UNITED STATES SUGAR CORPORATION

111 Ponce de Leon Ave.
Clewiston, Florida 33440

February 20, 2009

VIA UPS Overnight

Mr. Jeffrey Koerner, P.E.
Professional Engineer Administrator
Florida Dept. of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399-2400

Dear Mr. Koerner;

Enclosed are four (4) copies of the Air Construction Permit Modification and Title V Permit revision application for wood chip burning in Boiler #7 at the Clewiston facility.

If there are any questions regarding this submission, please call Mr. David Buff, P.E., our consulting engineer at (352) 336-5600 or myself at (863) 902-3186.

Sincerely,
United States Sugar Corporation

Keith Tingberg
Environmental Manager
Sugar Manufacturing

Enclosures (4)

Copy: Mr. David Buff, P.E. – Golder Associates

AIR CONSTRUCTION PERMIT MODIFICATION AND TITLE V PERMIT REVISION APPLICATION FOR WOOD CHIP BURNING IN BOILER NO. 7

U.S. SUGAR CORPORATION
CLEWISTON, FLORIDA

Prepared For:
U.S. Sugar Corporation
111 Ponce de Leon Ave.
Clewiston, Florida 33441

Prepared By:
Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

February 2009

0738-7595

DISTRIBUTION:
4 Copies – FDEP
2 Copies – United States Sugar Corporation
2 Copies – Golder Associates Inc.

APPLICATION FOR AIR PERMIT

LONG FORM

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: **United States Sugar Corporation**	
2. Site Name: **U.S. Sugar Clewiston Mill**	
3. Facility Identification Number: **0510003**	
4. Facility Location... Street Address or Other Locator: **W.C. Owens Ave. and S.R. 832** City: **Clewiston** County: **Hendry** Zip Code: **33440**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Keith Tingberg, Environmental Manager, Sugar Manufacturing**
2. Application Contact Mailing Address... Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce De Leon Ave.** City: **Clewiston** State: **FL** Zip Code: **33440**
3. Application Contact Telephone Numbers... Telephone: **(863) 902-3186** ext. Fax: **(863) 902-3149**
4. Application Contact E-mail Address: **ktingberg@ussugar.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

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

Title V permit revision application to incorporate the provisions of Air Construction Permit No. 0510003-044-AC, to fire Boiler No. 7 with up to 25 percent of the total heat input coming from wood chips.

This application is also being submitted to revise Specific Condition No. 8 of Construction Permit No. 0510003-044-AC. U.S. Sugar is proposing to test a representative sample of wood chips each calendar quarter only when wood chips are burned as fuel.

Finally, this application is being submitted to incorporate an Alternative Monitoring Plan (AMP) for opacity for Boiler No. 7.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
014	Boiler No. 7	AF2A	

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:
   Neil Smith, Vice President and General Manager, Sugar Manufacturing

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, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **United States Sugar Corporation**
   Street Address: **111 Ponce De Leon Ave.**
   City: **Clewiston** State: **FL** Zip Code: **33440**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(863) 902-2703** ext. Fax: **(863) 902-2729**

5. Application Responsible Official E-mail Address: **nsmith@ussugar.com**

6. Application Responsible Official Certification:

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

Signature _____ Date 2/20/09

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **David A. Buff**
   Registration Number: **19011**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext. **545** Fax: **(352) 336-6603**
4. Professional Engineer E-mail Address: **dbuff@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.

David A. Buff
Signature

2/17/09
Date

(seal)

* Attach any exception to certification statement.
**Board of Professional Engineers Certificate of Authorization #00001670.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **506.1** North (km) **2956.9**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **26 / 44 / 06** Longitude (DD/MM/SS) **80 / 56 / 19**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **20**	6. Facility SIC(s): **2061** **2062**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Keith Tingberg, Environmental Manager, Sugar Manufacturing**
2. Facility Contact Mailing Address... Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce De Leon Ave.** City: **Clewiston** State: **FL** Zip Code: **33440**
3. Facility Contact Telephone Numbers: Telephone: **(863) 902-3186** ext. Fax: **(863) 902-3149**
4. Facility Contact E-mail Address:

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]?
Ammonia - NH3	B	N
Carbon Monoxide - CO	A	N
Nitrogen Oxides - NOx	A	N
Particulate Matter Total - PM	A	N
Particulate Matter - PM10	A	N
Particulate Matter - PM2.5	A	N
Sulfur Dioxide - SO2	A	N
Sulfuric Acid Mist - SAM	A	N
Volatile Organic Compounds - VOC	A	N
Total Hazardous Air Pollutants - HAPs	A	N
Acetaldehyde - H001	A	N
Chlorine - H038	A	N
p - Cresol - H052	A	N
Dibenzofuran - H058	A	N
Formaldehyde - H095	A	N
Hydrochloric Acid - H106	A	N

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Benzene - H107	**A**	**N**
Manganese Compounds - H113	**A**	**N**
Mercury - H114	**B**	**N**
Naphthalene - H132	**A**	**N**
Phenol - H144	**A**	**N**
Polycyclic Organic Matter - H151	**A**	**N**
Styrene - H163	**A**	**N**
Toluene - H169	**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: **May 2005**
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: **May 2005**
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: **May 2005**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☒ Attached, Document ID: **USSC-FI-CC2**
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

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:_____
   ☒ 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: **USSC-FI-CV3**
   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: **See Comment** ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

Due to no firing of wood chips in Boiler 7 since permit issuance, USSC requests that the initial compliance testing required by Specific Condition No. 4, Construction Permit No. 0510003-044-AC, be revised to occur within 60 operational days on wood chips, but not later than October 1, 2009.

ATTACHMENT USSC-FI-CC2

PROPOSED AIR CONSTRUCTION PERMIT REVISION

ATTACHMENT USSC-FI-CC2
PROPOSED AIR CONSTRUCTION PERMIT REVISION

This application is being submitted to revise Specific Condition No. 8.a. in Section 3.A. of Construction Permit No. 0510003-044-AC. This condition currently requires U.S. Sugar to take representative samples of wood chips each calendar quarter and have them analyzed. The condition requires the sampling and analysis even if wood chips are not burned in Boiler No. 7.

U.S. Sugar is requesting that it be required to test a representative sample of wood chips only during each calendar quarter when wood chips are actually burned as fuel in Boiler No. 7. U.S. Sugar proposes revising Specific Condition 8.a. as follows:

> "A representative sample of wood chips shall be taken during each calendar quarter that woodchips are burned as fuel in Boiler No. 7, and analyzed for the heating value (modified ASTM D3286 in Btu/lb as fired) and moisture content (ASTM D3173 in percent by weight). Analytical results shall be determined and available for review within 30 days of the end of each calendar quarter. Such analysis is not required if wood chips are not burned in the boiler during the calendar quarter."

