Golder Associates Inc.

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Gainesville, FL USA 32653
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Golder Associates

March 21, 2008

0738-7595

RECEIVED
MAR 24 2008
BUREAU OF AIR REGULATION

Florida Department of Environmental Protection
Bureau of Air Quality
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Jeff Koerner, P.E., Professional Engineer Administrator

RE: UNITED STATES SUGAR CORPORATION – FACILITY ID NO. 0510003
AUTHORIZATION REQUEST FOR TEMPORARY BOILER OPERATION
0510003-045-AC

Dear Mr. Koerner:

United States Sugar Corporation (U.S. Sugar) owns and operates a sugar mill and refinery located in Clewiston, Florida. The mill and refinery currently operate under Title V Permit No. 0510003-017-AV (draft renewal Title V Permit No. 0510003-032-AV received February 8, 2008). The Clewiston Mill consists of five boilers fired primarily by bagasse, a carbon regeneration system, miscellaneous particulate matter sources associated with the sugar refinery and biomass handling and storage, and other equipment to manufacture raw and refined sugar from sugarcane. Additionally, there are two silos located at the Molasses Plant: a limestone silo and a salt silo.

Normally, steam from the existing boilers at the Mill is used to support sugar refining and sugar packaging operations at the facility. Although the existing Title V permit allows continuous operation of the existing boilers, only one or two boilers are typically operated during the off-season to support the refinery operations. However, beginning around June 1 to September 30 of this year, all the Mill boilers will be shut down for planned maintenance. Although most of the refinery operations will also be shut down during this period, sugar packaging operations will continue, which require a small amount of steam. Since the Mill boilers will be shut down, U.S. Sugar is planning to rent a trailer-mounted, 300-horsepower boiler to provide the necessary steam for their packaging operations. A similar request was submitted last year, in which an exemption from the requirement to obtain an air construction permit was obtained.

U.S. Sugar is submitting the following information to the Department to request authorization to operate this boiler for no more than a total of 744 hours during the period from June 1 to September 30, only when all other boilers at the Mill are shut down:

Manufacturer: York Shipley
Model No.: 476SPHV-300-N/2
Serial No.: A53-283W
Year of Manufacture: 1984
Maximum Heat Input Rate: 12 million British thermal units per hour (MMBtu/hr)
Fuel Fired: No. 2 fuel oil
Maximum Fuel Oil Sulfur Content: 0.05 percent
Maximum Fuel Oil Firing Rate: 85 gallons per hour (gph)

Since this boiler was manufactured prior to June 9, 1989, New Source Performance Standards (NSPS), Subpart Dc, is not applicable.

Rule 62-296.406, Florida Administrative Code (F.A.C.), commonly referred to as the Small Boiler BACT, is not applicable to the proposed boiler because it is an insignificant emission unit as defined in Rule 62-213.430(6)(c).

Hourly and annual emissions rates, assuming the proposed limit of 744 hours of operation, are presented in Table 1. No vendor emission factors were available for the rental boiler; therefore, AP-42 emission factors were used to estimate emissions.

Based on the information provided in this letter, U.S. Sugar requests approval from the Department to operate the rental boiler described in this correspondence as a temporary source pursuant to Rule 62-4.040(1)(b), F.A.C.

Since U.S. Sugar anticipates the need for steam during subsequent summers, an application for concurrent air construction and Title V permit processing is included with this correspondence to request that use of a package boiler during the summer months, to support the refinery operation, be a permanent mode of operation.

If you have any questions concerning this correspondence, please contact me at (352) 336-5600. Thank you for your prompt attention to this matter as U.S. Sugar desires to begin operation of this boiler by June 1, 2008.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff, P.E., Q.E.P.
Principal Engineer

Claire Booth, E.I.
Staff Engineer

DB/sl

Enclosures

cc: K. Tingberg

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TABLE 1
UNITED STATES SUGAR CORPORATION, CLEWISTON MILL
PACKAGE BOILER

Regulated Pollutant	Emission Factor (lb/MMBtu)	Ref.	Activity Factor [a] (MMBtu/hr)	Activity Factor [b] (MMBtu/yr)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)	0.014	1	12	8,928	0.17	0.064
Particulate Matter (PM_{10})	0.014	1	12	8,928	0.17	0.064
Particulate Matter ($PM_{2.5}$)	0.014	1	12	8,928	0.17	0.064
Sulfur dioxide (SO_2)	0.051	2	12	8,928	0.61	0.23
Nitrogen oxides (NO_x)	0.14	3	12	8,928	1.71	0.64
Carbon monoxide (CO)	0.036	3	12	8,928	0.43	0.16
Volatile Organic Compounds (VOC)	0.0024	3	12	8,928	0.029	0.011
Sulfuric acid mist (SAM)	0.0031	4	12	8,928	0.04	0.014
Lead (Pb)	9.00E-06	3	12	8,928	1.08E-04	4.02E-05
Mercury (Hg)	3.00E-06	3	12	8,928	3.60E-05	1.34E-05

