

**APPLICATION FOR
TITLE V RENEWAL
UNITED STATES SUGAR CORPORATION**

CLEWISTON AND BRYANT MILLS

VOLUME 1 OF 2

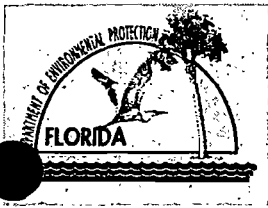
**Prepared For:
United States Sugar Corporation
Clewiston, Florida**

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

May 2005

0537540/0537541

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 and Bryant Mill	
3. Facility Identification Number: 0510003 and 0990061	
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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: William A. Raiola, Sr. Vice President, Sugar Processing Operations	
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) 983-8121 ext. Fax: (863) 902-2729	
4. Application Contact Email Address: wraiola@ussugar.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
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

To renew Title V Air Operating Permit Nos. 0510003-017-AV and 0990061-006-AV for the Clewiston and Bryant Mills, respectively. It is requested that the two facilities be combined into a single Title V facility. The Bryant Mill address is: Bryant Mill Road off of U.S. Highway 98, Bryant, Palm Beach County, Florida.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Clewiston Boiler No. 1		
002	Clewiston Boiler No. 2		
009	Clewiston Boiler No. 4		
014	Clewiston Boiler No. 7		
028	Clewiston Boiler No. 8		
015, 016, 017, 018, 019, 020, 021, 022, 029	Clewiston Sugar Refinery		
001	Bryant Boiler No. 1		
002	Bryant Boiler No. 2		
003	Bryant Boiler No. 3		
004	Bryant Boiler No. 5		
005, 006	Bryant Diesel Generators 1 and 2		
	Facility-wide Unregulated Sources		

Application Processing Fee

Check one: Attached - Amount: \$ _____ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

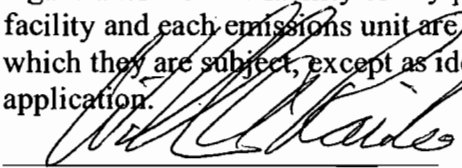
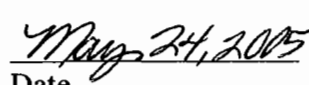
Complete if applying for an air construction permit or an initial FESOP.

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>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.</i> _____ 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: William A. Raiola, Senior Vice President, Sugar Processing Operations
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> 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. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> 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) 983-8121 ext. Fax: (863) 902-2729
5. Application Responsible Official Email Address: wraiola@ussugar.com
6. Application Responsible Official Certification: <p>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</p> <p> Signature</p> <p> Date</p>

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>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> (1) <i>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</i> (2) <i>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.</i> (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, 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.</i> (4) <i>If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, 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 <input type="checkbox"/>, 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.</i> (5) <i>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 <input type="checkbox"/>, 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.</i> <i>David A. Buff</i> _____ Signature _____ Date <i>6/1/05</i> (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 : The facility location above is for the Clewiston Mill. The Bryant Mill location is as follows: UTM Coordinates: Zone 17, 537.8 km East and 2969.1 km North; Latitude: 26°50'41" North, and Longitude: 80°37'09" West.			

Facility Contact

1. Facility Contact Name: William A. Raiola, Senior Vice President, Sugar Processing Operations
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) 983-8121 ext. Fax: (863) 902-2729
4. Facility Contact Email Address: wraiola@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. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: One or more emission units potentially subject to NESHAP for asbestos removal in the event that the facility may wish to perform asbestos removal in the future.	

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

FACILITY INFORMATION

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:					

FACILITY INFORMATION

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-C1</u> <input type="checkbox"/> Previously Submitted, Date: _____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-C2</u> <input type="checkbox"/> Previously Submitted, Date: _____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-C3</u> <input type="checkbox"/> Previously Submitted, Date: _____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: <input type="checkbox"/> Attached, Document ID: _____
3. Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> 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.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

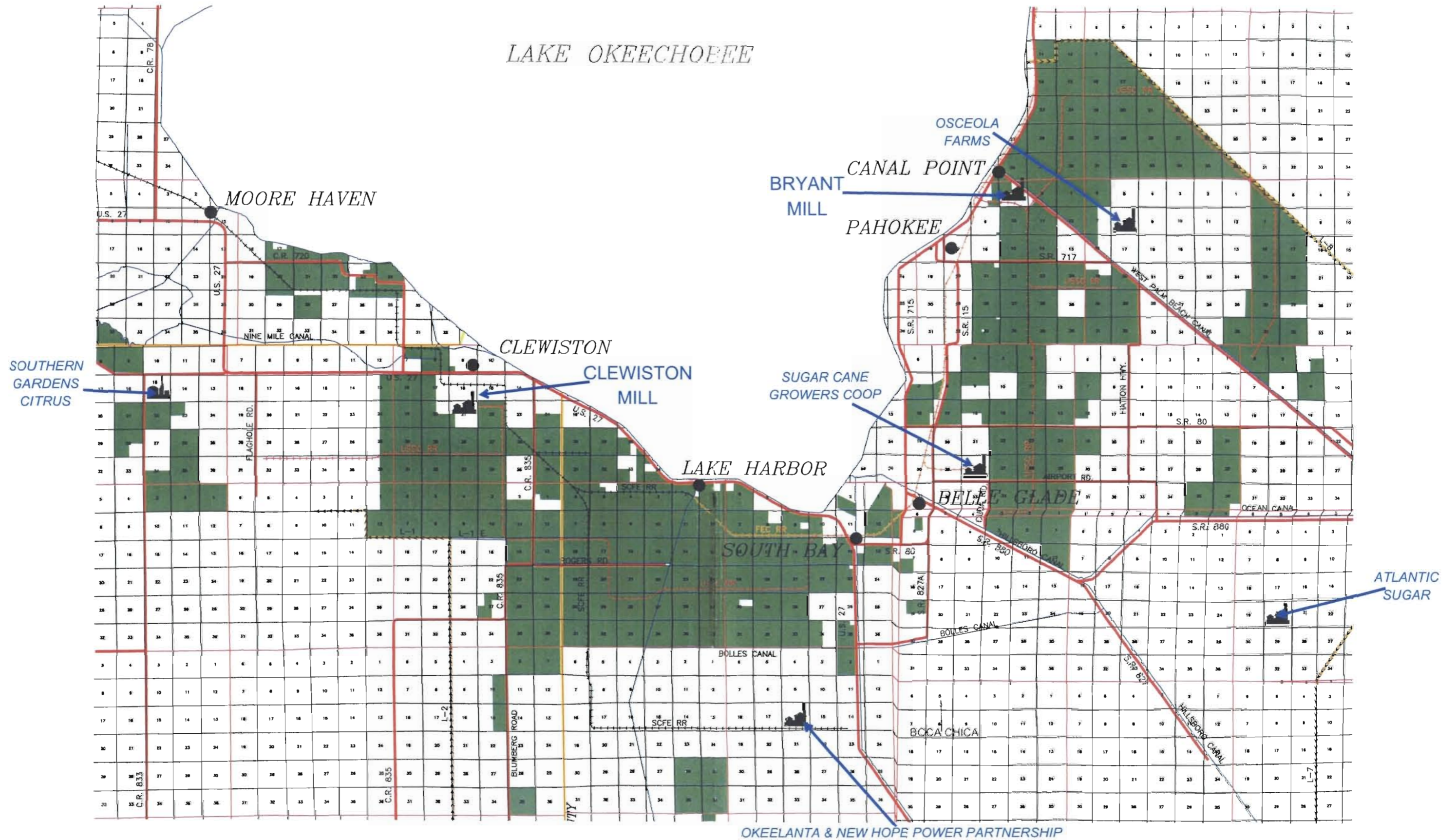
1. List of Insignificant Activities (Required for initial/renewal applications only): <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-CV1</u> <input type="checkbox"/> Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought): <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-CV2</u> <input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan (Required for all initial/revision/renewal applications): <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-CV3</u> 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): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) : <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Requested Changes to Current Title V Air Operation Permit: <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-FI-CV6</u> <input type="checkbox"/> Not Applicable

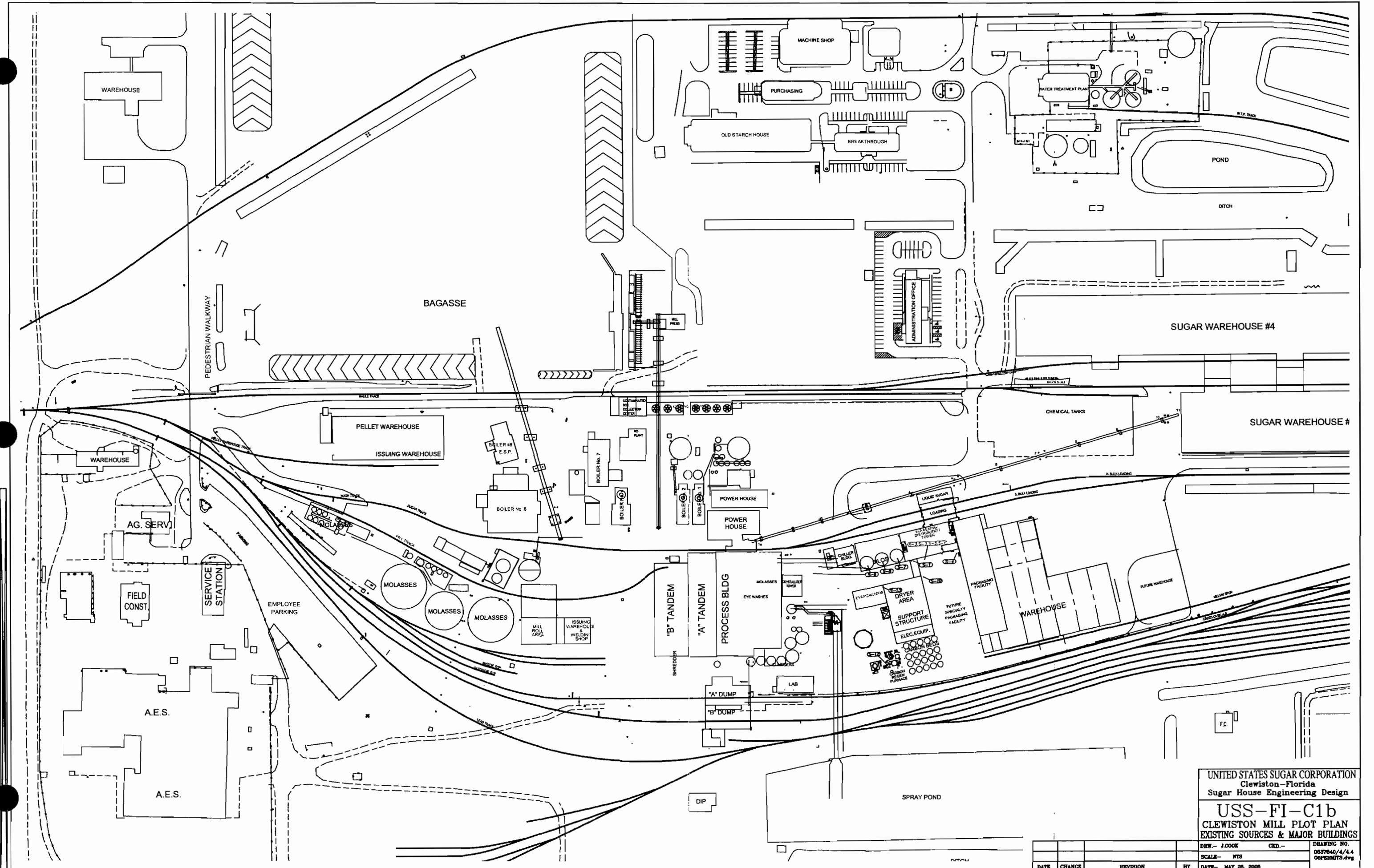
Additional Requirements Comment

ATTACHMENT USS-FI-C1

FACILITY PLOT PLANS

LAKE OKEECHOOEE





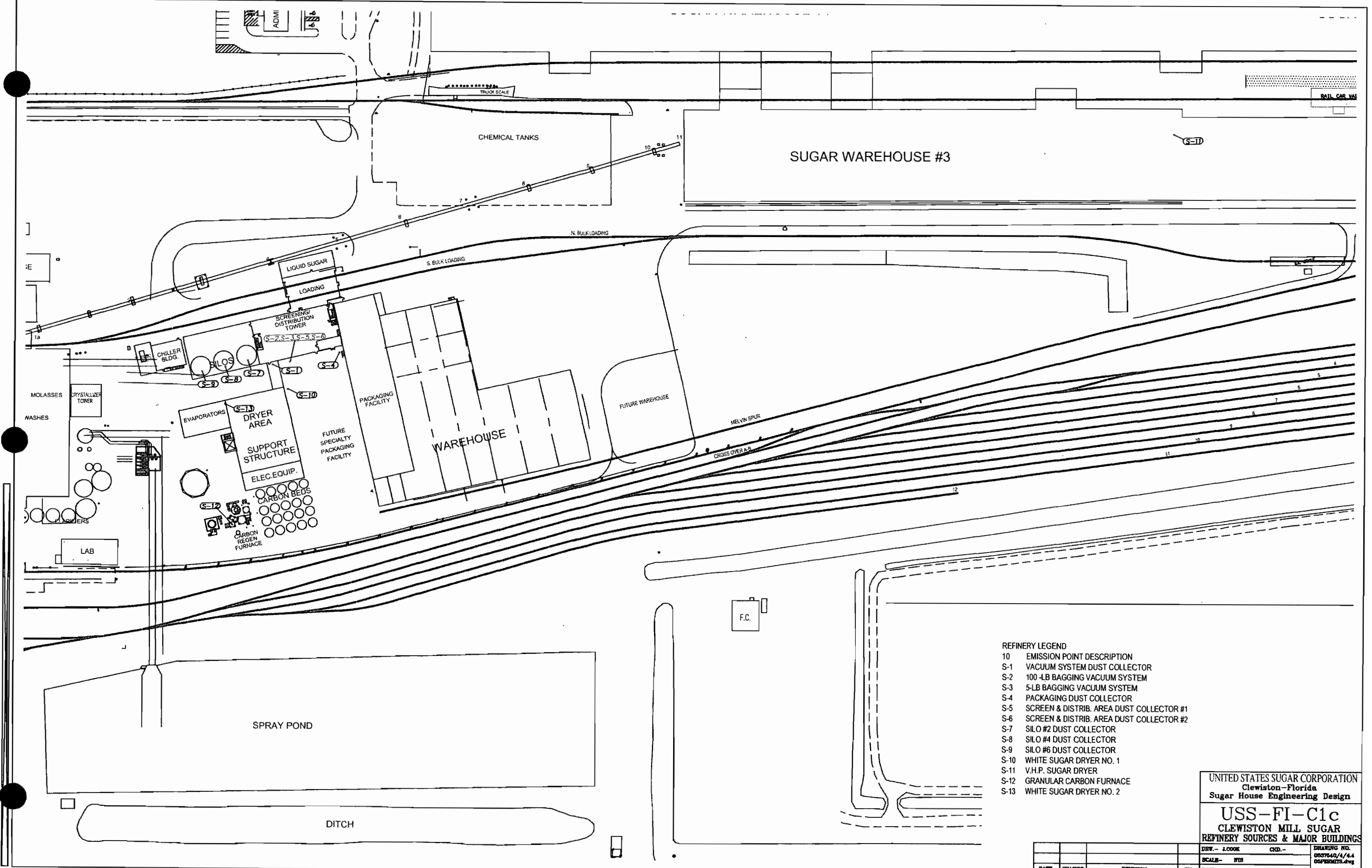
UNITED STATES SUGAR CORPORATION
 Clewiston-Florida
 Sugar House Engineering Design

