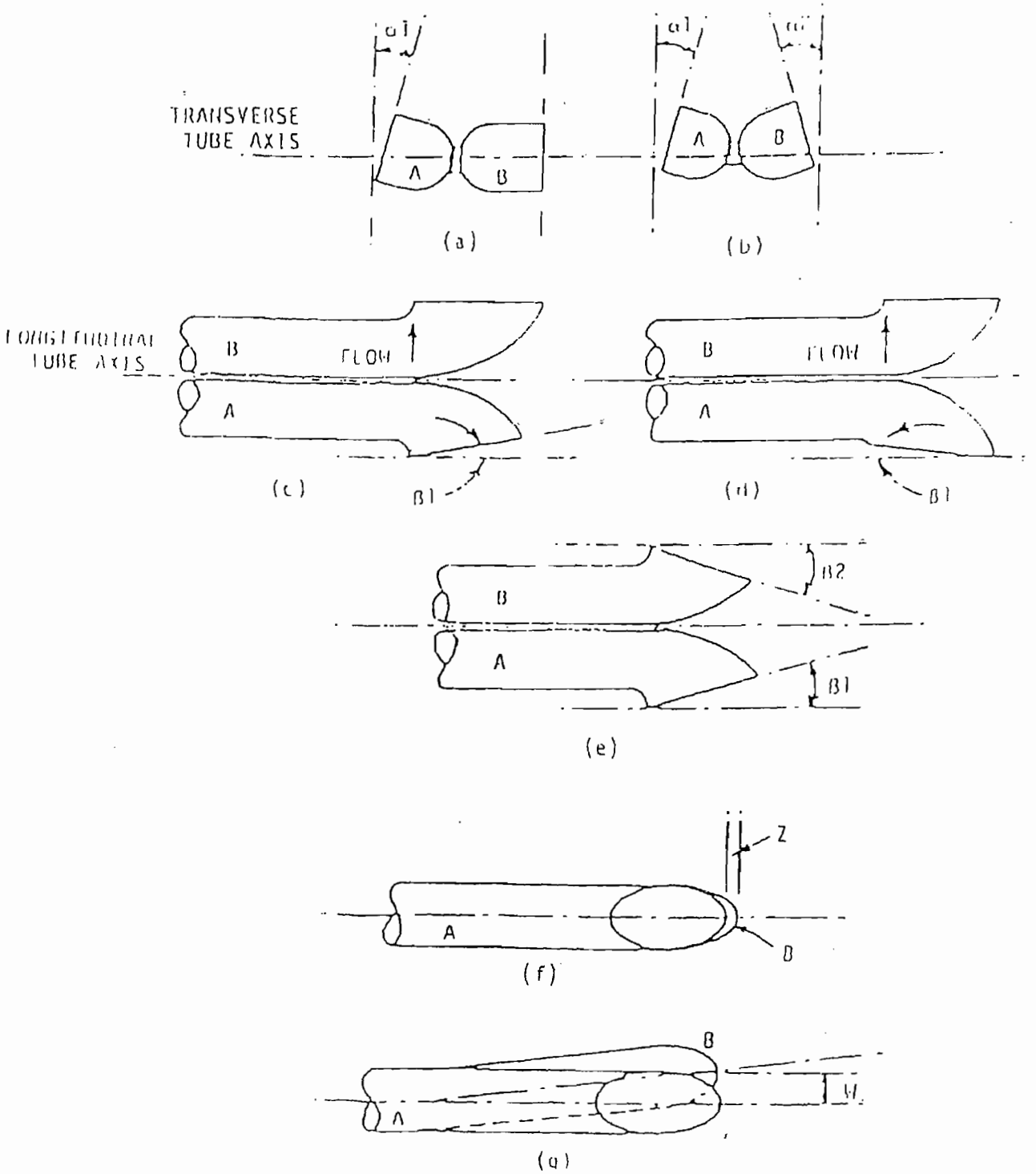
Reviewer: Ken Keen

Date: 5-28-10

PITOT TUBE ALIGNMENT CHECK

PITOT TUBE # #6
DATE: 12-17-09
BY: TC/KG

$\alpha_1 =$ 3° $\beta_1 =$ 2° $\alpha_2 =$ 2° $\beta_2 =$ 1° z = 0.2 cm w = 0.05 cm



Airgas

Certificate Of Analysis

Date Of Analysis: 7/12/2005

Reference Number: 21-110860320-2

Customer Name: Air Testing & Consulting

Part Number: NI UHP300

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

Liquid Technology Corporation

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

DO NOT USE BELOW 150 psig

Cylinder Data

Cylinder Serial Number:	CC-231482	Cylinder Outlet:	CGA 590
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 Duncan

Date: May 19, 2009

Unmatched Excellence

2564 Pemberton Drive ~ Apopka, Florida 32703 ~ Phone (407)-292-2990 ~ Fax (407)-292-3313
~ www.liquidtechcorp.com ~

Liquid Technology Corporation

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 Oxide: 61.1 ppm +/- 0.61 ppm

Nitrogen: Balance

Total Oxides of Nitrogen: 61.1 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 Serial 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.