References:

1. Based on AP-42, Chapter 1.3, *Fuel Oil Combustion*, Table 1.3-2, for No. 2 fuel oil.
2. Based on a requested maximum sulfur content of the No. 2 fuel oil fired in the boiler of 0.05%.
   (7.2 lb/gal) x (0.05 lb S/100 lb oil) x (2 lb SO_2/lb S) x (gal/136,000 Btu) x (1E6 Btu/MMBtu) = 0.051 lb/MMBtu
3. Based on AP-42, Chapter 1.3, *Fuel Oil Combustion*, Tables 1.3-1, 1.3-3, and 1.3-10.
4. Based on derivation of sulfuric acid mist from AP-42 for fuel oil.

Footnotes:

[a] The maximum heat input rate is 12 MMBtu/hr for No. 2 fuel oil calculated using the manufacturer's reported fuel usage rate of 85 gallons per hour. Heating value for No. 2 fuel oil was assumed to be 136,000 Btu/gal.
85 gallons/hour x 136,000 Btu/gal x (MMBtu/1x10^6 Btu) = 12 MMBtu/hr

[b] Based on a requested limit on operating hours of 744 hours per year.

Sample Calculations:

Hourly Emissions = Emission Factor x Activity Factor
Annual Emissions = Activity Factor (MMBtu/yr) x Emission Factor (lb/MMBtu) / 2,000 (lb/ton)

RECEIVED
MAR 25 2008
BUREAU OF AIR REGULATION

AIR CONSTRUCTION PERMIT APPLICATION AND TITLE V PERMIT REVISION FOR A PACKAGE BOILER AT THE CLEWISTON MILL
HENDRY COUNTY, FLORIDA

Prepared For:

United States Sugar Corporation
111 Ponce de Leon Avenue
Clewiston, Florida 33440

Prepared By:

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

March 2008

0738-7595

DISTRIBUTION:
4 Copies – FDEP
2 Copies - USSC
1 Copy - 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 a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

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

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **United States Sugar Corporation**	
2. Site Name: **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, Corporate Environmental Manager**
2. Application Contact Mailing Address... Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce de Leon Avenue** City: **Clewiston** State: **Florida** Zip Code: **33440**
3. Application Contact Telephone Numbers... Telephone: **(863) 902-3186** ext. Fax: **(863) 902-2729**
4. Application Contact Email Address: **ktingberg@ussugar.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3/25/08
2. Project Number(s):	0510003-045-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

☐ Air construction permit.

Air Operation Permit

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

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

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

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

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

Application Comment

This application is to revise the Title V Air Operation Permit No. 0510003-032-AV to include the use of a package boiler to supply steam to the sugar refinery packaging operations while the existing boilers are shut down.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
	Package Boiler		

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 Email Address:
5. Owner/Authorized Representative Statement: *I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.* _____ _____ Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
   Neil Smith, Vice President and General Manager, Sugar Processing Operations

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

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

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

5. Application Responsible Official Email 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 3/20/09

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: **32653-1500**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext.**545** Fax: **(352) 336-6603**
4. Professional Engineer Email Address: **dbuff@golder.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

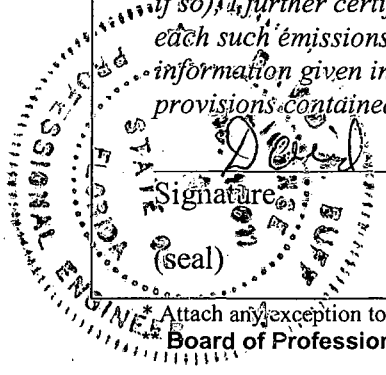
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions 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.