ATTACHMENT USSC-FI-CV3

COMPLIANCE REPORT AND PLAN

ATTACHMENT USSC-FI-CV3a
COMPLIANCE REPORT

United States Sugar Corporation certifies that the Clewiston Mill in Clewiston, Florida, as of the date of this application, is in compliance with each applicable requirement addressed in this Title V air permit revision application, except for those applicable requirements identified in the attached compliance plan.

I, the undersigned, am the responsible official as designed in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Compliance statements for this facility will be submitted on an annual basis to FDEP, on or before April 1 of each year.

Signature, Responsible Official	Date

ATTACHMENT USSC-FI-CV3b

COMPLIANCE PLAN FOR UNITED STATES SUGAR CORPORATION

A. BOILER NO. 7 – INITIAL NO_x, PM, AND OPACITY TESTING

Deviations from Applicable Requirements

Air Construction Permit No. 0510003-044-AC was issued on December 6, 2007, allowing Boiler No. 7 to fire wood chips with up to 25 percent of the total heat input coming from wood chips. Specific Condition No. 4 of this permit requires that initial compliance testing for nitrogen oxides (NO_x), particulate matter (PM), and visible emissions be conducted while burning wood chips. Testing is required to be conducted within 30 operational days on wood chips after first fire on woodchips, but not later than August 30, 2007.

USSC has not operated the boiler on wood chips since the permit was issued. Therefore, initial NO_x, PM, and opacity testing has not been conducted on the boiler.

Compliance Plan

Initial compliance testing required by Specific Condition No. 4 of Permit No. 0510003-044-AC has not been completed due to a lack of wood chip firing in Boiler No. 7 since permit issuance. USSC is not likely to fire wood chips until next off-season, beginning approximately May 2009. Therefore, USSC is proposing to conduct initial compliance testing for NO_x, PM, and visible emissions within 60 operational days on wood chips after first fire on wood chips, but not later than October 1, 2009. Up to 60 days is being requested in order to schedule and conduct the compliance testing considering the test contractor's previous commitments.

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION
Section [1]
Boiler No. 7

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:
   Boiler No. 7

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

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Spreader-stoker vibrating-grate boiler fired by carbonaceous fuel, wood chips, and distillate fuel oil (Grades No. 1 and 2) with a maximum sulfur content of 0.05 percent by weight. Fuel oil can include facility-generated, on-specification used oil.

EMISSIONS UNIT INFORMATION
Section [1]
Boiler No. 7

Emissions Unit Control Equipment/Method: Control **1** of **2**

1. Control Equipment/Method Description: **Electrostatic Precipitator**
2. Control Device or Method Code: **010**

Emissions Unit Control Equipment/Method: Control **2** of **2**

1. Control Equipment/Method Description: **Wet Sand Separator**
2. Control Device or Method Code: **099**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate:
2.	Maximum Production Rate: **385,000 lb/hr steam**
3.	Maximum Heat Input Rate: **812** million Btu/hr
4.	Maximum Incineration Rate: pounds/hr tons/day
5.	Requested Maximum Operating Schedule: **24** hours/day **7** days/week **52** weeks/year **8,760** hours/year
6.	Operating Capacity/Schedule Comment: **Maximum heat input rate based on 1-hour maximum steam rate of 385,000 lb/hr for carbonaceous fuel firing. The maximum 24-hour average heat input rate for firing wood chips is 369 MMBtu/hr (Permit No. 0510003-044-AC). The maximum permitted 24-hour heat input rate for firing bagasse fuel is 738 MMBtu/hr (Permit No. 0510003-017-AV), and the maximum permitted 1-hour average heat input rate for firing No. 2 fuel oil is 326 MMBtu/hr, corresponding to a maximum steam production rate of 225,000 lb/hr (Permit No. 0510003-018-AC).**

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **BLR-7**		2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **225** feet	7. Exit Diameter: **8.0** Feet
8. Exit Temperature: **272**°F	9. Actual Volumetric Flow Rate: **341,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: Feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment: **Stack parameters based on average 2006 and 2007 stack testing. Stack flow rate representative of heat input rate of 738 MMBtu/hr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Bagasse; All Boiler Sizes**		
2. Source Classification Code (SCC): **1-02-011-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **112.8**	5. Maximum Annual Rate: **897,900**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.24 (dry)**	8. Maximum % Ash: **8.4 (dry)**	9. Million Btu per SCC Unit: **7.2**
10. Segment Comment: **Maximum hourly rate based on a heat input rate of 812 MMBtu/hr (1-hour average) and annual rate based on a rate of 738 MMBtu/hr (24-hour average). Both annual and hourly maximums were based on a heating value of 3,600 Btu/lb wet bagasse (Permit No. 0510003-010-AC/PSD-FL-272A and Permit No. 0510003-017-AV).**		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Distillate Oil; Grades 1 and 2**		
2. Source Classification Code (SCC): **1-02-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.417**	5. Maximum Annual Rate: **4,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **150**
10. Segment Comment: **Maximum hourly and annual rates, and the maximum sulfur content of the distillate fuel oil, based on current permit limits (Permit No. 0510003-018-AC). Includes combustion of facility-generated, on-specification used oil.**		

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

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Wood/Bark Waste (> 50,000 lb/hr steam)**		
2. Source Classification Code (SCC): **1-02-009-02**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **90.2**	5. Maximum Annual Rate: **179,580**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.07**	8. Maximum % Ash: **6**	9. Million Btu per SCC Unit: **9.0**
10. Segment Comment: **Maximum hourly rate based on 100 percent woodchips (heating value 4,500 Btu/lb) and 812 MMBtu/hr (1-hour max) heat input rate. Maximum 24-hour average heat input is 369 MMBtu/hr (Permit No. 0510003-044-AC). Maximum annual usage based on 179,580 TPY woodchips, which represents 25 percent of the potential heat input capacity of the boiler or 1,616,220 MMBtu/yr.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	099	010	EL
PM10	099	010	EL
PM2.5	099	010	NS
SO2			EL
NOx			EL
CO			EL
VOC			EL
SAM			NS
H017 (Benzene)			NS
H038 (Chlorine)			NS
H095 (Formaldehyde)			NS
H106 (Hydrogen Chloride)	010		NS
HAPs			NS