USS-FI-C1b
 CLEWISTON MILL PLOT PLAN
 EXISTING SOURCES & MAJOR BUILDINGS

DRW.- J.LOOK C&D.-
 SCALE- NTS
 DATE- MAY 26, 2006

DRAWING NO.
 0037640/4/4.4
 00P6840T3.dwg

DATE	CHANGE	REVISION	BY



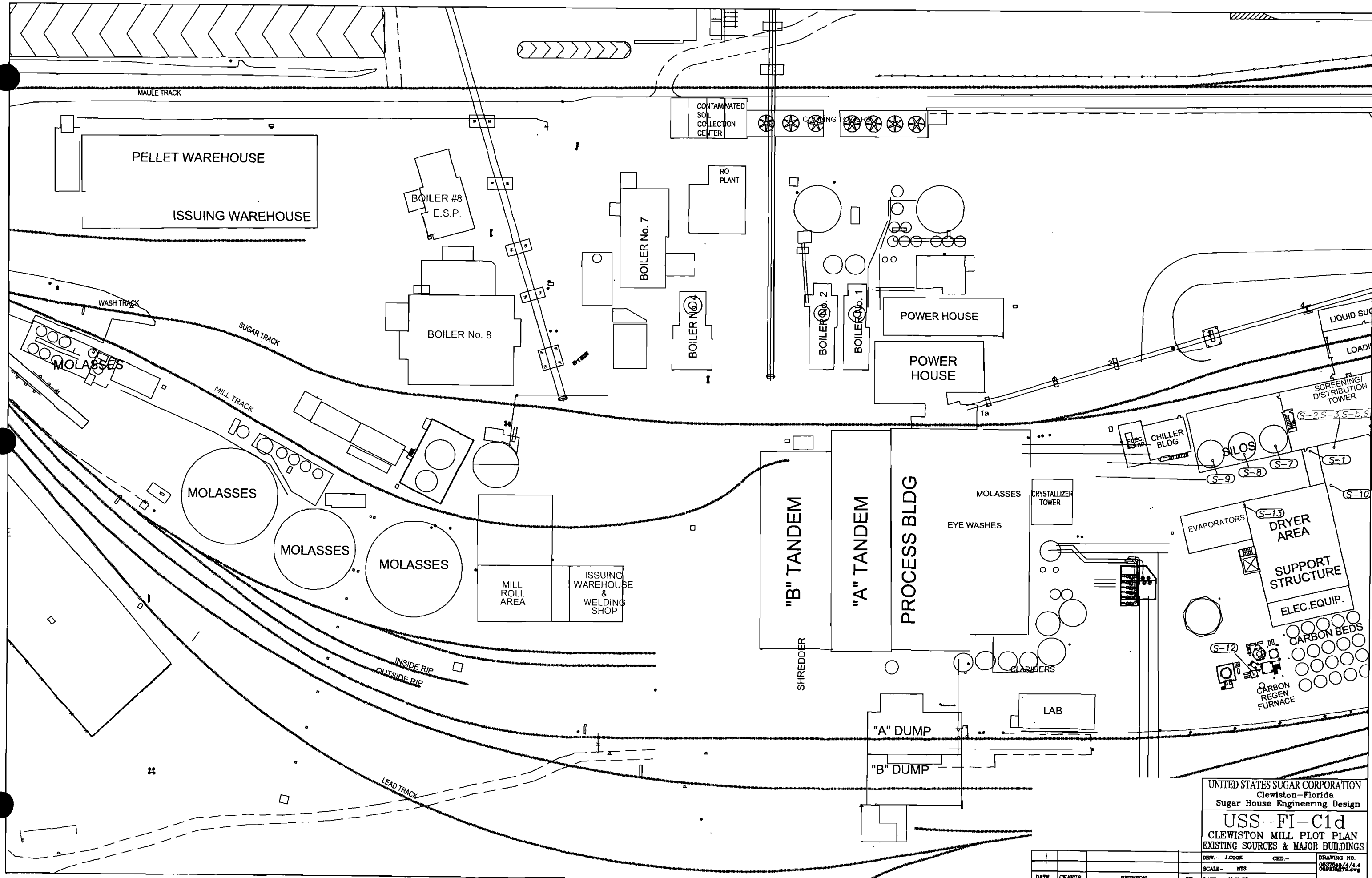
- REFINERY LEGEND**
- 10 EMISSION POINT DESCRIPTION
 - S-1 VACUUM SYSTEM DUST COLLECTOR
 - S-2 100 -LB BAGGING VACUUM SYSTEM
 - S-3 5-LB BAGGING VACUUM SYSTEM
 - S-4 PACKAGING DUST COLLECTOR
 - S-5 SCREEN & DISTRIB. AREA DUST COLLECTOR #1
 - S-6 SCREEN & DISTRIB. AREA DUST COLLECTOR #2
 - S-7 SILO #2 DUST COLLECTOR
 - S-8 SILO #4 DUST COLLECTOR
 - S-9 SILO #6 DUST COLLECTOR
 - S-10 WHITE SUGAR DRYER NO. 1
 - S-11 V.H.P. SUGAR DRYER
 - S-12 GRANULAR CARBON FURNACE
 - S-13 WHITE SUGAR DRYER NO. 2

UNITED STATES SUGAR CORPORATION
 Clewiston-Florida
 Sugar House Engineering Design

USS-FI-C1c
 CLEWISTON MILL SUGAR
 REFINERY SOURCES & MAJOR BUILDINGS

DEV. - L. COOK	CHKD. -	DRAWING NO.
SCALE - NTS		0587640/4/4.4
DATE - MAY 20, 2008		05F2EMITB.dwg

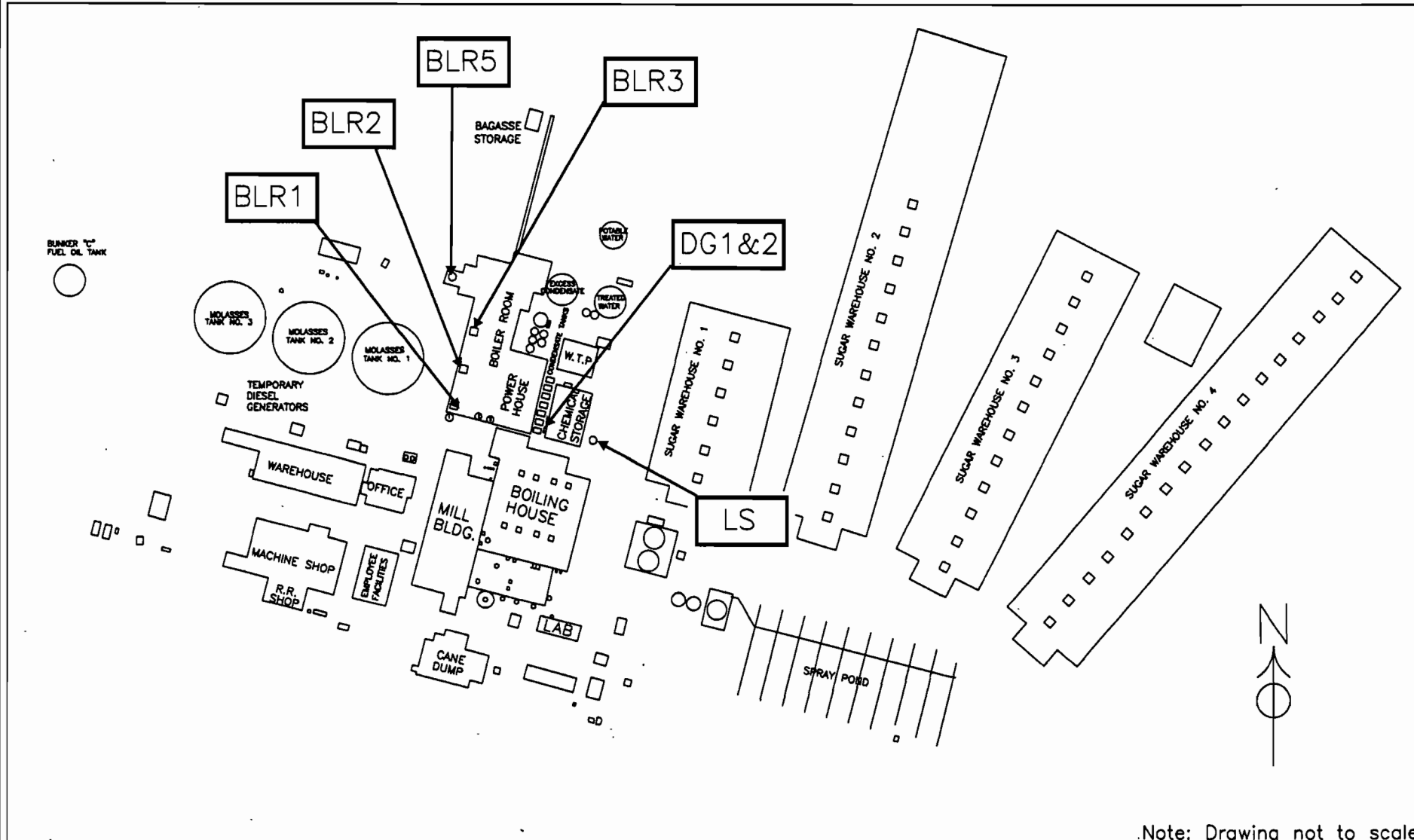
DATE	CHANGE	REVISION	BY



UNITED STATES SUGAR CORPORATION
 Clewiston-Florida
 Sugar House Engineering Design

USS-FI-C1d
 CLEWISTON MILL PLOT PLAN
 EXISTING SOURCES & MAJOR BUILDINGS

DATE	CHANGE	REVISION	BY	DATE	SCALE	DRWG. NO.
					1/4" = 1'-0"	0637840/4/4.4
				MAY 28, 2006	NTS	0637840/4/4.4



Note: Drawing not to scale

Attachment USS-FI-C1e: Facility Plot Plan

United States Sugar Corporation
Bryant, Florida

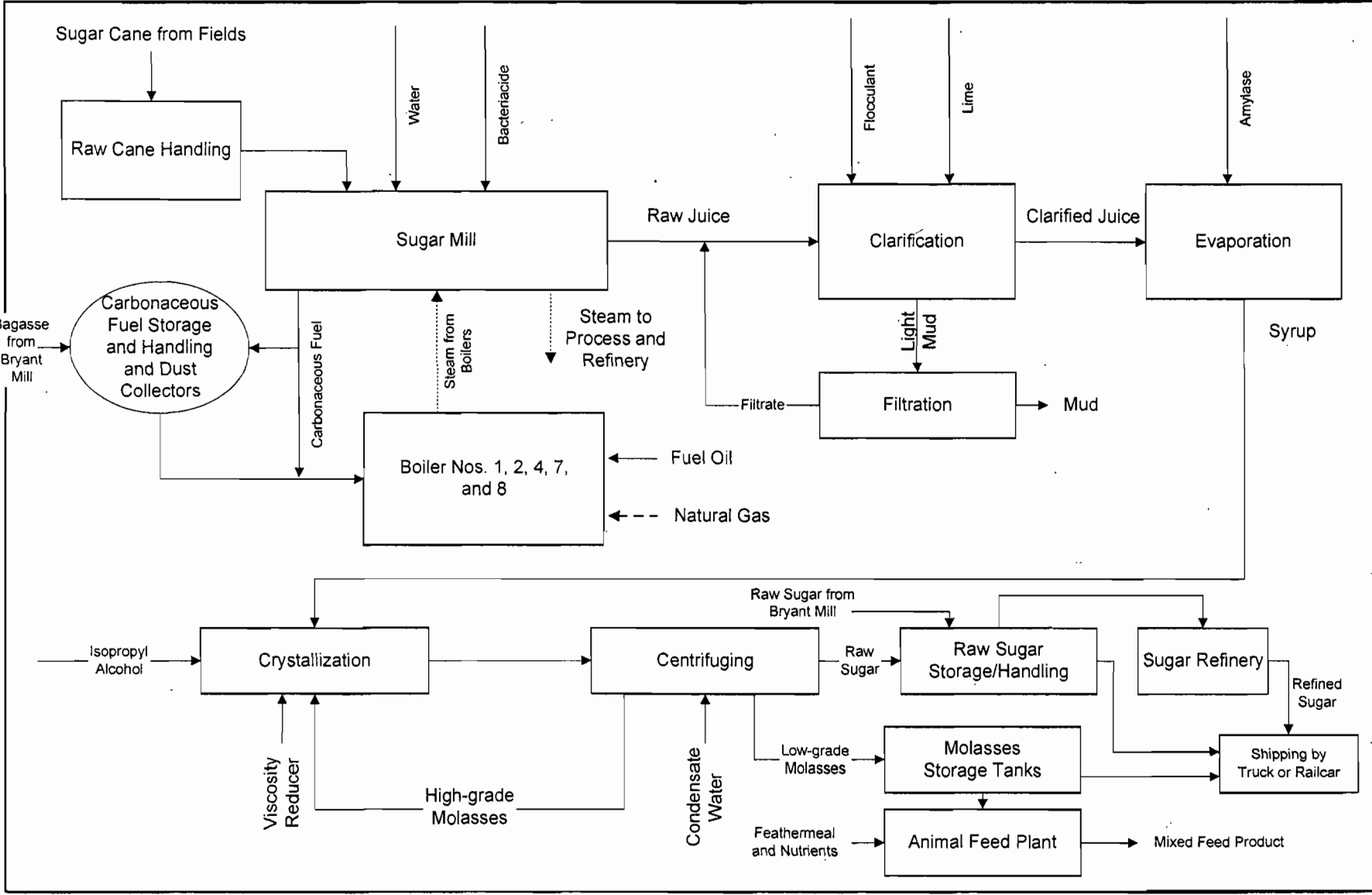
Emission Unit Identification

0537540/4/4.4/USS-FI-C1e.dwg



ATTACHMENT USS-FI-C2

PROCESS FLOW DIAGRAM



Attachment UC-FI-C2a
 Process Flow Diagram
 U.S. Sugar Corporation
 Clewiston Mill, Florida