Signature (seal) Date: 3/10/08

* 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, Corporate Environmental Manager**
2. Facility Contact Mailing Address... Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce de Leon Avenue** City: **Clewiston** State: **Florida** Zip Code: **33440**
3. Facility Contact Telephone Numbers: Telephone: **(863) 902-3186** ext. Fax: **(863) 902-2729**
4. Facility Contact Email Address: **ktingberg@ussugar.com**

Facility Primary Responsible Official

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

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

FACILITY INFORMATION

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:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter Total - PM	A	N
Sulfur Dioxide - SO_2	A	N
Nitrogen Oxides - NO_x	A	N
Carbon Monoxide - CO	A	N
Particulate Matter - PM_{10}	A	N
Sulfuric Acid Mist - SAM	A	N
Total Hazardous Air Pollutants - HAPs	A	N
Volatile Organic Compounds - VOC	A	N
Acetaldehyde - H001	A	N
Acrolein - H006	A	N
Benzene - H017	A	N
P-Cresol - H052	A	N
Formaldehyde - H095	A	N
Hydrogen Chloride - H106	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
Dibenzofuran - H058	A	N
Ammonia - NH_3	B	N
Manganese Cmpds - H113	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 Nos. 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 or Modification: ☒ Attached, Document ID: **Attachment A**
3. Rule Applicability Analysis: ☒ Attached, Document ID: **Attachment A**
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): ☐ Attached, Document ID:____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. 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

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ 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 On site 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: **Attachment A** ☐ Not Applicable

Additional Requirements Comment

This application is to revise the Title V Air Operation Permit No. 0510003-032-AV to include the use of a package boiler to supply steam to the sugar refinery packaging operations while the existing Mill boilers are shut down.

ATTACHMENT USSC – FI – CV3

COMPLIANCE REPORT AND PLAN

ATTACHMENT USSC-FI-CV3
COMPLIANCE REPORT AND PLAN

United States Sugar Corporation certifies that the Clewiston Mill, as of the date of this application, is in compliance with each applicable requirement addressed in this Title V air permit revision application.

I, the undersigned, am the responsible official as defined 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 March 1st of each year.

Signature, Responsible Official

3/20/08
Date

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 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 for air permit. 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 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/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. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** 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 construction permitting and insignificant emissions units 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.

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:
Package Boiler

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			**20**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **York Shipley** Model Number: **476SPHV-300-N/2**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Package Boiler will be rented and operated only during periods when existing Mill boilers are shutdown. Future rental boilers will be of similiar specifications, though may not be the same model.

Emissions Unit Control Equipment

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

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **12** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **8** weeks/year	**7** days/week **744** hours/year
6. Operating Capacity/Schedule Comment: **Package Boiler will be rented and operated only during periods of existing Mill boiler shutdown.**	

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: **Package Boiler**		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: **20** feet	7. Exit Diameter: **1** feet
8. Exit Temperature: **350°F**	9. Actual Volumetric Flow Rate: **3,770** 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: **Package Boiler will be rented and operated only during periods when existing Mill boilers are shutdown. Future rental boilers will be of similiar specifications, though may not be the same model.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Distillate oil; 10-100 MMBtu/hr**		
2. Source Classification Code (SCC): **1-02-005-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **0.085**	5. Maximum Annual Rate: **63.2**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment:		

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
SO_2			NS
NO_x			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.61** lb/hour **0.23** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.051 lb/MMBtu** Reference: **0.05% sulfur content**	7. Emissions Method Code: **2**
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: **See Attachment USSC-EU1-F1.10.**	
11. Potential Fugitive and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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):	

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/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.71** lb/hour **0.64** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **20 lb/10^3 gal** Reference: **AP-42**	7. Emissions Method Code: **3**
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: **See Attachment USSC-EU1-F1.10.**	
11. Potential Fugitive and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

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):	

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 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: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b), F.A.C.**	

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

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:	

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: **USSC-EU1-I1** ☐ Previously Submitted, Date ____

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

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

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

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

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

EMISSIONS UNIT INFORMATION
Section [1]
Package Boiler

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 (Rule 62-212.400(4)(d), F.A.C., and Rule 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** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: ____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: ____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT USSC – EU1 – F1.10

CALCULATION OF EMISSIONS

ATTACHMENT USSC-EU1-F1.10
UNITED STATES SUGAR CORPORATION, CLEWISTON MILL
PACKAGE BOILER

Regulated Pollutant	Emission Factor (lb/MMBtu)	Ref.	Activity Factor [a] (MMBtu/hr)	Activity Factor [b] (MMBtu/yr)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)	0.014	1	12	8,928	0.17	0.064
Particulate Matter (PM_{10})	0.014	1	12	8,928	0.17	0.064
Particulate Matter ($PM_{2.5}$)	0.014	1	12	8,928	0.17	0.064
Sulfur dioxide (SO_2)	0.051	2	12	8,928	0.61	0.23
Nitrogen oxides (NO_x)	0.14	3	12	8,928	1.71	0.64
Carbon monoxide (CO)	0.036	3	12	8,928	0.43	0.16
Volatile Organic Compounds (VOC)	0.0024	3	12	8,928	0.029	0.011
Sulfuric acid mist (SAM)	0.0031	4	12	8,928	0.04	0.014
Lead (Pb)	9.00E-06	3	12	8,928	1.08E-04	4.02E-05
Mercury (Hg)	3.00E-06	3	12	8,928	3.60E-05	1.34E-05