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **252.5** lb/hour **857.4** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.311 lb/MMBtu for wood chip firing** Reference: **Based on stack testing using a 25 percent wood/75 percent bagasse by heat input mix.**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Maximum Hourly Rate:
812 MMBtu/hr x 0.311 lb/MMBtu = 252.6 lb/hr

Maximum Annual Rate:
Wood Chip firing:
738 MMBtu/hr x 8,760 hr/yr x 25% from wood chips firing = 1,616,220 MMBtu/yr
1,616,220 MMBtu/yr x 0.311 lb/MMBtu x 1 ton/2,000 lbs = 251.3 TPY
Remainder due to bagasse firing:
738 MMBtu/hr x 8760 hr/yr x 75% from bagasse firing = 4,848,660 MMBtu/yr
4,848,660 MMBtu/yr x 0.25 lb/MMBtu x 1 ton/2,000 lbs = 606.1 TPY
Total Annual:
251.3 TPY + 606.1 TPY = 857.4 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Emission limit for bagasse only firing is 0.25 lb/MMBtu.
Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.311 lb/MMBtu**	4. Equivalent Allowable Emissions: **252.5** lb/hour **251.3** tons/year
5. Method of Compliance: **EPA Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Applies to wood chip burning.**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.25 lb/MMBtu**	4. Equivalent Allowable Emissions: **203.0** lb/hour **606.1** tons/year
5. Method of Compliance: **EPA Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on bagasse firing limits in Permit No. 0510003-017-AV.**	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.20 lb/MMBtu**	4. Equivalent Allowable Emissions: **65.2** lb/hour **60.8** tons/year
5. Method of Compliance: **EPA Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions representative of fuel oil firing only. Hourly emissions based on 326 MMBtu/hr (2,417 gal/hr) at 135,000 Btu/gal and annual emissions based on 4,500,000 gallons per any consecutive 12 months. Permit No. 0510003-018-AC.**	

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **24.4** lb/hour **97** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.03 lb/MMBtu** Reference: **Permit No. 0510003-17-AV and 0510003-044-AC.**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Biomass:

Hourly: 812 MMBtu/hr x 0.03 lb/MMBtu = 24.4 lb/hr

Annual: 738 MMBtu/hr x 8,760 hr/yr x 0.03 lb/MMBtu x 1 ton/2,000 lb = 97 TPY

No. 2 Fuel Oil:

Hourly: 326 MMBtu/hr x 0.03 lb/MMBtu = 9.8 lb/hr

Annual: 4,500,000 gal/yr x 135,000 Btu/gal = 607,500 MMBtu/yr

607,500 MMBtu/yr x 0.03 lb/MMBtu x 1 ton/2,000 lb = 9.1 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **24.4** lb/hour **97** tons/year
5. Method of Compliance: **EPA Method 17**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV and 0510003-044-AC. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **9.8** lb/hour **9.1** tons/year
5. Method of Compliance: **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-212.400(5), F.A.C. Emissions representative of No. 2 fuel oil firing only. Hourly emissions based on 326 MMBtu/hr (2,417 gal/hr) and annual emissions based on 4,500,000 gallons per any consecutive 12 months. Heating value of No. 2 fuel oil is 135,000 Btu/gal.**	

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **24.4** lb/hour **97** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.03 lb/MMBtu** Reference: **Permit No. 0510003-017-AV and 0510003-044-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Equal to PM emissions.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Maximum emissions representative of biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **24.4** lb/hour **97** tons/year
5. Method of Compliance: **EPA Method 17**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV and 0510003-044-AC. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **9.8** lb/hour **9.1** tons/year
5. Method of Compliance: **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-212.400(5), F.A.C. Emissions representative of No. 2 fuel oil firing only. Hourly emissions based on 326 MMBtu/hr (2,417 gal/hr) and annual emissions based on 4,500,000 gallons per any consecutive 12 months. Heating value of No. 2 fuel oil is 135,000 Btu/gal.**	

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **138** lb/hour **550** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.17 lb/MMBtu** Reference: **Permit No. 0510003-017-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Biomass:

Hourly: 812 MMBtu/hr x 0.17 lb/MMBtu = 138 lb/hr

Annual: 738 MMBtu/hr x 8,760 hr/yr x 0.17 lb/MMBtu x 1 ton/2,000 lb = 550 TPY

No. 2 Fuel Oil:

Hourly: 326 MMBtu/hr x 0.05 lb/MMBtu = 16.3 lb/hr

Annual: 607,500 MMBtu/yr x 0.05 lb/MMBtu x 1 ton/2,000 lb = 15.2 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.17 lb/MMBtu**	4. Equivalent Allowable Emissions: **138** lb/hour **550** tons/year
5. Method of Compliance: **EPA Method 6**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 lb/MMBtu**	4. Equivalent Allowable Emissions: **16.3** lb/hour **15.2** tons/year
5. Method of Compliance: **Fuel oil analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions representative of fuel oil firing only. Hourly emissions based on 326 MMBtu/hr (2,417 gal/hr) at 135,000 Btu/gal and annual emissions based on 4,500,000 gallons per any consecutive 12 months (Permit No. 0510003-017-AV).**	

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **568.4** lb/hour **2,262** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.70 lb/MMBtu** Reference: **Permit No. 0510003-017-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Biomass:

Hourly: 812 MMBtu/hr x 0.70 lb/MMBtu = 568.4 lb/hr

Annual: 738 MMBtu/hr x 8,760 hr/yr x 0.70 lb/MMBtu x 1 ton/2,000 lb = 2,262 TPY

No. 2 Fuel Oil:

Hourly: 326 MMBtu/hr x 0.066 lb/MMBtu = 21.5 lb/hr

Annual: 607,500 MMBtu/yr x 0.066 lb/MMBtu x 1 ton/2,000 lb = 20.0 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.70 lb/MMBtu**	4. Equivalent Allowable Emissions: **568.4** lb/hour **2,262** tons/year
5. Method of Compliance: **EPA Method 10**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **172.1** lb/hour **685** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.212 lb/MMBtu** Reference: **Permit No. 0510003-017-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Biomass:

Hourly: 812 MMBtu/hr x 0.212 lb/MMBtu = 172.1 lb/hr

Annual: 738 MMBtu/hr x 8,760 hr/yr x 0.212 lb/MMBtu x 1 ton/2,000 lb = 685 TPY

No. 2 Fuel Oil:

Hourly: 326 MMBtu/hr x 0.004 lb/MMBtu = 1.30 lb/hr

Annual: 607,500 MMBtu/yr x 0.004 lb/MMBtu x 1 ton/2,000 lb = 1.2 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.212 lb/MMBtu**	4. Equivalent Allowable Emissions: **172.1** lb/hour **685** tons/year
5. Method of Compliance: **EPA Method 25 and 25A in conjunction with Method 18.**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **13.8** lb/hour **55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.017 lb/MMBtu** Reference: **Permit No. 0510003-017-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Biomass:

Hourly: 812 MMBtu/hr x 0.017 lb/MMBtu = 13.8 lb/hr

Annual: 738 MMBtu/hr x 8,760 hr/yr x 0.017 lb/MMBtu x 1 ton/2,000 lb = 55 TPY

No. 2 Fuel Oil:

Hourly: 326 MMBtu/hr x 0.005 lb/MMBtu = 1.63 lb/hr

Annual: 607,500 MMBtu/yr x 0.005 lb/MMBtu x 1 ton/2,000 lb = 1.5 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions representative of biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.017 lb/MMBtu**	4. Equivalent Allowable Emissions: **13.8** lb/hour **55** tons/year
5. Method of Compliance: **EPA Method 8, when required**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0510003-017-AV. Emissions representative of biomass firing only.**	

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-212.400(5), F.A.C., 40 CFR 60.43b(f) and (g), Permit No. 0510003-044-AC, and Permit No. 0510003-017-AV. See also attached Alternative Monitoring Plan for opacity.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

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

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 5

1. Parameter Code: **FLOW**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **ABB-Kent Taylor or equivalent** Model Number: **621D**	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Fuel Oil flow measurement instrument. Permit No. 0510003-017-AV.**	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: **FLOW**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **ABB-Kent Taylor or equivalent** Model Number: **621D**	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: ***Steam production measurement instrument. Permit No. 0510003-017-AV.***	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: **Steam Pressure Monitor**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **ABB-Kent Taylor or equivalent** Model Number: **621G** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Steam pressure measurement instrument. Permit No. 0510003-017-AV.**	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: **TEMP**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **ABB-Kent Taylor or equivalent** Model Number: **600T** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Steam temperature measurement instrument. Permit No. 0510003-017-AV.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **Secondary Voltage/Current**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Epscon** Model Number: **Type E**	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Amp/Volt meter required to monitor ESP secondary power input.**	

Continuous Monitoring System: Continuous Monitor __ of __

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

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **USSC-EU1-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: **Nitrogen Oxides, Particulate Matter, and Visible Emissions**
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **Appendix A** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:
   ☒ Attached, Document ID: **USSC-EU1-IV1**
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation:
   ☒ Attached, Document ID: **USSC-EU1-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

See Appendix A for Alternative Opacity Monitoring Plan and associated EPA correspondence.

USSC-EU1-I2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT USSC-EU1-I2
BOILER NO. 7 FUEL ANALYSIS

Parameter	Units	Wood Chips	Bagasse[b]	Parameter	Units	No. 2 Fuel Oil
As Received				Density	lb/gal	6.83
Moisture	%	30 - 50	51.63	Moisture	%	0.51 [c]
Ash	%	3.26 [a]		AHV	Btu/lb	19,910
HHV	Btu/lb	4,500 - 5,435		AHV	Btu/gal	135,000
Arsenic	ppm	0.10 [a]		Carbon	%	84.7
Nitrogen	%	0.20 [a]		Hydrogen	%	15.3
				Nitrogen	%	0.015 [d]
Dry Basis				Oxygen	%	0.38
Ash	%	4.93	4.53	Sulfur	%	0.05 [d]
HHV	Btu/lb	9,000 - 10,870	7,920	Ash/Inorganic	%	0.06 [c]
Arsenic	ppm	0.15	0.39			
Nitrogen	%	0.31	0.35			
Chromium	ppm	5	0.4			
Copper	ppm	24.4				

Btu/lb = British thermal unit per pound
HHV = higher heating value
AHV = approximate heating value

Notes:

[a] Wood Chip Analysis Results - September 16, 2005.

[b] Proximate, Ultimate, and Heat Content Analyses Results for Bagasse for U.S. Sugar, Clewiston.

[c] Source: Perry's Chemical Engineering Handbook. Sixth Edition, 1984.
Represents average fuel characteristics.

[d] Permit limits, Permit No. 0510003-017-AV.

ATTACHMENT USSC-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE

U.S. Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:
Mr. Neil Smith, V.P. of Sugar Processing Operations
Clewiston Sugar Mill and Refinery

Air Permit No. PSD-FL-389
Project No. 0510003-044-AC
Expires: October 1, 2008

Clewiston Sugar Mill and Refinery
Facility ID No. 0510003
Limited Firing of Wood Chips in Boiler 7

FACILITY AND LOCATION

This permit authorizes the firing of limited amounts of wood chips in Boiler 7 at the existing Clewiston sugar mill and sugar refinery (SIC Nos. 2061 and 2062). The facility is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida.

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.) and Title 40, Parts 60 and 63 of the Code of Federal Regulations (CFR). Specifically, the project is subject to preconstruction review for the Prevention of Significant Deterioration (PSD) of Air Quality in accordance with Rule 62-212.400, 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 of Environmental Protection (Department).

CONTENTS

Section 1. General Information
Section 2. Administrative Requirements
Section 3. Emissions Units Specific Conditions
Section 4. Appendices

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

FACILITY AND PROJECT DESCRIPTION

Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

This project authorizes the firing of limited amounts of wood chips in existing Boiler 7 (EU-014). Primarily, wood chips will be fired during the off season (May through September) to support the refinery operations and as an initial startup fuel to begin the crop season when bagasse may not be readily available. In general, wood chips will displace distillate oil as the fuel fired during these limited periods.

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the Draft Permit; the Department's Technical Evaluation and Preliminary Determination; the Written Notice of Intent to Issue Air Permit; the Public Notice of Intent to Issue Air Permit; the publication in a newspaper of general circulation; comments received on the Draft Permit package; and the Department's Final Determination.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. Copies of each application shall be submitted to the Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's South District Office at P.O. Box 2549, Fort Myers, Florida, 33902-2549.

3. Appendices: The following Appendices are attached in Section 4 as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms), Appendix B (General Conditions), Appendix C (Common Conditions), Appendix D (Common Testing Requirements) and Appendix E (Summary of Best Available Control Technology Determinations).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

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: No emissions unit 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. Source Obligation:

   (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. 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 completing the required work and 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 each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. Boiler 7 (EU-014)

This section of the permit addresses the following emissions unit.