Process Flow Legend

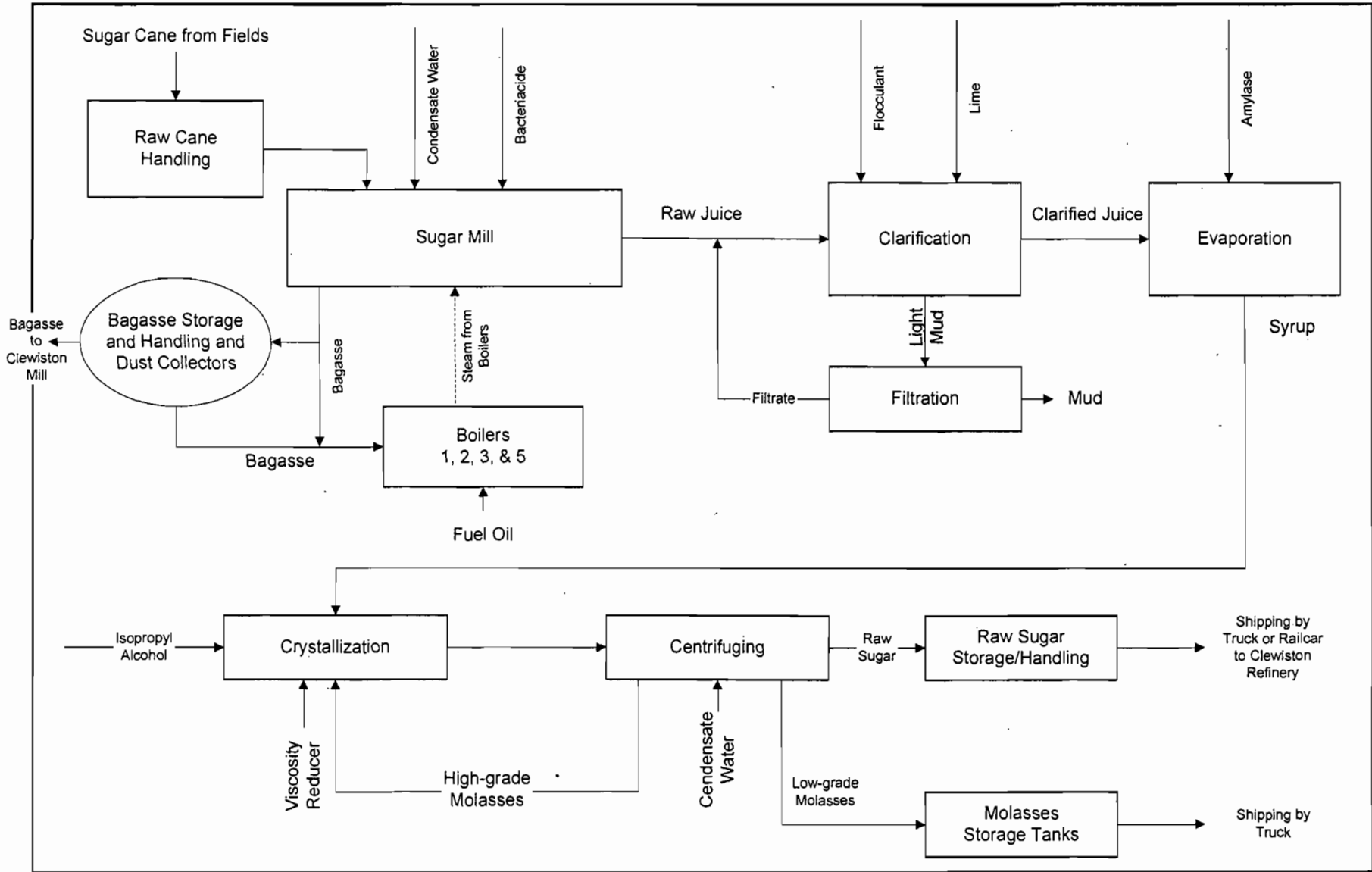
- Solid/Liquid →
- Steam →
- Gaseous →

Clewiston Sugar Mill Facility

Filename: 0537540/4/4.4/USS-FI-C2a.vsd

Date: 05/19/05





Attachment USS-FI-C2b
 Process Flow Diagram
 U.S. Sugar Corporation
 Bryant Mill, Florida

Process Flow Legend

Solid/Liquid ———→
 Steam - - - - -→

Bryant Sugar Mill Facility

0537540/4/4.4/USS-FI-C2B.VSD

Date: 05/19/05



ATTACHMENT USS-FI-C3

**PRECAUTIONS TO PREVENT EMISSIONS OF
UNCONFINED PARTICULATE MATTER**

ATTACHMENT USS-FI-C3**PRECAUTIONS TO PREVENT EMISSIONS OF
UNCONFINED PARTICULATE MATTER**

The Clewiston and Bryant Mills have the potential to emit unconfined particulate matter as a result of the operation of the facility. Examples of fugitive particulate matter emissions include:

- Fugitive particulate matter from carbonaceous fuel storage and handling;
- Fugitive dust from boiler ash removal and handling;
- Fugitive particulate matter from cane handling operations;
- Fugitive particulate matter from painting operations;
- Fugitive dust from paved and unpaved roads; and
- Fugitive particulate matter from the use of bagged chemical products.

The following measures are undertaken at the Clewiston Mill to minimize fugitive particulate matter emissions, in accordance with 62-296.320(4)(c), F.A.C. These measures are described below:

- The use of covered conveyors on the carbonaceous fuel handling systems;
- The use of enclosed material transfer points where feasible;
- Minimization of the distance carbonaceous fuel is dropped during handling;
- The use of windbreaks around the material handling equipment and storage piles;
- The use of enclosures and curtains to reduce fugitive particulate matter emissions from painting operations;
- The use of water to control boiler ash dust during disposal;
- Maintenance of paved areas as needed; and
- The use of reasonable precautions when reclaiming dry bagasse for the boilers.

The following measures are undertaken at the Bryant Mill to minimize fugitive particulate matter emissions, in accordance with 62-296.320(4)(c), F.A.C. These measures are described below:

- If visible emissions from the bagasse handling system exceed 20-percent opacity, the permittee shall take reasonable precautions, as approved by the Department, to minimize unconfined emissions. These precautions shall include covered conveyors, minimizing the distance the bagasse is dropped during handling, and windbreaks around the material handling equipment.

ATTACHMENT USS-FI-CV1

**LIST OF INSIGNIFICANT EMISSIONS UNITS
AND/OR ACTIVITIES**

ATTACHMENT USS-FI-CV1a

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

The emission units and/or activities at the Clewiston Mill facility are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Emission Source	Process Area
1. Auto repair/maintenance (non-painting)	Body shop
2. Material storage area Boiler ash handling / loading / storage Contraband drug disposal Large storage tanks	Boiler house
3. Paint booth with filter*	Carpentry shop
4. Painting operations	Facility-wide
5. Stationary internal combustion engines (general)	Facility-wide
6. Emergency generators	Facility-wide
7. Hot water tank heater and fuel storage tanks ATM, DMX7, mineral mix, mixed feed, urea holding, and urea mixing storage tanks Product loading (hoses)	Molasses plant
8. Ash/lime mixing, balanced polymer tanks, and chemical storage/mixing tanks	Boiler feedwater plant
9. Cane dumping/handling	Cane dumping area
10. Bagacillo and bagasse handling systems	Facility-wide
11. Batch mixers (< 30 cu. ft.)	Facility-wide
12. Carbonaceous fuel handling and storage piles	Facility-wide
13. Cold cleaning operations (non-halogenated solvent)	Facility-wide
14. Containers for oils/wax/grease	Facility-wide
15. Cooling water towers, spray ponds, and canals	Facility-wide
16. Covered conveyors/drop points	Facility-wide
17. Electric ovens for drying	Facility-wide

Emission Source	Process Area
18. Gear boxes, reducers vents	Facility-wide
19. Handling of raw sugar	Facility-wide
20. Kerosene dispenser drip pans	Facility-wide
21. Liquid loading/unloading (non-HAP)	Facility-wide
22. Metallizing operations	Facility-wide
23. Molasses storage tanks	Facility-wide
24. Oil/water separator/skimmer equipment, troughs/storage	Facility-wide
25. Pressurized LPG tanks	Facility-wide
26. Process-wide flanges and valves	Facility-wide
27. Pump vents (lube oil vents)	Facility-wide
28. Scrubber water ponds and troughs	Facility-wide
29. Solvent recovery stills	Facility-wide
30. Use of cutting oils	Facility-wide
31. Used oil tanks/drums (covered)	Facility-wide
32. Vacuum cleaning systems	Facility-wide
33. Vehicle-generated dust	Facility-wide
34. Vents from hydraulic/lube oil reservoirs and pumps	Facility-wide
35. Wastewater treatment/cooling towers	Facility-wide
36. Wood working and metal working operations	Facility-wide
37. Locomotive repair shop	Locomotive repair shop
38. Boiler blowdown pipes/vents Sandblaster/grinder with filter	Power house
39. Railroad maintenance	Railroad maintenance shop
40. Sugar Warehouses	Sugar Warehouses
41. DAF solids storage area	Warehouse No. I
42. Raw and refined sugar handling	Facility-wide

Emission Source	Process Area
43. Diesel, gasoline and fuel oil storage tanks	Facility-wide
44. *Paint booth with filter	Agricultural Equipment Shop
45. Parts washers (non-HAP)	Agricultural Equipment Shop
46. Diesel test benchpower unit (diesel engine)	Agricultural Equipment Shop
47. Multiple 55-gallon contaminated diesel drums	Agricultural Equipment Shop
48. Diesel storage tank (NSPS)	Agricultural Equipment Shop
49. Low sulfur diesel tank	Agricultural Equipment Shop
50. Used oil storage tanks (4)	Agricultural Equipment Shop
51. Kerosene storage tank	Agricultural Equipment Shop
52. Cane burning fuel storage tank	Agricultural Equipment Shop
53. Various equipment shops	Agricultural Equipment Shop
54. "Mart Tornado" electric parts cleaner	Agricultural Equipment Shop
55. Agricultural diesel field engines and associated fuel tanks	Cane Fields
56. Agricultural diesel cane elevator engines and associated fuel tanks	Cane Fields
57. Emergency diesel generator	Water Treatment Plant
58. Emergency diesel fire pump	Water Treatment Plant
59. High-service diesel pump	Water Treatment Plant
60. Diesel fuel storage tanks (3)	Water Treatment Plant
61. Small polymer tanks (2)	Water Treatment Plant
62. Propane-fired water heater	Railcar Wash Facility
63. Acid storage tanks	Facility-wide
64. Ammonia storage tanks	Water Treatment Plant

*Granted a permit exemption by the Florida Department of Environmental Protection on February 22, 1996.

ATTACHMENT USS-FI-CV1b

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

The below listed emissions units and/or activities at the Bryant Mill are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Emission Source	Process Area
1. Auto repair/maintenance	Body shop
2. Boiler ash handling / loading / storage	Boiling house
3. Boiler blowdown pipes/vents	Boiling house
4. Material storage areas	Boiling house
5. Cane dumping/handling	Cane dumping area
6. Hydrochloric (muriatic) acid tanks	Chemical prep building
7. Lime storage tanks	Chemical prep building
8. Ash ponds	Facility-wide
9. Bagacillo and bagasse handling systems	Facility-wide
10. Batch mixers (<30 cu. ft.)	Facility-wide
11. Carbonaceous fuel handling and storage piles	Facility-wide
12. Cold cleaning operations (non-halogenated solvent)	Facility-wide
13. Containers for oils/wax/grease	Facility-wide
14. Cooling water towers, spray ponds, and canals	Facility-wide
15. Covered conveyors/drop points	Facility-wide
16. Diesel, gasoline, fuel oil, kerosene, lube oil, hydraulic oil, motor oil, and used oil storage tanks	Facility-wide
17. Electric ovens for drying	Facility-wide
18. Emergency generators	Facility-wide
19. Gear boxes, reducer vents	Facility-wide
20. Handling of raw sugar	Facility-wide

Emission Source	Process Area
21. Kerosene dispenser drip pans	Facility-wide
22. Liquid loading/unloading (non-HAP)	Facility-wide
23. Molasses storage tanks	Facility-wide
24. Painting operations	Facility-wide
25. Oil/water separator/skimmer equipment, troughs/storage	Facility-wide
26. Pressurized LPG tanks	Facility-wide
27. Process-wide flanges and valves	Facility-wide
28. Pump vents (lube oil vents)	Facility-wide
29. Scrubber water ponds and troughs	Facility-wide
30. Solvent recovery stills	Facility-wide
31. Stationary internal combustion engines (general)	Facility-wide
32. Use of cutting oils	Facility-wide
33. Used oil tanks/drums (covered)	Facility-wide
34. Vacuum cleaning systems	Facility-wide
35. Vehicle-generated dust	Facility-wide
36. Vents from hydraulic/lube oil reservoirs and pumps	Facility-wide
37. Wastewater treatment/cooling towers	Facility-wide
38. Wood working and metal working operations	Facility-wide
39. Locomotive painting area	Locomotive shop
40. Locomotive repair, maintenance	Locomotive shop
41. Oil and water separators	Locomotive shop
42. Metallizing operations	Machine shop
43. Field services shop	Off-site
44. Paint booth	Painting
45. Steam turbine separator vents	Power house

Emission Source	Process Area
46. Gasoline dispensers	Scale house area
47. Sugar warehouses	Sugar warehouses
48. Track maintenance operations	Track maintenance building
49. Wastewater treatment	Wastewater treatment plant

ATTACHMENT USS-FI-CV2

FACILITY REGULATIONS

Title V Core List

Effective: 03/01/02

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

Federal: (description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

~~40 CFR 82: Protection of Stratospheric Ozone.~~

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

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

State: (description)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Title V Core List

Effective: 03/01/02

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Miscellaneous:

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

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

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

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

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

ATTACHMENT USS-FI-CV3

COMPLIANCE REPORT AND PLAN

ATTACHMENT USS-FI-CV3**COMPLIANCE REPORT AND PLAN**

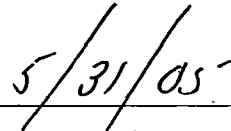
United States Sugar Corporation certifies that the Clewiston Mill and the Bryant Mill, as of the date of this application, are in compliance with each applicable requirement addressed in this Title V air permit application, except for those items addressed in the attached report.

I, the undersigned, am 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, before March 1st of each year.



Signature, Responsible Official



Date

ATTACHMENT USS-FI-CV3a**COMPLIANCE REPORT AND PLAN****United States Sugar Corporation
Clewiston Mill**

This Compliance Report and Plan for United States Sugar Corporation (U.S. Sugar) addresses the Clewiston Mill.

A. VE TESTING FOR BAGASSE HANDLING SYSTEM DUST COLLECTOR**1. Deviations from Applicable Requirements**

A construction permit was issued on November 4, 2004, that authorized modification of the Bagasse Handling System at the Clewiston Mill (Permit No. 0510003-024-AC/PSD-FL-333A). A total of five bagasse dust collectors are authorized to be installed under this permit. To date, U.S. Sugar has installed two of the bagasse dust collectors authorized under the permit. These dust collectors are depicted on Attachment USS-EU12-11 of the Title V application. One is a dust collector controlling fugitive dust emissions from the bagasse conveyor coming from the "B" Tandem, where the bagasse drops onto the C1 conveyor. The second is where bagasse is transferred from the C4 conveyor to the belt conveyor feeding the outside bagasse storage pile.

Section 3, Subsection B, Specific Condition No. 4 of the permit requires that initial visible emissions (VE) compliance testing be conducted within 180 days of completion of construction. The required VE testing was conducted on the transfer point from the C4 conveyor. However, VE testing was not conducted on the "B" Tandem conveyor transfer point. An attempt was made to conduct VE testing on this baghouse, but due to its location, VE testing could not be conducted. A subsequent follow-up visit by the professional engineer of record (David A. Buff, Golder Associates Inc.) confirmed that the baghouse was located inside the partially enclosed Boiler Building, and indeed discharged inside the partial enclosure. A valid VE reading is not feasible at this location.

2. Compliance Plan

U.S. Sugar is requesting, through this Title V renewal application, that the VE testing requirement for this bagasse dust collector be removed from the construction permit.

B. INSTALLATION OF DUST COLLECTORS FOR BAGASSE HANDLING SYSTEM**1. Deviations from Applicable Requirements**

A construction permit was issued on November 4, 2004, that authorized modification of the Bagasse Handling System at the Clewiston Mill (Permit No. 0510003-024-AC/PSD-FL-333A). A total of five bagasse dust collectors are authorized to be installed under this permit. U.S. Sugar has to date installed two of the bagasse dust collectors authorized under the permit. These dust collectors are depicted on Attachment USS-EU12-II of the Title V application. One is a dust collector controlling fugitive dust emissions from the bagasse conveyor coming from the "B" Tandem, where the bagasse drops onto the C1 conveyor. The second is where bagasse is transferred from the C4 conveyor to the belt conveyor feeding the outside bagasse storage pile. The remaining three dust collectors have not yet been installed. With the recent modification of the Bagasse handling System to accommodate the new Boiler No. 8, U.S. Sugar is reviewing the necessity, capacity, and location for the remaining dust collectors.