Certified by: Mike Duncan

Mike Duncan

Unmatched Excellence

2564 Pemberton Drive ~ Apopka, Florida 32703 ~ Phone (407)-292-2990 ~ Fax (407)-292-3313
~ www.liquidtechcorp.com ~

Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Air Testing & Consulting (Tampa, Florida)
Date	December 23, 2008
Delivery Receipt	DR-23355
Gas Standard	90.0 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-251486	Cylinder Outlet:	CGA 660
Cylinder Volume:	140 Cubic Feet	Cylinder Pressure:	2000 psig, 70°F
Expiration Date:	December 08, 2011		

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:	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:

Date: December 14, 2009

Unmatched Excellence

2564 Pemberton Drive ~ Apopka, Florida 32703 ~ Phone (407)-292-2990 ~ Fax (407)-292-3313
~ www.liquidtechcorp.com ~

Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

** Re-certification **

Customer	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:	CGA 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

Nitric 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

Mike Duncan

Original Data: 174.1 ppm NO, 176.1 ppm NOx/Nitrogen (October 16, 2009)

Unmatched Excellence

2564 Pemberton Drive ~ Apopka, Florida 32703 ~ Phone (407)-292-2990 ~ Fax (407)-292-3313
~ www.liquidtechcorp.com ~

F. PROJECT PARTICIPANTS

PROJECT PARTICIPANTS

Kenneth Given, P.E.	Air Testing & Consulting President / Project Manager
Tim Capelle	Air Testing & Consulting Environmental Field Supervisor
Josh Becker	Air Testing & Consulting Environmental Technician II
Greg Starling	Air Testing & Consulting Environmental Technician II
Scott Given	Air Testing & Consulting Environmental Scientist

ATTACHMENT CA-FI-C3

SOLAR TURBINES CENTAUR 50-6200S PREDICTED ENGINE PERFORMANCE

Solar Turbines
A Caterpillar Company

PREDICTED ENGINE PERFORMANCE

Customer: *Cutrale*	Model: **CENTAUR 50-6200S**
Job ID:	Package Type: **GSC**
Run By: **Christopher S Burns** / Date Run: **9-Apr-07**	Match: **STANDARD**
Engine Performance Code: **REV. 3.40** / Engine Performance Data: **REV. 0.1**	Fuel System: **GAS**
	Fuel Type: **SD NATURAL GAS**

DATA FOR NOMINAL PERFORMANCE

Elevation	feet	80
Inlet Loss	in H20	4.0
Exhaust Loss	in H20	10.0

		1	2	3	4	5
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*	kW	FULL	FULL	FULL	FULL	FULL
Net Output Power*	kW	4811	4426	4237	4044	3840
Fuel Flow	mmBtu/hr	56.50	52.81	51.14	49.53	47.87
Heat Rate*	Btu/kW-hr	11745	11933	12071	12248	12465
Therm Eff*	%	29.053	28.595	28.266	27.859	27.374
Engine Exhaust Flow	lbm/hr	157632	149491	145441	141730	137495
Exhaust Temperature	deg F	942	959	966	970	980

Fuel Gas Composition (Volume Percent)

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

Fuel Gas Properties

LHV (Btu/Scf)	939.2	Specific Gravity	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.

Notes
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% O_2 Dry, steady state operation	
NO_x	25 ppmv Max
CO	50 ppmv Max
UHC	25 ppmv Max
PM_{10}/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" H_2O
Exhaust Pressure Drop	10" H_2O
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 Terminals - Full Load	4,108 kWe

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.

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% load on gas fuel and 80 to 100% load on liquid fuel.
3. 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 PM_{10} 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.
6. Solar does not conduct PM10 testing. Any required PM10 testing is to be conducted by the customer (or its representative) at site.
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.

ATTACHMENT CA-FI-C4

NEW COGEN STATUS AND PROGRESS REPORT REQUIREMENTS

11 Cloud Street
Leesburg, FL 34748
Tel: 352-552-7800

CUTRALE®
CITRUS JUICES USA, INC.

January 25, 2011

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-AV

Dear FDEP:

The facility has made significant progress. The installation is approximately 98% complete. The units are 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: Southwest District

11 Cloud Street
Leesburg, FL 34748
Tel: 352-552-7800

CUTRALE.
CITRUS JUICES USA, INC.

COPY

October 21, 2010

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-AV

Dear FDEP:

The facility has made significant progress. The installation is approximately 75% 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

11 Cloud Street
Leesburg, FL 34748
Tel: 352-552-7800

CUTRALE.
CITRUS JUICES USA, INC.

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-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.

Edward Priest
Environmental Coordinator

602 McKean Street
Auburndale, FL 33823-4070
Tel. 863-965-5000

CUTRALE.
CITRUS JUICES USA, INC.

April 20, 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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-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 turbines. The delivery of the new turbines 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

11 Cloud Street
Leesburg, FL 34748
Telephone 352-728-7800

CUTRALE.
CITRUS JUICES USA, INC.

COPY

January 21, 2010

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-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 turbines. The delivery of the new turbines 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

602 McKean Street
Auburndale, FL 33823-4070
Tel. 863-965-5000

CUTRALE.
CITRUS JUICES USA, INC.

COPY

October 21, 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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-AV

Dear FDEP:

The facility has made significant progress by completing engineering and purchasing the new turbines. The delivery of the new turbines 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

11 Cloud Street
Leesburg, FL 34748
Telephone 352-728-7800

CUTRALE.
CITRUS JUICES USA, INC.

July 1, 2009

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-AV

Dear FDEP:

The facility has made progress by meeting with vendors to update all 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

11 Cloud Street
Leesburg, FL 34748
Telephone 352-728-7800

CUTRALE.
CITRUS JUICES USA, INC.

April 23, 2009

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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-AV

Dear FDEP:

The facility has made progress by meeting with vendors to update all proposals, project specifications and engineering. We have contracted for engineering and the engineering is in process.

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 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 (352) 552-9036.

Sincerely,
Cutrale Citrus Juices USA, Inc.

Edward Priest
Environmental Coordinator

602 McKean Street
Auburndale, FL 33823-4070
Tel. 863-965-5000

CUTRALE.
CITRUS JUICES USA, INC.

COPY

January 22, 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. - Auburndale, Florida**
New Cogen Status and Progress Report Requirements
FDEP Permit No. 1050023-021-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