Emissions Unit No. 014
Boiler 7 is a spreader-stoker, vibrating-grate boiler with a maximum 1-hour steam production rate of 385,000 pounds per hour at 750° F and 600 psig. The maximum heat input rate is 812 MMBtu/hour (1-hour average) and 738 MMBtu/hour (24-hour average). The primary fuel is bagasse with distillate oil fired as a startup fuel and restricted alternate fuel. Limited amounts of wood chips may also be fired as a startup fuel and restricted alternate fuel. Particulate matter emissions are controlled by a wet sand separator followed by an electrostatic precipitator. Exhaust gases exit a 225 feet tall stack at 335° F with an average flow rate of 355,000 acfm.

{Permitting Note: For this project, Boiler 7 is subject to Best Available Control Technology (BACT) determinations for nitrogen oxides (NO_x) in accordance with Rule 62-212.400(PSD), F.A.C. The final BACT determinations are presented in Appendix E of this permit. It is also subject to the applicable provisions of NSPS Subparts A and Db in 40 CFR 60 for industrial boilers.}

PERFORMANCE RESTRICTIONS

1. Authorized Fuel: The permittee is authorized to fire wood chips in Boiler 7 as a startup and restricted alternate fuel. Wood chips shall consist of clean dry wood and vegetative materials. The wood chips shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited. [Applicant Request; Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.]

2. Capacity: Wood chips shall be fired at a heat input rate of no more than 369 MMBtu per hour based on a 24-hour average. The heat input rate from firing wood chips shall not exceed 1,616,220 MMBtu during any consecutive 12 months. Bagasse remains the primary fuel. [Applicant Request; Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.]

EMISSIONS STANDARDS

3. Emissions Standards: The following emissions standards apply to Boiler 7 when firing wood chips alone or in combination with other authorized fuels.

   a. *Nitrogen Oxides*: As determined by EPA Method 7E, nitrogen oxide emissions shall not exceed 0.31 lb/MMBtu of heat input and 228.8 lb/hour. [Rule 62-212.400(BACT), F.A.C. and PSD-FL-389]

   b. *Particulate Matter*: As determined by EPA Method 5, particulate matter emissions shall not exceed 0.03 lb/MMBtu of heat input and 22 lb/hour. The standard applies at all times, except during periods of startup, shutdown or malfunction. [40 CFR 60.43b(g) and (h)(1)]

   c. *Visible Emissions*: As determined by EPA Method 9, visible emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. The standard applies at all times, except during periods of startup, shutdown or malfunction. [40 CFR 60.43b(f) and (g)]

   d. *Dust*: To minimize fugitive particulate matter, biomass conveyors shall be completely covered or enclosed except for the transfer points to/from the bagasse stockpile and the point associated with conveying bagasse from conveyor C9A to C9B in the drying mill. [Rules 62-4.070(3) and 62-296.310(4)(c), F.A.C.]

TESTING REQUIREMENTS

4. Initial Compliance Tests: When firing wood chips, Boiler 7 shall be tested to demonstrate initial

compliance with the emissions standards for nitrogen oxides, particulate matter and visible emissions. All initial tests shall be conducted when firing wood chips at a heat input rate of at least 332 MMBtu per hour. The initial tests shall be conducted within 30 operational days on wood chips after first fire on wood chips, but not later than August 30, 2007. The initial compliance tests for particulate matter and opacity while firing wood shall be conducted in accordance with the provisions of 40 CFR 60.46b(d). The initial test requirements for firing wood are in addition to any pre-existing test requirements for firing bagasse. [40 CFR 60.46b(d); and Rules 62-4.070(3), 62-297.310(7)(a)1, and 62-212.400(BACT), F.A.C.]

5. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), Boiler 7 shall be tested to demonstrate compliance with the emissions standards for nitrogen oxides, particulate matter and visible emissions. Since bagasse is the worst-case fuel with regard to particulate matter, annual tests for particulate matter and visible emissions when firing bagasse may also be used to demonstrate compliance with the standards for firing wood chips. [Rules 62-4.070(3), 62-297.310(7)(a)1, and 62-212.400(BACT), F.A.C.]

6. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

7. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5 or 5B	Method for Determining Particulate Matter Emissions
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
17	Alternate Method for Determining Particulate Matter Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

MONITORING, RECORDS AND REPORTS

8. Fuel Monitoring: The permittee shall maintain the following records for wood chips.

   a. Representative samples of wood chips shall be taken each calendar quarter and analyzed for the heating value (modified ASTM D3286 in Btu/lb as fired) and moisture content (ASTM D3173 in percent by weight). Analytical results shall be determined and available for review within 30 days of the end of each calendar quarter. Such analysis is not required if no wood chips are stored on site during the calendar quarter.

   b. For each 24-hour block of operation (midnight to midnight), the permittee shall maintain records of the amount of wood chips fired to demonstrate compliance with the heat input restrictions of this permit.

   c. For each 24-hour block of operation (midnight to midnight), the permittee shall calculate and record the heat input rate from wood chips.

   All records shall be maintained on site and made available upon request. [Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.]

9. COMS: The permittee shall install, calibrate and operate a continuous opacity monitoring system (COMS) pursuant to the applicable provisions of NSPS Subparts A and Db in 40 CFR 60. The provisions in Subpart A and Db establish a process for requesting EPA approval of alternate sampling procedures (ASP) to be used in lieu of monitoring opacity. The permittee is notified that a COMS or EPA-approved ASP is required for firing wood chips. [40 CFR 60.13, 40 CFR 60.43b(f) and 40 CFR 60.48b(a); and Rules 62-4.070(3) and 62-212.400(PSD), F.A.C.]

10. Monthly Operations Summary: Within 7 calendar days following each month, the permittee shall calculate and record the amount of wood chips fired (tons) and the corresponding heat input rate (MMBtu) from firing wood chips for the previous month and the previous consecutive 12 months. Records shall be maintained on site and made available upon request. [Rule 62-4.070(3), F.A.C.]

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D of this permit. For each test run, the report shall also indicate the total heat input rate, the heat input rate from firing wood chips, the steam production rate, and the secondary power input to the electrostatic precipitator. [Rule 62-297.310(8), F.A.C.]

OTHER REQUIREMENTS

12. NSPS Subpart Db: Boiler 7 is subject to the applicable requirements of NSPS Subpart Db in 40 CFR 60 when firing distillate oil and/or wood. [NSPS Subpart Db in 40 CFR 60]

SECTION 4. APPENDICES
CONTENTS

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Conditions

Appendix D. Common Testing Requirements

Appendix E. Summary of Best Available Control Technology Determinations

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

FI: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

PSD: prevention of signifi9cant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

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, F.S. 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.

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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., 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.

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.

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 F.S. and Department rules, unless specifically authorized by an order from the Department.

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.

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.

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.