Section 3, Subsection B, Specific Condition No. 4 of the permit requires that initial visible emissions (VE) compliance testing be conducted within 180 days of completion of construction. The required VE testing was conducted on the transfer point from the C4 conveyor. VE testing on the B Tandem conveyor transfer point is addressed in item 1 of this Compliance Report and Plan.

2. Compliance Plan

With the recent modification of the Bagasse Handling System to accommodate the new Boiler No. 8, U.S. Sugar is reviewing the necessity, capacity, and location for the remaining dust collectors. At such time as these plans become final, U.S. Sugar will proceed with the installation of the dust collectors, or, if necessary, they will submit changes to the previous air construction permit application submitted for the dust collectors. The required VE testing will then be completed.

C. INSTALLATION OF WHITE SUGAR DRYER AND COMPLIANCE TESTING**1. Deviations from Applicable Requirements**

A construction permit was issued on February 11, 2005, that authorized installation of a new white sugar dryer (Dryer No. 2) at the Clewiston Mill (Permit No. 0510003-026-AC/PSD-FL-346). U.S. Sugar will be installing the new dryer prior to the beginning of the coming crop season.

The construction permit requires that initial VE and PM compliance testing be conducted within 60 days after achieving the maximum sugar processing rate, but not later than 180 days after initial

startup of the system. Since the emissions unit has not yet started up, the initial compliance testing has not yet been conducted.

2. Compliance Plan

Within 60 days after achieving the maximum sugar processing rate, but not later than 180 days after initial startup of the system, the new White Sugar Dryer No. 2 will be tested for VE and PM.

ATTACHMENT USS-FI-CV6

**REQUESTED CHANGES TO
CURRENT TITLE V AIR OPERATING PERMIT**

ATTACHMENT USS-FI-CV6a
REQUESTED CHANGES TO
CURRENT TITLE V AIR OPERATION PERMIT

U.S. Sugar Corporation
Clewiston Mill

A. REDUCTION IN NO_x AND VOC TEST FREQUENCY FOR CLEWISTON BOILER NOS. 4 AND 7

United States Sugar Corporation (U.S. Sugar) currently operates the Clewiston sugarcane processing mill and refinery located at W.C. Owens Avenue and S. R. 832, Clewiston, Hendry County, under Title V Operating Permit No. 0510003-017-AV. U.S. Sugar is requesting to reduce the frequency of compliance testing for nitrogen oxides (NO_x) and volatile organic compounds (VOC) emissions for Boiler No. 4 [Emission Unit (EU) ID 009], and for VOC emissions for Boiler No. 7 (EU ID 014).

Boiler Nos. 4 and 7 currently have emission limits for NO_x and VOC, as well as other pollutants. These limits were set based on prevention of significant deterioration (PSD) new source review and application of best available control technology (BACT). Based on the current Title V operating permit, U.S. Sugar is required to test Boiler Nos. 4 and 7 for these pollutants on an annual basis.

This request for reduction in testing frequency is being made based on the historical compliance test data for the boilers, which shows that actual emissions of NO_x and VOC are consistently one-half or less of the allowable emission limit. The testing also shows a low degree of variation in emission levels. Further, there is no control equipment employed to control emissions of NO_x or VOC from the boilers.

Rule 62-297.620(1), Florida Administrative Code (F.A.C.), states:

“The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit, and shall request approval of an alternate procedure or requirement”.

Therefore, a reduced test frequency can be approved by the Department based on past compliance testing conducted by the permittee.

Presented in Tables 1 and 2 are the compliance test results for each boiler conducted during the last six crop seasons (1999-2004), since the BACT limits were imposed. Also shown are the permit limits for each pollutant and the maximum compliance test result as a percentage of the permit limit. As shown, NO_x and VOC emissions have historically tested well below the permit limits.

In addition, NO_x and VOC emissions from the boilers are not dependent on any control devices. There are no add-on control devices for NO_x or VOC emissions.

U.S. Sugar requests that annual compliance testing for NO_x and VOC for Boiler No. 4, and annual compliance testing for VOC for Boiler No. 7, be reduced from annually to once every five years or upon renewal of the Title V permit, based on Rule 62-297.620(1), F.A.C. U.S. Sugar is requesting a modification of Permit No. 0510003-017-AV to revise the annual compliance testing requirements.

B. FACILITY FUEL OIL BURNING LIMITATIONS

The current Title V permit for the Clewiston Mill contains limitations on fuel oil sulfur content and total combined fuel oil burning for Boiler Nos. 1-4 (see Facility-Wide conditions A.3.1 and A.3.2). These limitations were predicated upon burning of up to 2.5 percent sulfur fuel oil in these boilers during the crop season, and burning of 1.6 percent sulfur fuel oil during the off-season. The limitations were required in order to meet ambient air quality standards (AAQS) and prevention of significant deterioration (PSD) increments for sulfur dioxide (SO₂). The limitations were established in PSD Permit No. 0510003-010-AC/PSD-FL-272A, issued in 2001.

Since the time the PSD permit was issued, U.S. Sugar has applied for and received air construction permits to convert the fuel oil burners in Boiler Nos. 1, 2 and 4 to very low sulfur No. 2 fuel oil (maximum of 0.05 percent sulfur in Boiler Nos. 1 and 2, and 0.4 percent sulfur in Boiler No. 4). These conversions result in all boilers at Clewiston (Boiler Nos. 1, 2, 4, 7, and 8) now being permitted to burn 0.05 percent sulfur No. 2 fuel oil, except for Boiler No. 4 is permitted at 0.4 percent sulfur fuel oil.

The sulfur content of the 0.05 percent sulfur fuel oil fuel oil is equivalent to approximately 0.05 lb/MMBtu SO₂ emissions. With maximum SO₂ emissions due to bagasse burning of 0.06 lb/MMBtu, bagasse burning now becomes the worst case fuel for SO₂ emissions for Boiler Nos. 1, 2, 7, and 8.

Recalculated maximum SO₂ emissions due to the Clewiston boilers are shown in Table 3 (3-hour averaging time) and Table 4 (24-hour averaging time), based on the crop season operation. Maximum emission due bagasse firing only, and the combination of maximum fuel oil burning with the remainder due to bagasse burning, are shown in the table.

Also shown are the SO₂ emission rates used in the previous PSD permit modeling analysis. As indicated, the revised crop season SO₂ emissions are much less than the emissions used in the previous modeling analysis, as summarized below:

	Previous Modeling	Current Potential
3-hour average	1,952.9	369.4
24-hour average	1,717.6	349.2

The off-season SO₂ emissions would be similarly reduced. As a result, there is no longer any need to limit the fuel oil burning rate of the Clewiston boilers to below their maximum capacity for fuel oil burning. It is therefore requested that the Title V permit and the previous PSD construction permit be amended to allow maximum fuel oil burning in the boilers, up to the capacity of the fuel oil burners.

C. EXCESS EMISSIONS DURING PERIODS OF STARTUP/SHUTDOWN

U.S. Sugar has provided, in the Title V application, startup and shutdown procedures for each boiler. The procedures state that startup and shutdown of the boilers may take longer than 2 hours, and that excess emissions could occur during such periods. The current Title V operating permits for both Clewiston and Bryant incorporate the startup and shutdown procedures. However, the Title V permit does not explicitly authorize excess emission for longer than 2 hours duration during such conditions (see Facility-Wide Condition A.10.). It is therefore requested that the Title V permit be revised to authorize greater than two hours of excess emissions during periods of startup and shutdown, per Rule 62-210.700(1), F.A.C. The authorized period should reflect the time periods described in the startup/shutdown procedures for each boiler.

D. VE TESTING FOR BAGASSE HANDLING SYSTEM DUST COLLECTOR

A construction permit was issued on November 4, 2004, that authorized modification of the Bagasse Handling System at the Clewiston Mill (Permit No. 0510003-024-AC/PSD-FL-333A). A total of five (5) bagasse dust collectors are authorized to be installed under this permit. U.S. Sugar has to date installed

two of the bagasse dust collectors authorized under the permit. These dust collectors are depicted on Attachment USS-EU12-11 of the Title V application. One is a dust collector controlling fugitive dust emissions from the C1 to the C2 bagasse conveyor transfer point. The second is where bagasse is transferred onto the C7 conveyor, the belt conveyor feeding the outside bagasse storage pile.

Section 3, Subsection B, Specific Condition No. 4 of the permit requires that initial visible emissions (VE) compliance testing be conducted within 180 days of completion of construction. The required VE testing was conducted on the C7 conveyor transfer point. However, VE testing was not conducted on the C1 to C2 conveyor transfer point. An attempt was made to conduct VE testing on this baghouse, but due to its location, VE testing could not be conducted. A subsequent follow-up visit by the professional engineer of record (David A. Buff, Golder Associates Inc.) confirmed that the baghouse was located inside the partially enclosed Boiler Building, and indeed discharged inside the partial enclosure. A valid VE reading is not feasible at this location.

U.S. Sugar is requesting, through this Title V renewal application, that the VE testing requirement for this bagasse dust collector be removed from the construction permit.

E. FUEL OIL NITROGEN CONTENT LIMIT FOR BOILER NO. 7

Condition H.4.2 of the Title V permit limits the sulfur content and nitrogen content of the No. 2 distillate fuel oil burned in Boiler No. 7. The permit states that compliance with the fuel oil sulfur content limit can be determined based on a certification from the fuel oil supplier. However, the permit does not address a compliance determination method for the fuel oil nitrogen content.

Moreover, the fuel oil nitrogen content limitation is not considered necessary. Initial NO_x compliance testing of Boiler No. 7 while firing 100-percent No. 2 fuel oil was conducted on October 1, 2003, under construction permit no. 0510003-018-AC. The test was conducted while burning standard ultra low sulfur (<0.05 percent sulfur) distillate fuel oil. This test demonstrated NO_x emissions at 0.158 lb/MMBtu, compared to the permit limit of 0.20 lb/MMBtu. The actual heat input due to fuel oil firing was 314.2 MMBtu/hr, compared to the permit limit of 326 MMBtu/hr.

It is therefore requested that the fuel oil nitrogen limitation contained in Condition H.4.2 be removed from the permit.

F. RECLASSIFICATION OF NSPS STORAGE TANKS AS UNREGULATED

Subsection N of the current Title V permit addresses three (3) fuel oil storage tanks, EU ID Nos. 024, 025 and 026. These consist of:

- 100,000 gallon (gal) storage tank for Boiler No. 4 containing No. 6 fuel oil, regulated under new source performance standards (NSPS), 40 CFR 60 Subpart Kb;
- 400,000 gal storage tank for Boiler Nos. 1-3 containing No. 6 fuel oil; and
- 200,000 gal storage tank for Boiler No. 7 containing No. 2 fuel oil, also regulated under NSPS, 40 CFR 60 Subpart Kb.

These were regulated emissions units in the Title V permit due to the requirements of Subpart Kb, which required recordkeeping and reporting. However, Subpart Kb was revised in October 2003 to eliminate all requirements, including recordkeeping and reporting, for certain tanks. Subpart Kb was revised to read as follows:

This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa)...

[40 CFR 61.110b(b)]

The above criteria equate to tanks of size greater than 39,890 gal, storing a liquid with a maximum true vapor pressure less than 0.51 psi. Both No. 6 fuel oil and No. 2 fuel oil have maximum true vapor pressures less than 0.51 psi. The maximum true vapor pressure for No. 6 fuel oil is 0.00019 at 100 degrees Fahrenheit (°F), and for No. 2 fuel oil is 0.022 at 100°F.

As a result, the provisions of Subpart Kb are no longer applicable. Therefore, the three fuel oil storage tanks may now be moved to the list of insignificant emission units for the Clewiston Mill. It is also noted that, upon completion of conversion of Boiler Nos. 1 and 2 to ultra low sulfur (0.05 percent sulfur maximum) No. 2 fuel oil, all the boilers at Clewiston will be permitted for only this quality of fuel oil. Therefore, the requirements in Subsection N of the Title V permit regarding higher sulfur content fuel oils may be removed.

G. COMPLETENESS OF PERMIT CONDITIONS

The current Title V permit contains requirements in certain emissions unit sections which relate to other emissions units. For example, the Facility-Wide conditions impose certain conditions upon Boiler Nos. 1, 2, 3, 4, and 7. It is requested that all conditions for each emission unit be specified in that emissions unit section (other than common conditions referring to testing, monitoring, recordkeeping and reporting).

Table 1. NO_x Stack Test Results for Boiler No. 4: 1999 - 2004, U.S. Sugar Clewiston Mill

Boiler	Permit Limits	NO _x Compliance Test Results (lb/MMBtu)						Maximum Test Result as Percent of Permit Limit
		1999	2000	2001	2002	2003	2004	
Boiler No. 4	0.20 lb/MMBtu	0.074	0.106	0.119	0.093	0.135	0.106	68

Table 2. VOC Stack Test Results Boilers Nos. 4 and 7: 1999 - 2004, U.S. Sugar Clewiston Mill

Boiler	Permit Limits	VOC Compliance Test Results (lb/MMBtu)						Maximum Test Result as Percent of Permit Limit
		1999	2000	2001	2002	2003	2004	
Boiler No. 4 ^a	0.5 lb/MMBtu	--	0.31	0.03	0.17	0.44	0.3	88
Boiler No. 7 ^b	0.212 lb/MMBtu	0.013	0.001	0.114	0.007	0.036	0.006	54

^a Reported as Methane.

^b Reported as Carbon.

Table 3. U.S. Sugar Clewiston Mill Maximum Fuel Oil Burning And SO₂ Emissions - Future Crop Season Operation - 3-hr Averaging Time (5/25/2005)
Boilers 1, 2, 7, and 8 @ 0.05% sulfur fuel oil; Boiler No. 4 @ 0.4% sulfur

Boiler	Total	Maximum	Rate For Scenario				SO ₂ Emissions				Modeling Conducted in 2000			
	Maximum	Heat Input	Fuel Oil		Bagasse	Fuel Oil ^b		Bagasse ^c		Crop Season		Off-Season		
	Heat Input	From Fuel Oil	gal/hr ^a	MMBtu/hr	(MMBtu/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(g/s)	Total	Total	(lb/hr)	(g/s)	
	(MMBtu/hr)	(MMBtu/hr)								(lb/hr)	(g/s)	(lb/hr)	(g/s)	
CASE A: MAXIMUM FUEL OIL BURNING														
1	495.6	208	1,541	208	287.6	11.1	17.3	28.3	3.57	631.2	79.54	409.8	51.64	
2	447.0	208	1,541	208	239.0	11.1	14.3	25.4	3.20	628.3	79.17	406.9	51.27	
4	633.0	326	2,415	326	307.0	139.1	18.4	157.5	19.85	376.8	47.48	244.0	30.74	
7	812.0	326	2,415	326	486.0	17.4	82.6	100.0	12.60	178.5	22.49	0.0	0.00	
8	1,030.0	562	4,163	562	468.0	30.0	28.1	58.1	7.31	138.0	17.39	138.0	17.39	
Totals	3,417.6	1,630	12,074	1,630	1,787.6	208.6	160.7	369.4	46.5	1,952.9	246.1	1,198.8	151.0	
CASE B: MAXIMUM BAGASSE BURNING														
1	495.6	208	0	0	495.6	0.0	29.7	29.7	3.75	631.2	79.54	409.8	51.64	
2	447.0	208	0	0	447.0	0.0	26.8	26.8	3.38	628.3	79.17	406.9	51.27	
3	633.0	326	0	0	633.0	0.0	38.0	38.0	4.79	376.8	47.48	244.0	30.74	
4	812.0	326	0	0	812.0	0.0	138.0	138.0	17.39	178.5	22.49	0.0	0.00	
7	1,030.0	562	0	0	1030.0	0.0	61.8	61.8	7.79	138.0	17.39	138.0	17.39	
Totals	3,417.6	1,630	0	0	3,417.6	0.0	294.4	294.4	37.1	1,952.9	246.1	1,198.8	151.0	

^a Based on maximum capacity of fuel oil burners.