Footnotes:

[a] The maximum heat input rate is 12 MMBtu/hr for No. 2 fuel oil calculated using the manufacturer's reported fuel usage rate of 85 gallons per hour. Heating value for No. 2 fuel oil was assumed to be 136,000 Btu/gal.
85 gallons/hour x 136,000 Btu/gal x (MMBtu/1x10^6 Btu) = 12 MMBtu/hr

[b] Based on a requested limit on operating hours of 744 hours per year.

Sample Calculations:

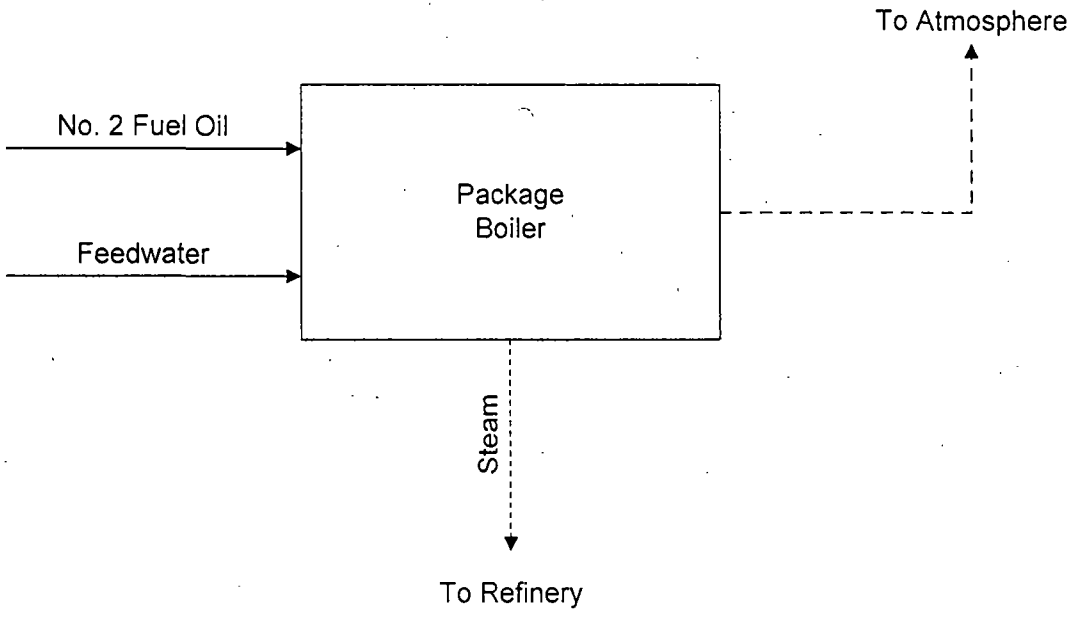
Hourly Emissions = Emission Factor x Activity Factor
Annual Emissions = Activity Factor (MMBtu/yr) x Emission Factor (lb/MMBtu) / 2,000 (lb/ton)

References:

1. Based on AP-42, Chapter 1.3, *Fuel Oil Combustion* , Table 1.3-2, for No. 2 fuel oil.
2. Based on a requested maximum sulfur content of the No. 2 fuel oil fired in the boiler of 0.05%:
(7.2 lb/gal) x (0.05 lb S/100 lb oil) x (2 lb SO_2/lb S) x (gal/136,000 Btu) x (1E6 Btu/MMBtu) = 0.051 lb/MMBtu.
3. Based on AP-42, Chapter 1.3, *Fuel Oil Combustion* , Tables 1.3-1, 1.3-3, and 1.3-10.
4. Based on derivation of sulfuric acid mist from AP-42 for fuel oil.

ATTACHMENT USSC – EU1 – I1

PROCESS FLOW DIAGRAM



Attachment USSC-EU1-I1 Package Boiler Process Flow Diagram U.S. Sugar - Clewiston	**Process Flow Legend** Solid/Liquid ——→ Gas - - - → Steam ·····→	Package Boiler Filename: USSC-EU1-I1 Date: 03/10/08	Golder Associates

ATTACHMENT USSC – EU1 – I2

PACKAGE BOILER FUEL ANALYSIS

ATTACHMENT USSC-EU1-I2
PACKAGE BOILER FUEL ANALYSIS

Parameter	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	7.2
Approximate Heating Value (Btu/lb)	19,444
Approximate Heating Value (Btu/gal)	136,000
Ultimate Analysis (dry basis):	
Carbon	84.7%
Hydrogen	15.3%
Nitrogen	0.015%
Oxygen	0.38%
Sulfur	0.05%
Ash/Inorganic	0.06% [a]
Moisture	0.51% [a]

Represents typical values.