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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with 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.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (NO_X);
    b. Determination of Prevention of Significant Deterioration (NO_X); and
    c. Compliance with New Source Performance Standards (Subpart Db in 40 CFR 60).

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.

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.

SECTION 4. APPENDIX C
COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: 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, F.A.C., cannot vary any NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee 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.]
6. VOC or OS Emissions: No person shall 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. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(3), F.A.C.]

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

3. Calculation of Emission Rate: For each emissions performance test, 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.]

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:

         (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

         (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

         (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 or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

d. *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.]

5. 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.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable 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), toe board, 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 toe boards.

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 dual rail 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.]

7. 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.*

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

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 sub-subparagraph 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;

   (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

   (c) c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

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.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.

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 shall 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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. 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.

[Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX E

SUMMARY OF BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATIONS

Unit Description

U.S. Sugar Corporation operates existing Boiler 7, which is a spreader-stoker, vibrating-grate boiler with a maximum 1-hour steam production rate of 385,000 pounds per hour at 750° F and 600 psig. The maximum heat input rate is 812 MMBtu/hour (1-hour average) and 738 MMBtu/hour (24-hour average). The primary fuel is bagasse with distillate oil fired as a supplemental and alternate fuel.

Air Pollution Control Equipment

Particulate matter emissions are controlled by wet sand separators followed by an electrostatic precipitator. In accordance with original Permit No. PSD-FL-208, this equipment was specified as the Best Available Control Technology (BACT) for particulate matter emissions.

New Project Description

U.S. Sugar Corporation proposes to fire limited amounts of wood chips. Primarily, wood chips will be fired during the off season (May through September) to support the refinery operations and as an initial startup fuel to begin the crop season when bagasse may not be readily available. In general, wood chips will displace distillate oil as the fuel fired during these limited periods. With regard to emissions of nitrogen oxides (NO_X), the project is subject to preconstruction review for the prevention of Significant Deterioration (PSD) of Air Quality pursuant to Rule 62-212.400, F.A.C., which requires a BACT determination.

Final BACT Determination

Pursuant to Rule 62-212.400, F.A.C., the Department establishes the following NO_X BACT standards for Boiler 7. As determined by EPA Method 7E, NO_X emissions shall not exceed 0.31 lb/MMBtu of heat input and 228.8 lb/hour. Compliance shall be demonstrated by conducting tests in accordance with EPA Method 7E.

ATTACHMENT USSC-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USSC-EU1-IV3
ALTERNATIVE METHODS OF OPERATION

U.S. Sugar Clewiston Boiler No. 7 is permitted to fire bagasse fuel as the primary fuel with wood chips and distillate fuel oil as a restricted alternate fuel for startup and supplemental use. The boiler has a maximum steam production capacity of 385,000 lb/hr based on a maximum heat input rate of 812 MMBtu/hr (1-hour average). The sulfur content of distillate fuel oil is limited to 0.05 percent by weight. The operating hours of the boiler are not limited (8,760 hr/yr). Bagasse and wood chips can include incidental amounts of on-specification used oil.

APPENDIX A

ALTERNATIVE MONITORING PLAN FOR OPACITY

ALTERNATIVE MONITORING PLAN FOR OPACITY
BOILER NO. 7 WOOD CHIP FIRING
U.S. SUGAR CLEWISTON

The United States Sugar Corporation (U.S. Sugar) proposes the following alternative monitoring plan (AMP) for opacity for Boiler No. 7. Boiler No. 7 is subject to the opacity standards in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60), Subpart Db, while firing wood chips and No. 2 fuel oil. The proposed AMP is for the purpose of demonstrating continuous compliance with the opacity limit in Subpart Db. The opacity limit contained in Subpart Db is 20-percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Subpart Db requires the use of a continuous opacity monitoring system (COMS) for units that fire wood fuel.

A request for approval of the AMP was submitted to the United States Environmental Protection Agency (EPA), Region 4. In correspondence dated February 1, 2008, the EPA approved the AMP as an alternative to a COMS for Boiler No. 7. The EPA also determined that the use of a 3-hour average total power input to the electrostatic precipitator (ESP) to demonstrate continuous compliance is appropriate for the AMP for Boiler No. 7.

The ESP serving Boiler No. 7 has a total of three fields. Total power input can be determined by monitoring secondary voltage and secondary current to each field, calculating power input to each field, and summing the individual field values to obtain total power input.

Total secondary power input to the ESP is a recognized parameter for controlling PM/PM_{10} emissions. Because U.S. Sugar currently has no test data for PM emissions while firing wood chips in Boiler No. 7, initial compliance testing for wood chip firing will be performed. U.S. Sugar is choosing to use the historic test data on bagasse at this time to establish an indicator value for total secondary power input to the Boiler No. 7 ESP for both bagasse and wood chip firing. The test data correlating the parameter to the PM emission levels are presented in Figure A-1. Supporting information is contained in Table A-1.

The proposed parameter minimum value is based on 90 percent of the minimum parameter value recorded during any test run from the historic data, when compliance was demonstrated with the PM/PM_{10} limit. The calculation of the minimum parameter value is provided below:

ESP secondary power input:

Minimum test run value = 41.9 kilowatts (kW)

Minimum parameter value = 41.9 × 0.9 = 38 kW

ESP operating parameter values below this minimum parameter value will be indicative of atypical operation of the control device. This methodology is consistent with the establishment of ESP operating limits under 40 CFR 63, Subpart DDDDD, which are the Industrial Boiler/Process Heater Maximum Achievable Control Technology (MACT) standards.

Table 8 of Subpart DDDDD provides work practice standards for demonstrating continuous compliance. Table 8 requires ESP operating parameters values to be continuously recorded. The continuously recorded data is then reduced to 3-hour block averages.

Based on collecting data continuously and calculating 3-hour block averages, an excursion will occur when the average 3-hour block reading is below the minimum parameter value. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required (if any) to correct the situation. All excursions will be documented and reported on a semi-annual basis.

The AMP for opacity when firing wood chips is summarized below for Boiler No. 7. U.S. Sugar will revise the AMP appropriately based on the results of initial wood chip firing emissions testing after that testing is completed.

Monitoring Approach

The monitoring approach is based on monitoring total ESP secondary power input, which is calculated from the ESP secondary voltage and secondary current. The monitoring approach is summarized in the table below.