^b No. 2 fuel oil @ 0.05 % sulfur and 7.2 lb/gal; except Boiler No. 4 @ 0.4% sulfur.

^c Based on 0.06 lb/MMBtu SO₂ due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu.

Table 4. U.S. Sugar Clewiston Mill Maximum Fuel Oil Burning And SO₂ Emissions - Future Crop Season Operation - 24-hr Averaging Time (5/25/2005)
Boilers 1, 2, 7, and 8 @ 0.05% sulfur fuel oil; Boiler No. 4 @ 0.4% sulfur

Boiler	Total	Maximum	Rates For Scenario						SO ₂ Emissions				Modeling Conducted in 2000			
	Maximum	Heat Input	Fuel Oil			Bagasse			Fuel Oil ^b		Bagasse ^c		Crop Season		Off-Season	
	Heat Input	From Fuel Oil ^a	gal/hr ^a		MMBtu/hr		(lb/hr)		(lb/hr)		Total		Total			
	(MMBtu/hr)	(MMBtu/hr)									(lb/hr)	(g/s)	(lb/hr)	(g/s)		
<u>CASE A: MAXIMUM FUEL OIL BURNING</u>																
1	495.6	208	1,541	208	287.6	11.1	17.3	28.3	3.57	591.1	74.48	327.3	41.23			
2	447.0	208	1,541	208	239.0	11.1	14.3	25.4	3.20	588.2	74.12	295.4	37.22			
4	600.0	326	2,415	326	274.0	139.1	16.4	155.5	19.60	376.8	47.48	0.0	0.00			
7	738.0	326	2,415	326	412.0	17.4	70.0	87.4	11.02	36.0	4.54	0.0	0.00			
8	936.0	562	4,163	562	374.0	30.0	22.4	52.4	6.60	125.5	15.81	125.5	15.81			
Totals	3,216.6	1,630	12,074	1,630	1,586.6	208.6	140.5	349.2	44.0	1,717.6	216.4	748.1	94.3			
<u>CASE B: MAXIMUM BAGASSE BURNING</u>																
1	495.6	208	0	0	495.6	0.0	29.7	29.7	3.75	591.1	74.48	327.3	41.23			
2	447.0	208	0	0	447.0	0.0	26.8	26.8	3.38	588.2	74.12	295.4	37.22			
4	600.0	326	0	0	600.0	0.0	36.0	36.0	4.54	376.8	47.48	0.0	0.00			
7	738.0	326	0	0	738.0	0.0	125.5	125.5	15.81	36.0	4.54	0.0	0.00			
8	936.0	562	0	0	936.0	0.0	56.2	56.2	7.08	125.5	15.81	125.5	15.81			
Totals	3,216.6	1,630	0	0	3,216.6	0.0	274.2	274.2	34.5	1,717.6	216.4	748.1	94.3			

^a Based on maximum capacity of fuel oil burners.

^b No. 2 fuel oil @ 0.05 % sulfur and 7.2 lb/gal; except Boiler No. 4 @ 0.4% sulfur.

^c Based on 0.06 lb/MMBtu SO₂ due to bagasse firing, based on industry test data, except Boiler No. 7 based on permit limit of 0.17 lb/MMBtu.

ATTACHMENT USS-FI-CV6b
REQUESTED CHANGES TO
CURRENT TITLE V AIR OPERATION PERMIT

U.S. Sugar Corporation
Bryant Mill

A. REDUCTION IN NO_x AND VOC TEST FREQUENCY FOR BRYANT BOILER NOS. 1-5 AND DIESEL GENERATORS

U.S. Sugar currently operates a sugarcane processing mill located on Bryant Mill Road, off U.S. Highway 98, Bryant, Palm Beach County, under Title V Operating Permit No. 0990061-006-AV. U.S. Sugar is requesting to reduce the frequency of compliance testing for NO_x and VOC emissions for Boiler Nos. 1, 2, and 3 (EU ID 001, 002, and 003, respectively), and for NO_x testing for Boiler No. 5 (EU ID 004) and Diesel Engine Nos. 1 and 2 (EU ID 005 and 006, respectively).

Boiler Nos. 1, 2, and 3 currently have emission limits for NO_x and VOC. The diesel generators have NO_x limits. The limits for Boiler Nos. 1, 2, and 3, and for Diesel Generators No. 1 and 2 were set based on the requirements of Rule 296.570, F.A.C, Reasonably Available Control Technology (RACT) – Requirements for Major VOC- and NO_x-Emitting Facilities. The NO_x limit for Boiler No. 5 was set based on a limit assumed by U.S. Sugar. Based on the current Title V operating permit, U.S. Sugar is required to test each of these emissions units on an annual basis.

This request for reduction in testing frequency is being made based on the historical compliance test data for the units, which shows that actual emissions of NO_x are consistently less than 70 percent of the allowable emission limit, and VOC emissions are less than 50 percent of the allowable emission limit. The testing also shows a low degree of variation in emission levels. Further, there is no control equipment employed to control emissions of NO_x or VOC from the boilers and diesel engines.

Rule 296.570(4)(a)3, F.A.C., requires that compliance with the RACT emission limits be demonstrated by annual emission testing, “or other methods approved by the Department in accordance with the requirements of Rule 62-297.620, F.A.C.” Further, Rule 62-297.620(1), F.A.C., states:

“The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit, and shall request approval of an alternate procedure or requirement”.

Therefore, a reduced test frequency can be approved by the Department based on past compliance testing conducted by the permittee.

Presented in Table 5 and 6 are the compliance test results for the boilers and diesel engines conducted during the last seven crop seasons (1998-2004), since the RACT limits were imposed. Also shown are the permit limits for each pollutant and the maximum compliance test result as a percentage of the permit limit. As shown, NO_x and VOC emissions have historically tested well below the permit limits.

In addition, NO_x and VOC emissions from the boilers and diesel engines are not dependent on any control devices. There are no add-on control devices for NO_x or VOC emissions.

U.S. Sugar requests that annual compliance testing for NO_x for Boiler Nos. 1, 2, 3 and 5, and Diesel Generators No. 1 and 2, and annual compliance testing for VOC for Boiler Nos. 1, 2, and 3, be reduced from annually to once every five years or upon renewal of the Title V permit, based on Rule 62-297.620(1), F.A.C.

U.S. Sugar is requesting a modification of permit no. 0990061-006-AV to revise the annual compliance testing requirements.

B. EXCESS EMISSIONS DURING PERIODS OF STARTUP/SHUTDOWN

U.S. Sugar has provided, in the Title V application, startup and shutdown procedures for each boiler. The procedures state that startup and shutdown of the boilers may take longer than 2 hours, and that excess emissions could occur during such periods. The current Title V operating permits for the Bryant Mill incorporate the startup and shutdown procedures. However, the Title V permit does not explicitly authorize excess emission for longer than 2 hours duration during such conditions (see Facility-Wide Condition 17). It is therefore requested that the Title V permit be revised to authorize greater than two hours of excess emissions during periods of startup and shutdown, per Rule 62-210.700(1), F.A.C. The authorized period should reflect the time periods described in the startup/shutdown procedures for each boiler.

Table 5. NO_x Stack Test Results Boiler Nos. 1, 2, 3, and 5, and Diesel Generators: 1998 - 2004, U.S. Sugar Bryant Mill

Boiler	Permit Limits	NO _x Compliance Test Results (lb/MMBtu)							Maximum Test Result as Percent of Permit Limit
		1998	1999	2000	2001	2002	2003	2004	
Boiler No. 1	0.45 lb/MMBtu	0.078	0.124	0.293	0.255	0.311	0.173	0.184	69
Boiler No. 2	0.45 lb/MMBtu	0.153	0.154	0.131	0.143	0.125	0.133	0.202	45
Boiler No. 3	0.45 lb/MMBtu	0.145	0.136	0.139	0.143	0.181	0.211	0.155	47
Boiler No. 5	0.28 lb/MMBtu	NA	NA	NA	0.173	0.129	0.094	0.122	62
Diesel Engine 1	4.75 lb/MMBtu	2.88	3.16	2.97	2.74	2.73	2.58	2.61	67
Diesel Engine 2	4.75 lb/MMBtu	3.06	3.2	2.94	2.74	2.69	2.67	2.57	67

Table 6. VOC Stack Test Results Boilers No.1, 2, 3, and 5: 1998 -2004, U.S. Sugar Bryant Mill

Boiler	Permit Limits	VOC Compliance Test Results (lb/MMBtu) ^a							Maximum Test Result
		1998	1999	2000	2001	2002	2003	2004	as Percent of Permit Limit
Boiler No. 1	1.5 lb/MMBtu	0.644	0.150	0.025	0.021	0.012	0.117	0.196	43
Boiler No. 2	1.5 lb/MMBtu	0.213	0.085	0.235	0.317	0.391	0.384	0.704	47
Boiler No. 3	1.5 lb/MMBtu	0.203	0.071	0.102	0.186	0.267	0.240	0.641	43

^a Reported as carbon.

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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.

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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. 1

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code:
A

5. Commence Construction Date:

6. Initial Startup Date:

7. Emissions Unit Major Group SIC Code:
20

8. Acid Rain Unit?
 Yes
 No

9. Package Unit: Manufacturer:

Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:

Vibrating grate boiler fired by carbonaceous fuel and No. 2 fuel oil with a maximum sulfur content of 0.05 percent by weight.

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 125, Type D

2. Control Device or Method Code(s): **001**

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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: 245,000 lb/hr steam	
3.	Maximum Heat Input Rate: 495 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:	
	<p>Maximum heat input based on 1-hour maximum steam rate (above) for carbonaceous fuel of 245,000 lb/hr steam. Maximum heat input for No. 2 fuel oil is 208 MMBtu/hr and 3,500,000 gal/yr.</p> <p>See Attachment USS-EU1-B6 for calculation of maximum heat input rate.</p>	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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-1		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: 213 feet	7. Exit Diameter: 8.0 feet	
8. Exit Temperature: 150 °F	9. Actual Volumetric Flow Rate: 250,000 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:			

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate: Segment 1 of 2**

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: 68.75	5. Maximum Annual Rate: 602,250	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.09 (dry basis)	8. Maximum % Ash: 8.4 (dry basis)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Based on 495 MMBtu/hr and 3,600 Btu/lb wet bagasse. Wet bagasse averages approximately 52-percent moisture. Boiler No. 1 may burn petroleum-contaminated soil up to 2 percent by weight of the bagasse feed rate and maximum 500 cubic yards per season. Boiler may also burn incidental amounts of de-watered filter material from the DAF system, comingled with bagasse.		

Segment Description and Rate: Segment 2 of 2

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: 1.541	5. Maximum Annual Rate: 3,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment: Maximum hourly and annual rates based on 208 MMBtu/hr and 3,500,000 gallons of No. 2 fuel oil per year (Permit No. 0510003-027-AC). Also includes facility-generated, on-spec used oil (Permit No. 0510003-017-AV).		

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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	001		EL
PM ₁₀	001		NS
SO ₂	001		EL
NO _x			NS
CO			NS
VOC			NS
SAM			NS
Acetaldehyde - H001			NS
Acrolein - H006			NS
Benzene - H017			NS
P-Cresol - H052			NS
Formaldehyde - H095			NS
Naphthalene - H132			NS
Phenol - H144			NS
POMs - H151			NS
Styrene - H163			NS
Toluene - H169			NS
Dibenzofurans - H058			NS
Hydrogen Chloride - H106			NS
Total Hazardous Air Pollutants - HAPs			NS

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

Page [1] of [2]
Particulate Matter Total - PM

**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: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 123.8 lb/hour 542.0 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.25 lb/MMBtu Reference: Permit No. 0510003-017-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Bagasse: 495 MMBtu/hr x 0.25 lb/MMBtu = 123.75 lb/hr 123.75 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 542.0 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

Section [1]
Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter Total - PM

**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 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/MMBtu	4. Equivalent Allowable Emissions: 123.8 lb/hour 542.0 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 20.8 lb/hour 23.6 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2., F.A.C., and Permit No. 0510003-027-AC. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 months.	

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):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

Page [2] of [2]
Sulfur Dioxide - SO₂

**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: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 29.7 lb/hour 130.1 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.06 lb/MMBtu and 0.05% of S Oil Reference: Industry Test Data		7. Emissions Method Code: 1	
8. Calculation of Emissions: Bagasse: 495 MMBtu/hr x 0.06 lb/MMBtu = 29.71 lb/hr Fuel Oil: 208 MMBtu/hr x 0.053 lb/MMBtu = 11.1 lb/hr Bagasse Annual: 29.7 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 130.1 TPY Fuel Oil Annual: 3,500,000 gal/yr x 135,000 Btu/gal x MMBtu/1E6 Btu x 0.053 lb/MMBtu x 1 ton/2,000 lb = 12.6 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Fuel oil emission factor of 0.053 lb/MMBtu is based on a density of 7.2 lb/gal, heating value of 135,000 Btu/gal, and sulfur content of 0.05 percent by weight.			

EMISSIONS UNIT INFORMATION

Section [1]
Boiler No. 1

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Sulfur Dioxide - SO₂

**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 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05 percent sulfur oil	4. Equivalent Allowable Emissions: 11.1 lb/hour 12.6 tons/year
5. Method of Compliance: Fuel oil analysis	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-027-AC. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 months.	

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):	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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: VE30	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 30 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit Nos. 0510003-017-AV and 0510003-027-AC, and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 6

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors pressure drop across wet scrubber. Monitored to ensure proper operation of scrubber.	

Continuous Monitoring System: Continuous Monitor 2 of 6

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: ITT Barton or equivalent Model Number: Flowco F500 Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors fuel oil flow to Boiler No. 1. No serial # or installation data provided because monitors are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 3 of 6

1. Parameter Code: Nozzle PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Permit No. 0510003-017-AV. Monitors wet scrubber spray nozzle pressure.	

Continuous Monitoring System: Continuous Monitor 4 of 6

1. Parameter Code: Steam TEMP	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Preferred Instruments or equivalent Model Number: PCC-III Controller Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors steam temperature.	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 5 of 6

1. Parameter Code: Steam PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Permit No. 0510003-017-AV. Monitors steam pressure.	

Continuous Monitoring System: Continuous Monitor 6 of 6

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: ABB-Kent Taylor or equivalent Model Number: 621D Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors steam flow rate.	

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU1-11</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU1-12</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU1-13</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU1-14</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> 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: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> 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 <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU1-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU1-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

Additional Requirements Comment

[Empty rectangular box for additional requirements comment]

ATTACHMENT USS-EU1-B6

OPERATING CAPACITY COMMENT

ATTACHMENT USS-EU1-B6

EMISSION UNIT OPERATING CAPACITY COMMENT

**MAXIMUM HEAT INPUT RATE AND MAXIMUM PRODUCTION RATE
FOR CLEWISTON BOILER NO. 1**

The maximum heat input rates (MMBtu/hr), the maximum steam rates (lb/hr), and the hours of operation of Boiler No. 1 are not limited by an applicable requirement.