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

ATTACHMENT USSC – EU1 – IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USSC-EU1-IV1
IDENTIFICATION OF APPLICABLE REQUIREMENTS

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

62-296.320(4)(b), F.A.C.: Visible Emissions Standard

ATTACHMENT A

ATTACHMENT A
SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

1.0 INTRODUCTION

United States Sugar Corporation (U.S. Sugar) owns and operates a sugar mill and refinery located in Clewiston, Hendry County, Florida. The mill and refinery currently operate under Title V Air Operation Permit No. 0510003-017-AV, issued October 18, 2004. A draft Title V permit renewal was received February 8, 2008.

U.S. Sugar operates five sugar mill boilers at the Clewiston Mill. The five boilers provide steam to the sugar mill as well as to the sugar refinery. Boiler Nos. 1, 2, and 4 operate primarily during the crop season, which is typically November through May, to provide steam to the sugar mill and refinery. Boiler Nos. 7 and 8 can operate year-round to provide steam to the sugar mill during the crop season and steam to the sugar refinery during the off-crop season. Boiler Nos. 1, 2, and 4 can operate as backup units during the off-season when Boiler No. 7 is down for maintenance, repair, or during periods of unusually low steam demand.

2.0 PROJECT DESCRIPTION

Although the existing Title V permit allows continuous operation of the existing boilers, only one or two boilers are typically operated during the off-season to support the refinery operations. However, beginning around June 1 to September 30 of each year, all the Mill boilers are shut down for planned maintenance. Although most of the refinery operations will also be shut down during this period, sugar packaging operations will continue, which require a small amount of steam. To continue operating the sugar packaging operations during this time, U.S. Sugar is planning to rent a trailer-mounted, 300-horsepower boiler to provide the necessary steam.

The package/rental boiler has a heat input of 12 million British thermal units per hour (MMBtu/hr) and will only be operated during the period from June 1 to September 30 for a total of 744 hours per year (hr/yr). The package boiler will fire distillate fuel oil (No. 2), which corresponds to 85 gallons per hour (gph) and 63,240 gallons per year (gpy). The maximum sulfur content of the No. 2 fuel oil, which may include facility-generated, on-specification used oil, is 0.05 percent by weight.

It is requested that use of the package boiler during the summer months be allowed as a permanent revision of the Title-V permit. The package boiler specifications are listed below:

- Manufacturer: York Shipley;
- Model No.: 476SPHV-300-N/2;
- Serial No.: A53-283W;
- Year of Manufacture: 1984;
- Maximum Heat Input Rate: 12 MMBtu/hr;
- Fuel Fired: No. 2 fuel oil;
- Maximum Fuel Oil Sulfur Content: 0.05 percent; and
- Maximum Fuel Oil Firing Rate: 85 gph.

Future rental boilers will have similar specifications with a heat input not to exceed 12 MMBtu/hr, though they may not be of the same model or manufacturer.

3.0 APPLICABLE REQUIREMENTS

3.1 New Source Performance Standards (NSPS)

New Source Performance Standards (NSPS) for Small Industrial, Commercial, Institutional Steam Generating Units (40 CFR 60, Subpart Dc) are applicable to boilers with a maximum design heat input capacity equal to or greater than 10 MMBtu/hr, but less than or equal to 100 MMBtu/hr and manufactured after June 9, 1989. Because the package boiler was manufactured prior to 1989, Subpart Dc is not applicable. If a boiler built after June 9, 1989 is utilized, only a record keeping requirement would apply (i.e., fuel usage records).

3.2 State of Florida

Rule 62-296.406, Florida Administrative Code (F.A.C.), commonly referred to as the Small Boiler Best Available Control Technology (BACT), is applicable to fossil fuel steam generating units with less than 250 MMBtu/hr heat input. Due to the limited operating schedule and subsequent emissions of the package boiler, Rule 62-296.406, F.A.C. would not be applicable per Rule 62-213.430(6)(b), F.A.C.

4.0 EMISSIONS

Hourly and annual emission rates, based on the proposed limit of 744 hr/yr of operation, are presented in Attachment USSC-EU1-F1.10 of the application package. Since no vendor emission factors were available for the package boiler, U.S. Environmental Protection Agency (EPA) AP-42 emission factors were used to estimate emissions. The annual emissions for each criteria pollutant were below 1 ton per year (TPY).