Boiler No. 7	Indicator No. 1
Indicator	Total Secondary Power Input
Measurement Approach	Total secondary power input to each field is calculated from the secondary current and voltage, which are monitored with an amp/volt meter.
Indicator Range	An excursion is defined as any 3-hour block average total power input below 38 kW. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	Accuracy of the amp/volt meter is ±1 milliampere (mA) and ±1 kilovolt (kV).
Verification of Operational Status	NA
QA/QC Practices and Criteria	The amp/volt meter is maintained in accordance with the manufacturer's recommendations.
Monitoring Frequency	ESP secondary current and secondary voltage are measured continuously and used to determine the total secondary power input.
Data Collection Procedures	ESP secondary current and secondary voltage data collected continuously and total power input calculated on a 3-hour block average basis.
Averaging Period	3-hour block

FIGURE A-1
PM vs. Power
Clewiston Boiler No. 7

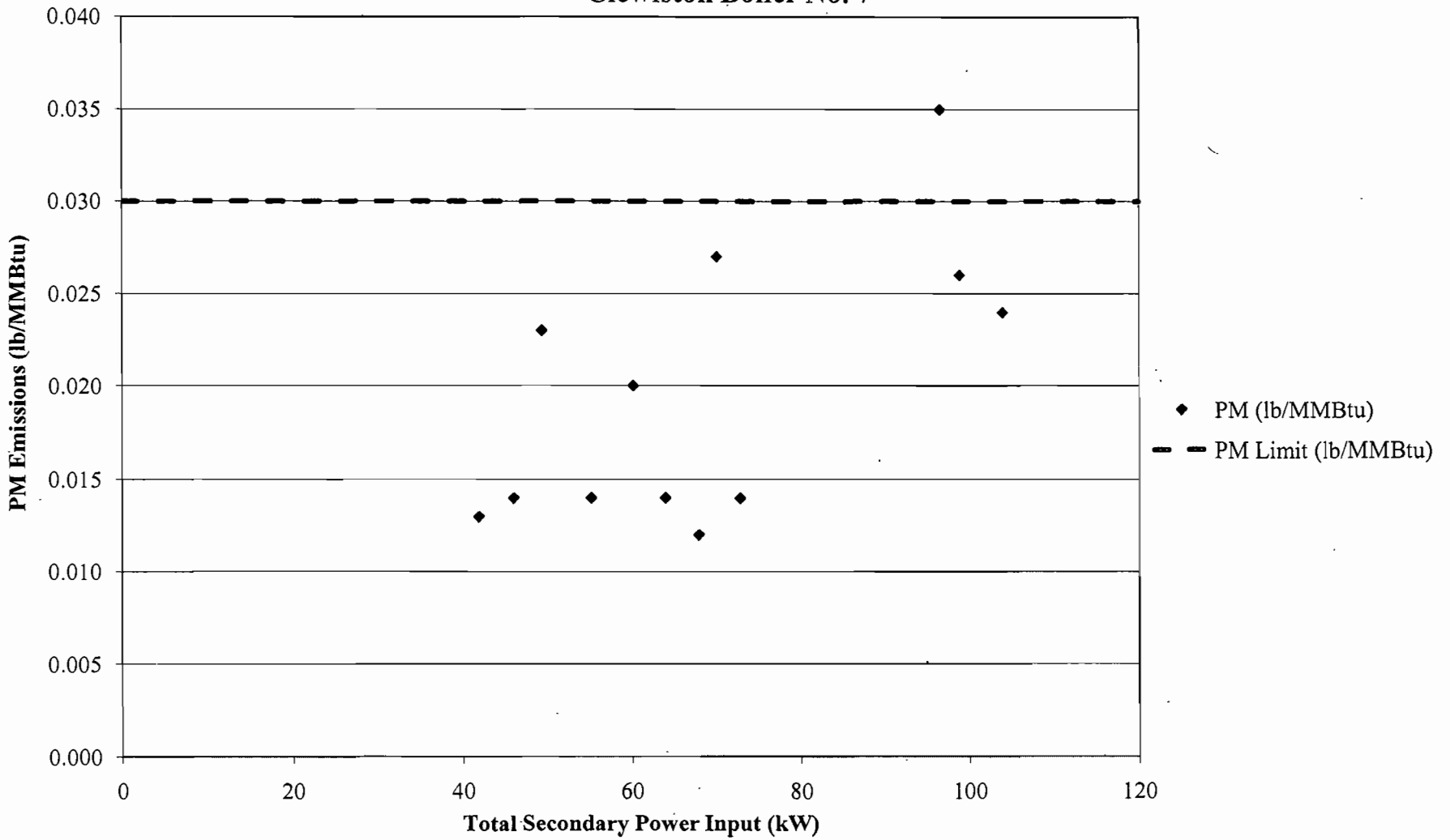

TABLE A-1

BOILER PM EMISSION TESTS, CLEWISTON

Unit	Run Number	Boiler Type	Test Date	Stack Gas Flow Rate (dscfm)	Stack Gas Flow Rate (acfm)	Steam Rate (lb/hr)	Heat Input Rate (MMBtu/hr)	Bagasse Burning Rate [1] (TPH)	Allowable PM Emissions (EPA Method 5) lb/hr	Allowable PM Emissions (EPA Method 5) lb/MMBtu	Actual PM Emissions (EPA Method 5) lb/hr	Actual PM Emissions (EPA Method 5) lb/MMBtu	ESP Secondary Power Input (kW)
Boiler 7	1	Spreader-Stoker Vibrating Grate	02/04/05	165,392	296,331	232,174	494.28	68.65	14.83	0.030	11.57	0.023	49.3
Boiler 7	2	Spreader-Stoker Vibrating Grate	02/04/05	161,579	296,174	228,000	487.84	67.76	14.64	0.030	6.84	0.014	55.1
Boiler 7	3	Spreader-Stoker Vibrating Grate	02/04/05	159,426	285,860	223,099	475.52	66.04	14.27	0.030	13.03	0.027	70.0
Boiler 7	1	Spreader-Stoker Vibrating Grate	01/05/06	184,525	318,378	318,300	659.85	91.65	19.80	0.030	13.47	0.020	60.1
Boiler 7	2	Spreader-Stoker Vibrating Grate	01/05/06	178,105	315,125	348,674	721.46	100.20	21.64	0.030	9.96	0.014	63.9
Boiler 7	3	Spreader-Stoker Vibrating Grate	01/05/06	173,265	306,013	349,209	720.61	100.08	21.62	0.030	8.77	0.012	67.9
Boiler 7	1	Spreader-Stoker Vibrating Grate	01/25/07	185,288	318,417	307,597	637.19	88.50	19.12	0.030	22.05	0.035	96.5
Boiler 7	2	Spreader-Stoker Vibrating Grate	01/25/07	174,015	301,630	319,097	658.39	91.44	19.75	0.030	16.91	0.026	98.8
Boiler 7	3	Spreader-Stoker Vibrating Grate	01/25/07	175,714	301,314	290,569	599.18	83.22	17.98	0.030	14.46	0.024	103.9
Boiler 7	1	Spreader-Stoker Vibrating Grate	01/24/08	157,003	289,313	337,192	712.98	99.03	21.39	0.030	3.62	0.005	ND
Boiler 7	2	Spreader-Stoker Vibrating Grate	01/24/08	154,128	285,290	361,014	758.13	105.30	22.74	0.030	3.84	0.005	ND
Boiler 7	3	Spreader-Stoker Vibrating Grate	01/24/08	158,129	287,635	344,968	724.38	100.61	21.73	0.030	4.16	0.006	ND
Boiler 7	1	Spreader-Stoker Vibrating Grate	12/04/08	178,899	321,444	347,877	686.71	95.38	20.60	0.030	9.70	0.014	72.8
Boiler 7	2	Spreader-Stoker Vibrating Grate	12/04/08	184,297	338,873	352,174	689.88	95.82	20.70	0.030	9.97	0.014	46.0
Boiler 7	3	Spreader-Stoker Vibrating Grate	12/04/08	181,705	333,116	370,870	731.76	101.63	21.95	0.030	9.74	0.013	41.9