The maximum steam rates specified in this permit application for these boilers are derived from the maximum design 24-hour average heat input rates from carbonaceous fuel firing.

The calculations used to derive the maximum 24-hour average steam rates for these boilers, and the assumptions upon which the calculations are based, are provided below. The formula to calculate steam flow rate from a boiler based on steam conditions, boiler efficiency, and heat input is as follows:

$$Q = [HI \times (Eff/100)] \div (H_s - H_f)$$

where,

Q = steam flow rate, lb/hr

HI = heat input, MMBtu/hr

Eff = boiler efficiency: 55% while burning bagasse

H_s = enthalpy of steam at temperature and pressure, Btu/lb

H_f = enthalpy of boiler feed water, Btu/lb

Boiler No. 1

HI = Maximum 24-hour average heat input of 495 MMBtu/hr from bagasse combustion

Steam at 450 psig (465 psia) and 615°F

Boiler feed water at 230°F

H_s = 1,310.5 Btu/lb and H_f = 198.3 Btu/lb

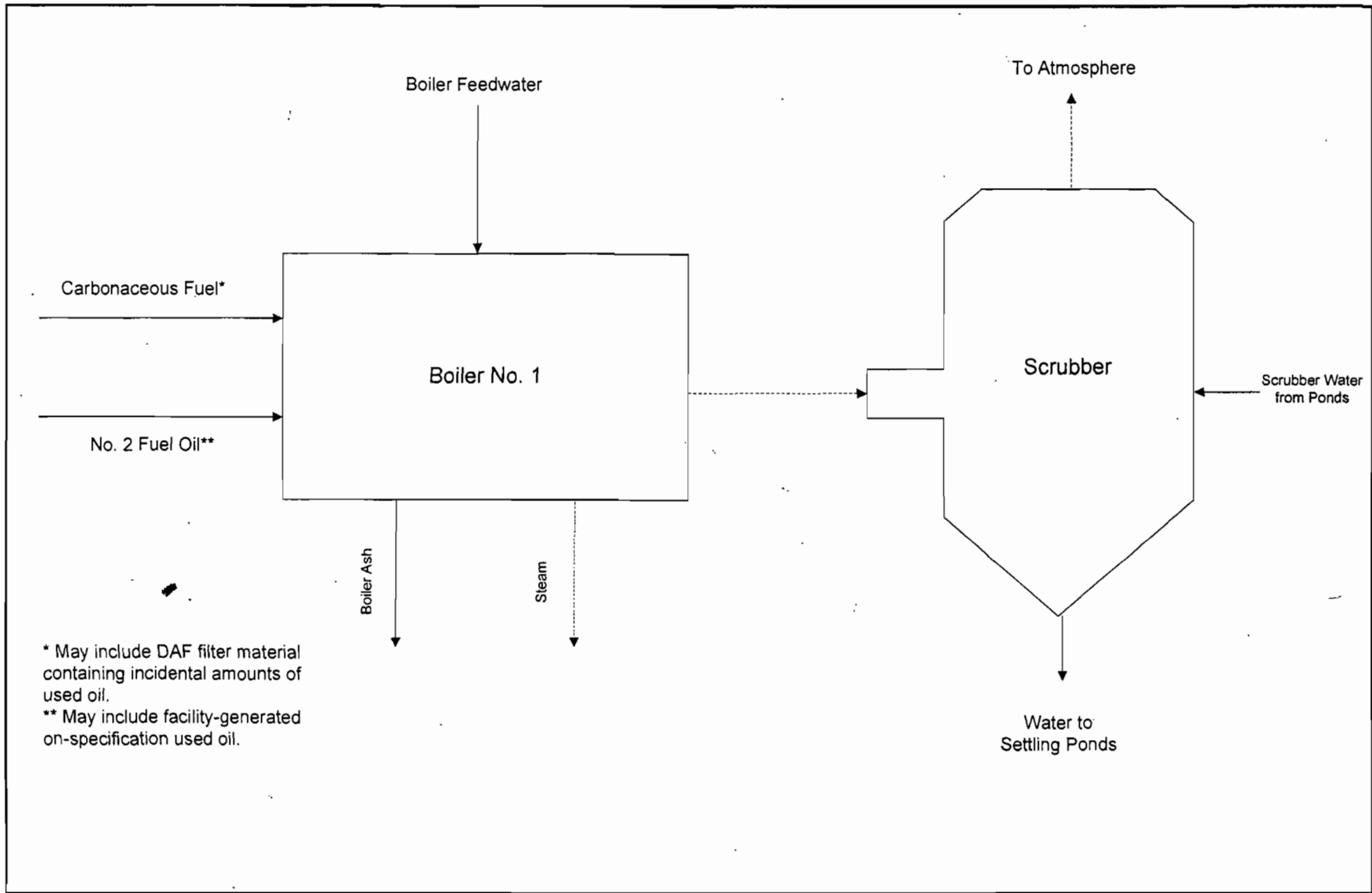
Steam Calculations for Boiler No. 1:

$$Q = [495 \times 10^6 \text{ Btu/hr} \times (55/100)] \div (1,310.5 - 198.3) \text{ Btu/lb}$$

$$Q = 244,785 \text{ lb/hr (rounded to 245,000 lb/hr)}$$

ATTACHMENT USS-EU1-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU1-I1
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 1

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	· · · · ·▶

0537540/4/4.4/USS-EU1-I1.VSD

Date: 05/23/05



ATTACHMENT USS-EU1-I2

FUEL ANALYSIS

ATTACHMENT USS-EU1-I2

**Boiler No. 1
Fuel Analysis**

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	--	7.2 ^c
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000-139,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.1%	87.3% ^d
Hydrogen	5.9%	12.6% ^d
Nitrogen	0.35%	0.22% ^d
Oxygen	40.9%	0.04% ^d
Sulfur	0.08% - 0.24%	0.05%
Ash/Inorganic	0.87% - 8.4%	<0.001% ^c
Moisture	49% - 55%	0.05%

Note:

^a Source: Clewiston Mill fuel analysis averages.

^b Wet basis for bagasse. Represents normal minimum.

^c Source: Marathon Ashland Petroleum LLC; Coastal Fuels.

^d Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984.

Represents average fuel characteristics.

ATTACHMENT USS-EU1-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU1-I3

Control Equipment Parameters for Boiler No. 1 Wet Scrubber at
U.S. Sugar, Clewiston Mill

Boiler No. 1	1 Joy Turbulaire Wet		
Manufacturer and Model No.	Impingement Scrubber Type D, Size 125		
Outlet Gas Temp (°F)	150		
Outlet Gas Flow Rate (ACFM)	250,000		
Pressure Drop Across Device (inches of H ₂ O) - Avg.	9 ^a		
Scrubbant Flow Rate (gal/min) - Normal	300 ^a		
Scrubbant Supply Pressure (psi) - Normal	50 ^a		
Max Permitted Heat Inputs (MMBtu/hr) Carbonaceous Fuel	495.6		
Max Carbonaceous Fuel Consumption (lb carbonaceous fuel/hr)	137,667 ^b		
Uncontrolled Particulate Emission Rate (lb particulates/ton carbonaceous fuel)	15.6 ^c		
Permitted Particulate Emission Rate (lb particulates/MMBtu)	0.25 ^d		
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	1,074	124	88

Note: Scrubber parameters represent typical values.

^a Represent average values from daily records.

^b Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^c AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^d From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate} \times \text{max permitted heat input rate})$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100$$

ATTACHMENT USS-EU1-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU1-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 1. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shut down for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.

5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU1-IV1

IDENTIFICATION OF APPLICABLE REGULATIONS

ATTACHMENT USS-EU1-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS**

62-296.410(1)(b), F.A.C.: Carbonaceous Fuel Burning Equipment

62-296.410(3), F.A.C.: Carbonaceous Fuel Burning Equipment

62-297.310(1), F.A.C.: General Compliance Test Requirements

62-297.310(2)(b), F.A.C.: General Compliance Test Requirements

62-297.310(3), F.A.C.: General Compliance Test Requirements

62-297.310(4), F.A.C.: General Compliance Test Requirements

62-297.310(5), F.A.C.: General Compliance Test Requirements

62-297.310(6), F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)3., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)4., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)5., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)9., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)10., F.A.C.: General Compliance Test Requirements

62-297.310(8), F.A.C.: General Compliance Test Requirements

62-297.401(1), F.A.C.: EPA Test Method 1

62-297.401(2), F.A.C.: EPA Test Method 2

62-297.401(3), F.A.C.: EPA Test Method 3

62-297.401(4), F.A.C.: EPA Test Method 4

62-297.401(5), F.A.C.: EPA Test Method 5

62-297.401(6), F.A.C.: EPA Test Method 6

62-297.401(6)(c), F.A.C.: EPA Test Method 6C

62-297.401(7), F.A.C.: EPA Test Method 7

62-297.401(7)(e), F.A.C.: EPA Test Method 7E

62-297.401(8), F.A.C.: EPA Test Method 8

62-297.401(9), F.A.C.: EPA Test Method 9

62-297.401(10), F.A.C.: EPA Test Method 10

62-297.401(18), F.A.C.: EPA Test Method 18

62-297.401(25)(a), F.A.C.: EPA Test Method 25A

40 CFR 63.1 – 63.16 – Subpart A – General Provisions: Boiler No. 1 is subject to the notification requirements of Subpart DDDDD.

40 CFR 63.7485 – Subpart DDDDD – Applicability: Boiler No. 1 is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.

40 CFR 63.7490 – Subpart DDDDD – Applicability: Boiler No. 1 is subject to the requirements of Subpart DDDDD for existing boilers.

40 CFR 63.7495 – Subpart DDDDD – Compliance Dates – Boiler No. 1 must meet notification requirements and comply by September 13, 2007.

40 CFR 63.7499 – Subpart DDDDD – Subcategories: Boiler No. 1 is in the large solid fuel subcategory.

40 CFR 63.7506 – Subpart DDDDD – Limited Requirements: Boiler No. 1 must only meet the notification requirements of 63.9(b) at this time.

40 CFR 63.7545 – Subpart DDDDD – Notifications: Boiler No. 1 must submit the required notification by March 12, 2005.

NOTICE OF FINAL PERMIT

FEB 28 2005

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sug r Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-027-AC
Boilers 1 and 2
Modified Oil Firing Systems
Hendry County, Florida

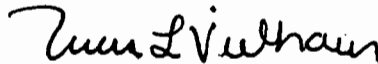
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Final Air Permit No. 0510003-027-AC is enclosed authorizing modification of the oil firing systems for existing Boilers 1 and 2 at the Clewiston Sugar Mill and Refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

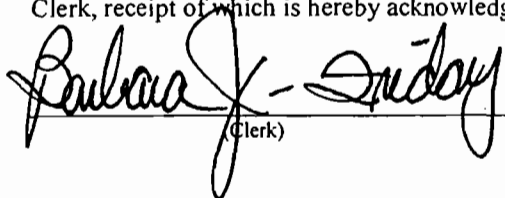
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/24/05 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. David Buff, Golder Associates Inc.

Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

2/24/05
(Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation - Air Permitting South Program
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400

PROJECT

Project No. 0510003-027-AC
U. S. Sugar Corporation – Clewiston Sugar Mill
Boilers 1 and 2, Modified Oil Firing Systems

The United States Sugar Corporation proposes to modify the oil firing systems of existing Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLIC ATION

The Department distributed an "Intent to Issue Permit" package on December 30, 2004. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on January 20, 2005. The Department received the proof of publication on January 28, 2005. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, the EPA Region 4 Office, the National Park Service, or the applicant.

CONCLUSION

The final action of the Department is to issue the permit with only minor changes to typographical errors.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-027-AC
Facility ID No. 0510003
Boilers 1/2, Oil Burner Modifications
Permit Expires: January 30, 2006

PROJECT AND LOCATION

This permit authorizes replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, 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.). The permittee is authorized to perform the work 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. This permit supplements all previously issued air construction and operation permits for the affected emissions units.

PERMIT CONTENT

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

Michael G. Cooke, Director
Division of Air Resource Management

(Effective Date)

FACILITY DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. A sixth unit, Boiler 8, is under construction. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with electrostatic precipitators for Boilers 7 and 8. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. This project only affects the oil firing capabilities of Boilers 1 and 2 (Emissions Units 001 and 002).

FACILITY REGULATORY CLASSIFICATIONS

Title III: The existing facility is a major source of hazardous air pollutants (HAP).

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

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

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

RELEVANT DOCUMENTS

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

APPENDICES

The following Appendices are included as part of the permit in Section 4.

- Appendix CF. Citation Format
- Appendix GC. General Conditions
- Appendix SC. Standard Conditions

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated 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 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. 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.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
001	Boiler 1 is a traveling grate boiler with a maximum 1-hour steam production rate of 255,000 pounds per hour at 750° F and 600 psig. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 213 feet tall stack at 150° F with an approximate flow rate of 204,000 acfm.
002	Boiler 2 is a traveling grate boiler with a maximum 1-hour steam production rate of 230,000 pounds per hour at 750° F and 600 psig. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 213 feet tall stack at 150° F with an approximate flow rate of 201,000 acfm.

EQUIPMENT

1. **Oil Firing Modifications:** For each boiler, the permittee is authorized to replace the existing oil burners with new Peabody multi-stage combustion (MSC) burners (or equivalent) to fire distillate oil. In general, each burner consists of a steam-atomized center-fired oil gun, a flame scanner, an ignitor with flame proving rod, and an individual burner windbox with an electrically-operated modulating damper. The project also includes new combustion air fans with associated ductwork, new fuel oil pump sets, and new burner management systems. The burners shall be low NO_x burners designed for a maximum NO_x emission rate of 0.15 lb/MMBtu. Each boiler will have two oil burners with a maximum heat input rate to each burner of 104 MMBtu/hour. Based on a higher heating value of 18,750 Btu/lb, the maximum distillate oil firing rate will be approximately 770.5 gallons per hour per burner. The modified boilers are estimated to produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. Bagasse will remain the primary fuel and distillate oil will be fired as a startup and supplemental fuel. This permit only addresses the oil firing aspects of these boilers. [Application; Design]

PERFORMANCE RESTRICTIONS

2. **Oil Specification:** Any oil fired in Boilers 1 and 2 shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. [Application; Design; Rule 62-212.400(2)(g), F.A.C.]
3. **Permitted Capacity on Oil:** For each boiler, the maximum heat input rate from distillate oil is 208 MMBtu per hour. {Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 156,000 lb/hour.} [Design; Rules 62-120.200(PTE) and 62-212.400(2)(g), F.A.C.]
4. **Restrictions on Oil:** For each boiler, distillate oil firing shall not exceed 1541 gallons per hour and 3,500,000 gallons during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. {Permitting Note: The above hourly oil firing restriction supersedes the restriction of "1500" gallons per hour specified in Condition 4, Subsection IIIB, in Permit No. PSD-FL-272A.} [Application; Design; Rule 62-212.400(2)(g), F.A.C.]

EMISSIONS STANDARDS

5. **Visible Emissions on Oil:** Visible emissions shall not exceed 30% opacity based on a 6-minute average except for two minutes per hour during which the opacity shall not exceed 40% as determined by DEP Method 9. [Rule 62-296.410, F.A.C.]
6. **Particulate Matter Emissions on Oil:** Emissions of particulate matter shall not exceed 0.1 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. This standard is used to prorate the corresponding final standard if a compliance test is conducted while firing a combination of bagasse and oil. A separate emissions performance test on oil only is not required. [Rule 62-296.410, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

EMISSIONS PERFORMANCE TESTING

7. Performance Tests: For each boiler, the permittee shall conduct an initial performance test to validate the actual installed capacity of the burner system (208 MMBtu per hour, maximum) and the design low-NOx burner specification (0.15 lb/MMBtu hour, maximum). The test shall be conducted for at least 60 consecutive minutes when firing only distillate oil. During the test, the following parameters shall be recorded: firing rate (gallons), density (lb/gallon) and heating value of the distillate oil (Btu/lb); and production rate (lb/hour), temperature (° F), and pressure (psig) of the steam. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis of the distillate oil. The tests shall be conducted within 120 days of first firing oil with the modified system. Results of the test shall be submitted to the Department within 45 days of the test date. If the results of the performance test show potential NOx emissions greater than 40 tons per year, the permittee shall submit a PSD permit application or an application to modify this permit to avoid PSD preconstruction review. Applications shall be filed within 90 days of submitting the test report as necessary. [Rule 62-4.070(3), F.A.C.]
8. Emissions Compliance Tests: This permit does not impose any new emissions compliance test requirements. The permittee shall continue to perform emissions compliance testing in accordance with the requirements of the current Title V air operation permit. [Rules 62-4.070(3) and 62-297.310, F.A.C.]
9. 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. [Rule 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

10. Oil Firing Records: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heating value in Btu/lb, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable. At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling. At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month. [Rule 62-4.070(3), F.A.C.]

OTHER APPLICABLE REQUIREMENTS

11. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for changes specified in the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]
12. DAF Filter Material: The permittee may co-fire incidental amounts of de-watered filter material from the Dissolved Aeration Flotation (DAF) system with other authorized fuels. To the extent practicable, the de-watered DAF filter material shall be commingled with bagasse in the existing conveyor system and distributed among the operational boilers. [Rule 62-4.070, F.A.C.] *{Permitting Note: The firing of this material was reviewed in Project No. 0510003-024-AC and Permit No. PSD-FL-333A includes the above requirement. See Appendix I of Permit No. PSD-FL-333A for other requirements.}*

Filename: 0510003-027-AC - Draft Permit

SECTION 4. APPENDICES

CONTENTS

Appendix CF. Citation Format
Appendix GC. General Conditions
Appendix SC. Standard Conditions

SECTION 4. APPENDIX CF
CITATION FORMAT

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC

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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

Statutes. 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 Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (not applicable to project);
 - b. Determination of Prevention of Significant Deterioration (not applicable to project); and
 - c. Compliance with New Source Performance Standards (not applicable to project).
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 SC
STANDARD CONDITIONS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities.}

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(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 or organic solvents 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. [Rule 62-296.320(2), 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 percent opacity. [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 five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 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(2), F.A.C.]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

NOTICE OF FINAL PERMIT

JUN - 5 2003

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

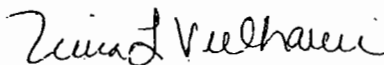
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-022-AC, which authorizes a 3-year boiler maintenance project at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes to correct typographical errors were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

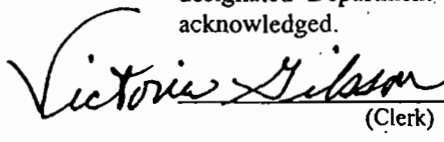
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/3/2003 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 June 3, 2003
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 2, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, or the applicant. Informal comments were received from the EPA Region 4 office. The main concern regarded the issue of determining PSD applicability for the project. Region 4 notes that federal PSD rule revisions issued by EPA on December 31, 2002 allow a comparison of past-actual-to-projected-actual emissions to determine PSD applicability. However, Florida has not yet adopted these revisions. Therefore, Region 4 believes that the appropriate PSD evaluation is to compare past actual emissions with future allowable/potential emissions where future potential emissions can be based on enforceable emissions controls and/or emissions limits.

As stated in the technical evaluation, the Department does not believe that the proposed physical changes will result in any increases in the actual emissions. The types of maintenance activities proposed are routinely performed by the sugar industry during each off season. U.S. Sugar maintains that the activities are routine for this mill and the industry in general. Based on the available information, the Department presumes that the proposed activities for each boiler are routine and not a modification by definition. However, due to the difficulties in making these evaluations as mentioned by Region 4, the Department will issue the minor source permit that requires U.S. Sugar to track and report the progress of maintenance activities each year to further assess the nature of the project.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery Air Permit No. 0510003-022-AC Facility ID No. 0510003 SIC Nos. 2061, 2062 Permit Expires: October 1, 2005

PROJECT AND LOCATION

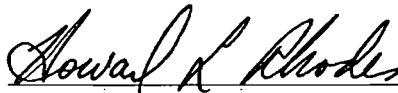
This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

STATEMENT OF BASIS

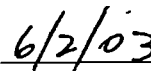
This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the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

CONTENTS

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



Howard L. Rhodes, Director
Division of Air Resources Management



(Date)

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through to bagasse fired in the boilers and creates a very abrasive flue gas, which has led to premature tube and component wear. The permit authorizes maintenance, repairs, and replacements to maintain each unit at normal operational levels and reliability. This permit only affects the boilers. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

This section of the permit addresses the following emissions units.

ID	Emission Unit Description
001	Boiler 1 – 255,000 lb/hour steam with a heat input rate of 495.6 MMBtu/hour (24-hour averages)
002	Boiler 2 – 230,000 lb/hour steam with a heat input rate of 447 MMBtu/hour (24-hour averages)
003	Boiler 3 – 130,000 lb/hour steam with a heat input rate of 265 MMBtu/hour (24-hour averages)
009	Boiler 4 – 285,000 lb/hour steam with a heat input rate of 600 MMBtu/hour (24-hour averages)
014	Boiler 7 – 350,000 lb/hour steam with a heat input rate of 738 MMBtu/hour (24-hour averages)

COMPONENT REPAIRS AND REPLACEMENT

- Schedule:** This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]
- Maintenance Activities:** The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:
 - Boiler 1:** tube replacements in the main generating bank, superheater, and air heater.
 - Boiler 2:** tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
 - Boiler 3:** tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
 - Boiler 4:** tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
 - Boiler 7:** stoker repairs; tube replacements in economizer

Replacements shall be made with “functionally equivalent” components that serve the same purpose as the replaced component. The off season maintenance activities are intended to maintain the boilers at current operational levels and reliability for the upcoming cane milling seasons. After further inspection, some activities may not be required to the extent requested and other similar routine repair, replacement, and maintenance activities may be necessary. Routine repairs and replacements that are not mentioned above shall be included in the required summary reports. [Applicant Request; Rule 62-4.070(3), F.A.C.]

EMISSIONS AND PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any emissions standards, operational restrictions, authorized fuels or any other conditions specified in other applicable air construction and operation permits.}

- Permitted Capacities:** The maintenance activities authorized in this permit shall not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project shall not increase the emission rates of any boiler or the cane milling capacity of the plant. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]
5. Capacity Report and Emissions Summary: Within 60 days of completing the last required stack test for all of the boilers during that season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information for each boiler: the test dates; the pollutant tested; the tested emissions rate; the allowable emissions rate; the permitted 24-hour average steam production rate; the steam production rate during the test; and the percent of permitted capacity during the test based on the permitted 24-hour steam production rate. *{Permitting Note: This condition refers to the testing that is already required by the Title V air operation permit.}* [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES
CONTENTS

Appendix CF. Citation Format
Appendix GC. General Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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

"001" identifies the specific permit project

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

Statutes. 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 Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (NA).
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.

ATTACHMENT USS-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU1-IV3**ALTERNATIVE METHODS OF OPERATION**

Boiler No. 1 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 495 MMBtu/hr (maximum 24-hour average); or, No. 2 fuel oil alone at a maximum fuel oil heat input rate of 208 MMBtu/hr (maximum 24-hour average); or, a combination of carbonaceous fuel and No. 2 fuel oil. The boiler may also burn small quantities of petroleum-contaminated soils (up to 500 cubic yards per season); facility-generated, on-specification used oil; and Dissolved Aeration Flotation (DAF) system filter material. The maximum sulfur content in the fuel oil is limited to 0.05 percent by weight. This unit has no limits on hours of operation and may operate for 8,760 hours per year.

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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.

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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. 2

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:
Vibrating grate boiler fired by carbonaceous fuel and No. 2 fuel oil with a maximum sulfur content of 0.05 percent by weight.

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 125, Type D

2. Control Device or Method Code(s): **001**

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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: 215,000 lb/hr steam					
3. Maximum Heat Input Rate: 447 million Btu/hr					
4. Maximum Incineration Rate:	pounds/hr tons/day				
5. Requested Maximum Operating Schedule:	<table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="padding: 0 20px;">24 hours/day</td> <td style="padding: 0 20px;">7 days/week</td> </tr> <tr> <td style="padding: 0 20px;">52 weeks/year</td> <td style="padding: 0 20px;">8,760 hours/year</td> </tr> </table>	24 hours/day	7 days/week	52 weeks/year	8,760 hours/year
24 hours/day	7 days/week				
52 weeks/year	8,760 hours/year				
6. Operating Capacity/Schedule Comment:	<p>Maximum heat input based on 1-hour maximum steam rate (above) for carbonaceous fuel of 215,000 lb/hr steam. Maximum heat input for No. 2 fuel oil is 208 MMBtu/hr and 3,500,000 gal/yr.</p> <p>See Attachment USS-EU2-B6 for calculation of maximum heat input rate.</p>				

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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-2		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: 213 feet		7. Exit Diameter: 8.0 feet
8. Exit Temperature: 150 °F	9. Actual Volumetric Flow Rate: 250,000 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:			

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

D. SEGMENT (PROCESS/FUEL) INFORMATION**Segment Description and Rate: Segment 1 of 2**

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: 62.08	5. Maximum Annual Rate: 543,850	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.09 (dry basis)	8. Maximum % Ash: 8.4 (dry basis)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Based on 447 MMBtu/hr and 3,600 Btu/lb wet bagasse. Wet bagasse averages approximately 52-percent moisture. Boiler No. 2 may burn petroleum-contaminated soil up to 2 percent by weight of the bagasse feed rate and maximum 500 cubic yards per season. Boiler may also burn incidental amounts of de-watered filter material from the DAF system, comingled with bagasse.		

Segment Description and Rate: Segment 2 of 2

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: 1.541	5. Maximum Annual Rate: 3,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment: Maximum hourly and annual rates based on 208 MMBtu/hr and 3,500,000 gallons of No. 2 fuel oil per year (Permit No. 0510003-027-AC). Also includes facility-generated, on-spec used oil (Permit No. 0510003-017-AV).		

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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	001		EL
PM ₁₀	001		NS
SO ₂	001		EL
NO _x			NS
CO			NS
VOC			NS
SAM			NS
Acetaldehyde - H001			NS
Acrolein - H006			NS
Benzene - H017			NS
P-Cresol - H052			NS
Formaldehyde - H095			NS
Naphthalene - H132			NS
Phenol - H144			NS
POMs - H151			NS
Styrene - H163			NS
Toluene - H169			NS
Dibenzofurans - H058			NS
Hydrogen Chloride - H106			NS
Total Hazardous Air Pollutants - HAPs			NS

EMISSIONS UNIT INFORMATION

Section [2]
Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter Total - PM

**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: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 111.8 lb/hour 490 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.25 lb/MMBtu Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse: 447 MMBtu/hr x 0.25 lb/MMBtu = 111.8 lb/hr 111.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 490 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.	

EMISSIONS UNIT INFORMATION

Section [2]
Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [1] of [2]
Particulate Matter Total - PM

**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 1 of 2

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: 111.8 lb/hour 490 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Emissions representative of bagasse 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: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 20.8 lb/hour 23.6 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.410(1)(b)2., F.A.C., and Permit No. 0510003-027-AC. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 months.	

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):	

EMISSIONS UNIT INFORMATION

Section [2]
Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Sulfur Dioxide - SO₂

**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: SO₂	2. Total Percent Efficiency of Control:
3. Potential Emissions: 26.8 lb/hour 117.4 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.06 lb/MMBtu and 0.05% of S Oil Reference: Industry Test Data	7. Emissions Method Code: 1
8. Calculation of Emissions: Bagasse: 447 MMBtu/hr x 0.06 lb/MMBtu = 26.8 lb/hr Fuel Oil: 208 MMBtu/hr x 0.053 lb/MMBtu = 11.1 lb/hr Bagasse Annual: 26.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 117.4 TPY Fuel Oil Annual: 3,500,000 gal/yr x 135,000 Btu/gal x MMBtu/1E6 Btu x 0.053 lb/MMBtu x 1 ton/2,000 lb = 12.6 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Fuel oil emission factor of 0.053 lb/MMBtu is based on a density of 7.2 lb/gal, heating value of 135,000 Btu/gal, and sulfur content of 0.05 percent by weight.	

EMISSIONS UNIT INFORMATION

Section [2]
Boiler No. 2

POLLUTANT DETAIL INFORMATION

Page [2] of [2]
Sulfur Dioxide - SO₂

**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 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05 percent sulfur oil	4. Equivalent Allowable Emissions: 11.1 lb/hour 12.6 tons/year
5. Method of Compliance: Fuel oil analysis	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-027-AC. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 months.	

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):	

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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: VE30	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 30 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Permit Nos. 0510003-017-AV and 0510003-027-AC, and Rule 62-296.410(1)(b)1., F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 6

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors pressure drop across wet scrubber. Monitored to ensure proper operation of scrubber.	

Continuous Monitoring System: Continuous Monitor 2 of 6

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: ITT Barton or equivalent Model Number: Flowco F500 Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors fuel oil flow to Boiler No. 1. No serial # or installation data provided because monitors are routinely replaced to ensure optimum performance.	

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 3 of 6

1. Parameter Code: Nozzle PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Permit No. 0510003-017-AV. Monitors wet scrubber spray nozzle pressure.	

Continuous Monitoring System: Continuous Monitor 4 of 6

1. Parameter Code: Steam TEMP	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Preferred Instruments or equivalent Model Number: PCC-III Controller Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors steam temperature.	

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 5 of 6

1. Parameter Code: Steam PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Permit No. 0510003-017-AV. Monitors steam pressure.	

Continuous Monitoring System: Continuous Monitor 6 of 6

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: ABB-Kent Taylor or equivalent Model Number: 621D Serial Number: See comment	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Permit No. 0510003-017-AV. Monitors steam flow rate.	

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU2-I1</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU2-I2</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU2-I3</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU2-I4</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> 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: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> 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 <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: USS-EU2-IV1 <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: CAM Plan <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: USS-EU2-IV3 <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

Additional Requirements Comment

ATTACHMENT USS-EU2-B6

OPERATING CAPACITY COMMENT

ATTACHMENT USS-EU2-B6

EMISSION UNIT OPERATING CAPACITY COMMENT

**MAXIMUM HEAT INPUT RATE AND MAXIMUM PRODUCTION RATE
FOR CLEWISTON BOILER NO. 2**

The maximum heat input rates (MMBtu/hr), the maximum steam rates (lb/hr), and the hours of operation of Boiler No. 2 are not limited by an applicable requirement.

The maximum steam rates specified in this permit application for these boilers are derived from the maximum design 24-hour average heat input rates from carbonaceous fuel firing.