Notes:

lb/hr = pounds per hour.

lb/MMBtu = pounds per million British thermal units.

lb/ton = pounds per ton.

MMBtu/hr = million British thermal units per hour.

TPH = tons per hour.

ND = No Data

[1] Assumed 3,600 Btu/lb average heat content for wet bagasse, except where noted.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
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February 1, 2008

Mr. Joseph Kahn, Director
Division of Air Resources Management
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Kahn:

We have received a request from U.S. Sugar Corporation for an alternative opacity monitoring procedure for Boiler No. 7 at the company's Clewiston Sugar Mill and Refinery, located in Clewiston, Florida. The boiler is subject to New Source Performance Standards (NSPS) Subpart Db - "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units." As an alternative to the use of a continuous opacity monitoring system (COMS) as required by Section 60.48b(a), U.S. Sugar proposes a procedure for monitoring the total power input to the electrostatic precipitator (ESP). Based on a review of the U.S. Sugar proposal, the Environmental Protection Agency (EPA) Region 4 approves the monitoring of total power input to the ESP as an alternative to a COMS for Boiler No. 7. The requirements of an acceptable alternative monitoring procedure are discussed in this letter.

Boiler No. 7 has a heat input capacity of 738 mmBtu/hr and currently fires bagasse as a primary fuel. No. 2 fuel oil is used during startup and as a supplemental fuel, with an annual capacity factor of ten percent or less. U.S. Sugar proposes to fire wood chips, with an annual capacity factor of 25 percent or less. No physical changes are needed to enable the boiler to use wood chips as fuel. Emissions from Boiler No. 7 are controlled by a wet sand separator followed by an ESP. The boiler is subject to the Subpart Db standard for opacity while firing wood chips and No. 2 fuel oil, and Subpart Db requires a COMS to demonstrate compliance with the opacity standard. Although the State of Florida has previously indicated that Boiler No. 7 is subject to a Subpart Db particulate matter (PM) emission limit at Section 60.43b(h), further review indicates that the PM emission limits of Subpart Db do not apply to the boiler. The boiler was constructed prior to February 28, 2005, and is therefore not subject to Section 60.43b(h). Since the maximum heat input capacity of the boiler is greater than 250 mmBtu/hr and the annual capacity factor for wood chips will be restricted to 25 percent or less, the PM emission limits in

Section 60.43b(c) do not apply. Although the Subpart Db emission limits for PM are not applicable, the Prevention of Significant Deterioration preconstruction permit issued for Boiler No. 7 over ten years ago requires compliance with a Best Available Control Technology PM emission limit of 0.03 lb/mmBtu.

Due to the high moisture content of the bagasse and wood chips and the moisture from the wet sand separator, U.S. Sugar indicates that water droplets in the flue gas will interfere with reliable opacity measurements when using a COMS. Section 60.13(i)(1) allows EPA to approve alternative monitoring procedures when liquid water interference does not provide accurate measurements with a continuous monitoring system, and U.S. Sugar proposes an alternative based on monitoring of the total power input to the ESP. To justify the alternative monitoring proposal, U.S. Sugar has referenced the provisions of 40 CFR Part 63 Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" (promulgated on September 13, 2004). When wet control systems are used in combination with an ESP, Subpart DDDDD allows a parametric monitoring procedure based on monitoring the total power input to an ESP as an alternative to the use of a COMS.

EPA Region 4 approves the use of the Subpart DDDDD procedure for monitoring the total power input to the ESP for Boiler No. 7, as an alternative to a COMS. This approval includes a requirement for U.S. Sugar to demonstrate continuous compliance by following the provisions in Table 8 of Subpart DDDDD. Table 8 of Subpart DDDDD requires a facility to continuously collect secondary current and voltage or total power input monitoring system data, reduce the data to 3-hour block averages, and maintain the 3-hour average values at or above the limits established during the performance test.

The U.S. Sugar alternative monitoring proposal references provisions of the Compliance Assurance Monitoring (CAM) rule at 40 CFR Part 64 to justify the use of an 8-hour average total power input to demonstrate continuous compliance. However, the CAM rule provisions do not justify a relaxation of the parametric monitoring requirements specified in 40 CFR Part 63 Subpart DDDDD or a relaxation of the requirements in the alternative monitoring procedure for Boiler No. 7 at U.S. Sugar. The CAM rule at 40 CFR Part 64.2(b)(1)(i) indicates that requirements of that rule do not apply to emission limitations or standards proposed by the Administrator after November 15, 1990, pursuant to Section 111 or 112 of the Clean Air Act. The CAM rule at Section 64.10(a)(1) further indicates that the rule shall not be used to justify the approval of monitoring less stringent than the monitoring that is required under separate legal authority and is not intended to establish minimum requirements for determining the monitoring to be imposed under separate authority. The use of a 3-hour average total power input to demonstrate continuous compliance, as required in the ESP monitoring provisions developed for

40 CFR Part 63 Subpart DDDDD, is appropriate for the U.S. Sugar alternative monitoring plan for Boiler No. 7. The U.S. Sugar proposal to use an 8-hour average total power input to demonstrate continuous compliance under NSPS Subpart Db is not justified.

If there are any questions regarding this letter, please contact Mr. Keith Goff of the Region 4 staff at (404)562-9137.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides, and Toxics
Management Division

cc: Jeffery Koerner, Florida Department of Environmental Protection
David A. Buff, Golder Associates Inc.