The calculations used to derive the maximum 24-hour average steam rates for these boilers, and the assumptions upon which the calculations are based, are provided below. The formula to calculate steam flow rate from a boiler based on steam conditions, boiler efficiency, and heat input is as follows:

$$Q = [HI \times (Eff/100)] \div (H_s - H_f)$$

where,

Q = steam flow rate, lb/hr

HI = heat input, MMBtu/hr

Eff = boiler efficiency: 55% while burning bagasse

H_s = enthalpy of steam at temperature and pressure, Btu/lb

H_f = enthalpy of boiler feed water, Btu/lb

Boiler No. 2

Steam at 495 psig (510 psia) and 685°F

Boiler feed water at 230°F

H_s = 1,347.9 Btu/lb and H_f = 198.3 Btu/lb

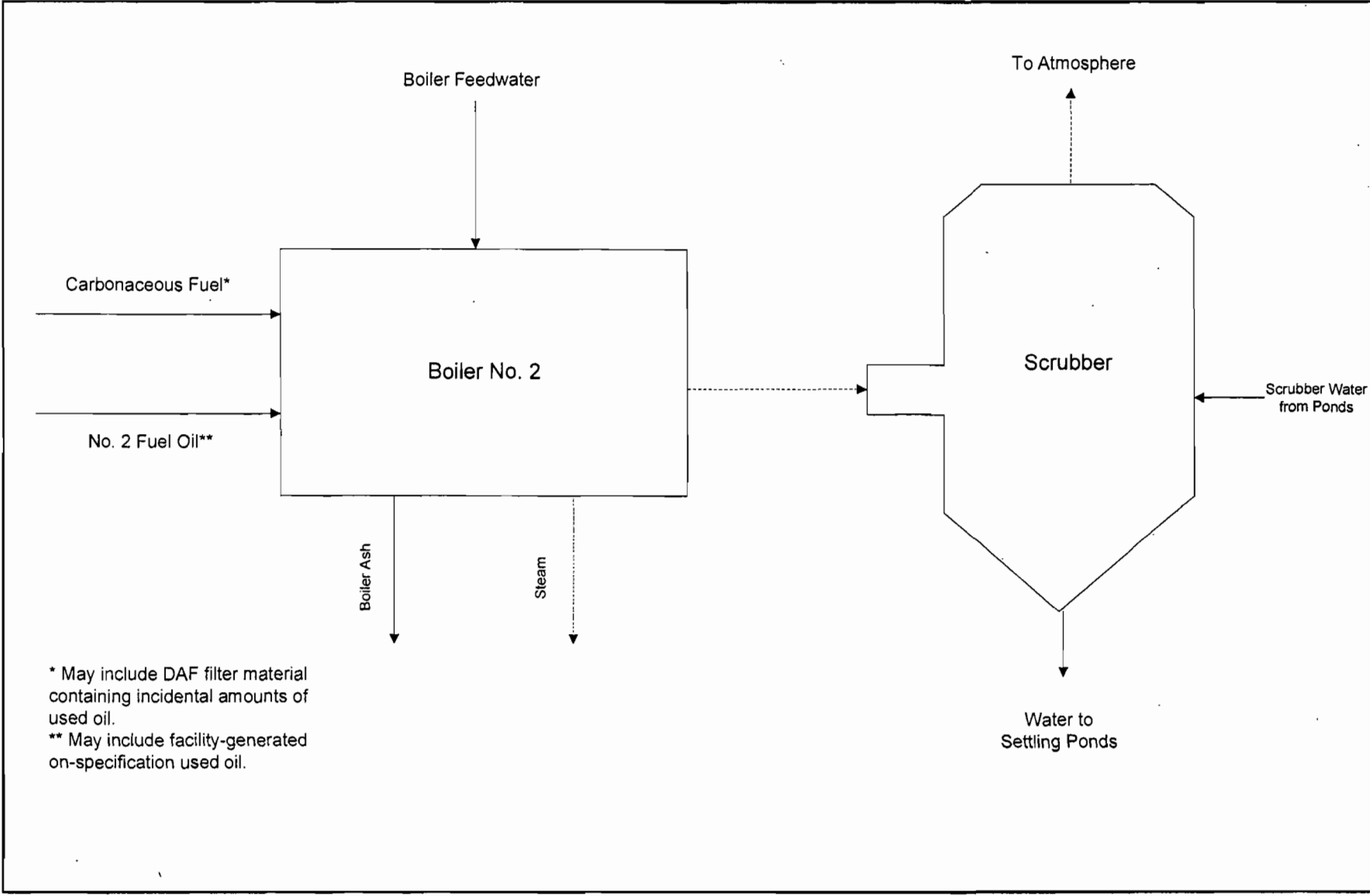
Steam Calculations for Boiler No. 2:

$$Q = [447 \times 10^6 \text{ Btu/hr} \times (55/100)] \div (1,347.9 - 198.3) \text{ Btu/lb}$$

$$Q = 213,857 \text{ lb/hr (rounded to 215,000 lb/hr)}$$

ATTACHMENT USS-EU2-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU2-11.
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 2

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	- · - · -▶

0537540/4/4.4/USS-EU2-11.VSD
 Date: 05/23/05



ATTACHMENT USS-EU2-I2

FUEL ANALYSIS

ATTACHMENT USS-EU2-I2

Boiler No. 2
Fuel Analysis

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	--	7.2 ^c
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000-139,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.1%	87.3% ^d
Hydrogen	5.9%	12.6% ^d
Nitrogen	0.35%	0.22% ^d
Oxygen	40.9%	0.04% ^d
Sulfur	0.08% - 0.24%	0.05%
Ash/Inorganic	0.87% - 8.4%	<0.001% ^c
Moisture	49% - 55%	0.05%

Note:

^a Source: Clewiston Mill fuel analysis averages.

^b Wet basis for bagasse. Represents normal minimum.

^c Source: Marathon Ashland Petroleum LLC; Coastal Fuels.

^d Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984.

Represents average fuel characteristics.

ATTACHMENT USS-EU2-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU2-I3

Control Equipment Parameters for Boiler No. 2 Wet Scrubber at
U.S. Sugar, Clewiston Mill

Boiler No. 1			
Manufacturer and Model No.	1 Joy Turbulaire Wet Impingement Scrubber Type D, Size 125		
Outlet Gas Temp (°F)	<u>150</u>		
Outlet Gas Flow Rate (ACFM)	<u>250,000</u>		
Pressure Drop Across Device (inches of H ₂ O) - Avg.	<u>9^a</u>		
Scrubbant Flow Rate (gal/min) - Normal	<u>300^a</u>		
Scrubbant Supply Pressure (psi) - Normal	<u>50^a</u>		
Max Permitted Heat Inputs (MMBtu/hr) Carbonaceous Fuel	<u>447</u>		
Max Carbonaceous Fuel Consumption (lb carbonaceous fuel/hr)	<u>124,167^b</u>		
Uncontrolled Particulate Emission Rate (lb particulates/ton carbonaceous fuel)	<u>15.6^c</u>		
Permitted Particulate Emission Rate (lb particulates/MMBtu)	<u>0.25^d</u>		
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency (%)
Particulate Matter	968.5	112	88

Note: Scrubber paramters represent typical values.

^a Represent average values from daily records.

^b Calculated using an average carbonaceous fuel heating value of 3,600 Btu/lb and the permitted heat input rate.

^c AP-42 Table 1.8-2 uncontrolled emission factor of 15.6 lb/ton.

^d From permit specific condition.

Sample calculations:

$$\text{Inlet loading (lb/hr)} = (\text{uncontrolled particulate emission rate} \times \text{max carbonaceous fuel consumption}) \div 2,000 \text{ lb/ton}$$

$$\text{Outlet loading (lb/hr)} = (\text{permitted particulate emission rate} \times \text{max permitted heat input rate})$$

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) \div \text{inlet loading}] \times 100$$

ATTACHMENT USS-EU2-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU2-I4**PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 2. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (approximately 6 to 12 hours)

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shut down for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.

5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU2-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU2-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS**

62-296.410(1)(b), F.A.C.: Carbonaceous Fuel Burning Equipment

62-296.410(3), F.A.C.: Carbonaceous Fuel Burning Equipment

62-297.310(1), F.A.C.: General Compliance Test Requirements

62-297.310(2)(b), F.A.C.: General Compliance Test Requirements

62-297.310(3), F.A.C.: General Compliance Test Requirements

62-297.310(4), F.A.C.: General Compliance Test Requirements

62-297.310(5), F.A.C.: General Compliance Test Requirements

62-297.310(6), F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)3., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)4., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)5., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)9., F.A.C.: General Compliance Test Requirements

62-297.310(7)(a)10., F.A.C.: General Compliance Test Requirements

62-297.310(8), F.A.C.: General Compliance Test Requirements

62-297.401(1), F.A.C.: EPA Test Method 1

62-297.401(2), F.A.C.: EPA Test Method 2

62-297.401(3), F.A.C.: EPA Test Method 3

62-297.401(4), F.A.C.: EPA Test Method 4

62-297.401(5), F.A.C.: EPA Test Method 5

62-297.401(6), F.A.C.: EPA Test Method 6

62-297.401(6)(c), F.A.C.: EPA Test Method 6C

62-297.401(7), F.A.C.: EPA Test Method 7

62-297.401(7)(e), F.A.C.: EPA Test Method 7E

62-297.401(8), F.A.C.: EPA Test Method 8

62-297.401(9), F.A.C.: EPA Test Method 9

62-297.401(10), F.A.C.: EPA Test Method 10

62-297.401(18), F.A.C.: EPA Test Method 18

62-297.401(25)(a), F.A.C.: EPA Test Method 25A

40 CFR 63.1 – 63.16 – Subpart A – General Provisions: Boiler No. 2 is subject to the notification requirements of Subpart DDDDD.

40 CFR 63.7485 – Subpart DDDDD – Applicability: Boiler No. 2 is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.

40 CFR 63.7490 – Subpart DDDDD – Applicability: Boiler No. 2 is subject to the requirements of Subpart DDDDD for existing boilers.

40 CFR 63.7495 – Subpart DDDDD – Compliance Dates – Boiler No. 2 must meet notification requirements and comply by September 13, 2007.

40 CFR 63.7499 – Subpart DDDDD – Subcategories: Boiler No. 2 is in the large solid fuel subcategory.

40 CFR 63.7506 – Subpart DDDDD – Limited Requirements: Boiler No. 2 must only meet the notification requirements of 63.9(b) at this time.

40 CFR 63.7545 – Subpart DDDDD – Notifications: Boiler No. 2 must submit the required notification by March 12, 2005.

NOTICE OF FINAL PERMIT

FEB 28 2005

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-027-AC
Boilers 1 and 2
Modified Oil Firing Systems
Hendry County, Florida

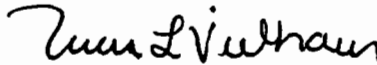
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Final Air Permit No. 0510003-027-AC is enclosed authorizing modification of the oil firing systems for existing Boilers 1 and 2 at the Clewiston Sugar Mill and Refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

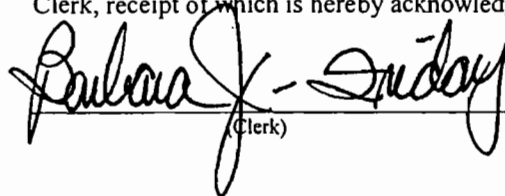
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/24/05 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. David Buff, Golder Associates Inc.

Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

2/24/05
(Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation - Air Permitting South Program
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400

PROJECT

Project No. 0510003-027-AC
U. S. Sugar Corporation – Clewiston Sugar Mill
Boilers 1 and 2, Modified Oil Firing Systems

The United States Sugar Corporation proposes to modify the oil firing systems of existing Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLIC ATION

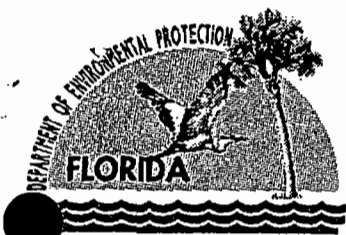
The Department distributed an "Intent to Issue Permit" package on December 30, 2004. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on January 20, 2005. The Department received the proof of publication on January 28, 2005. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, the EPA Region 4 Office, the National Park Service, or the applicant.

CONCLUSION

The final action of the Department is to issue the permit with only minor changes to typographical errors.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-027-AC
Facility ID No. 0510003
Boilers 1/2, Oil Burner Modifications
Permit Expires: January 30, 2006

PROJECT AND LOCATION

This permit authorizes replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, 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.). The permittee is authorized to perform the work 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. This permit supplements all previously issued air construction and operation permits for the affected emissions units.

PERMIT CONTENT

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

Michael G. Cooke, Director
Division of Air Resource Management

(Effective Date)

FACILITY DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. A sixth unit, Boiler 8, is under construction. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with electrostatic precipitators for Boilers 7 and 8. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. This project only affects the oil firing capabilities of Boilers 1 and 2 (Emissions Units 001 and 002).

FACILITY REGULATORY CLASSIFICATIONS

Title III: The existing facility is a major source of hazardous air pollutants (HAP).

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

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

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

RELEVANT DOCUMENTS

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

APPENDICES

The following Appendices are included as part of the permit in Section 4.

Appendix CF. Citation Format

Appendix GC. General Conditions

Appendix SC. Standard Conditions

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated 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 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. 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.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
001	Boiler 1 is a traveling grate boiler with a maximum 1-hour steam production rate of 255,000 pounds per hour at 750° F and 600 psig. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 213 feet tall stack at 150° F with an approximate flow rate of 204,000 acfm.
002	Boiler 2 is a traveling grate boiler with a maximum 1-hour steam production rate of 230,000 pounds per hour at 750° F and 600 psig. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 213 feet tall stack at 150° F with an approximate flow rate of 201,000 acfm.

EQUIPMENT

1. Oil Firing Modifications: For each boiler, the permittee is authorized to replace the existing oil burners with new Peabody multi-stage combustion (MSC) burners (or equivalent) to fire distillate oil. In general, each burner consists of a steam-atomized center-fired oil gun, a flame scanner, an ignitor with flame proving rod, and an individual burner windbox with an electrically-operated modulating damper. The project also includes new combustion air fans with associated ductwork, new fuel oil pump sets, and new burner management systems. The burners shall be low NOx burners designed for a maximum NOx emission rate of 0.15 lb/MMBtu. Each boiler will have two oil burners with a maximum heat input rate to each burner of 104 MMBtu/hour. Based on a higher heating value of 18,750 Btu/lb, the maximum distillate oil firing rate will be approximately 770.5 gallons per hour per burner. The modified boilers are estimated to produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. Bagasse will remain the primary fuel and distillate oil will be fired as a startup and supplemental fuel. This permit only addresses the oil firing aspects of these boilers. [Application; Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any oil fired in Boilers 1 and 2 shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. [Application; Design; Rule 62-212.400(2)(g), F.A.C.]
3. Permitted Capacity on Oil: For each boiler, the maximum heat input rate from distillate oil is 208 MMBtu per hour. {Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 156,000 lb/hour.} [Design; Rules 62-120.200(PTE) and 62-212.400(2)(g), F.A.C.]
4. Restrictions on Oil: For each boiler, distillate oil firing shall not exceed 1541 gallons per hour and 3,500,000 gallons during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. {Permitting Note: The above hourly oil firing restriction supersedes the restriction of "1500" gallons per hour specified in Condition 4, Subsection IIIB, in Permit No. PSD-FL-272A.} [Application; Design; Rule 62-212.400(2)(g), F.A.C.]

EMISSIONS STANDARDS

5. Visible Emissions on Oil: Visible emissions shall not exceed 30% opacity based on a 6-minute average except for two minutes per hour during which the opacity shall not exceed 40% as determined by DEP Method 9. [Rule 62-296.410, F.A.C.]
6. Particulate Matter Emissions on Oil: Emissions of particulate matter shall not exceed 0.1 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. This standard is used to prorate the corresponding final standard if a compliance test is conducted while firing a combination of bagasse and oil. A separate emissions performance test on oil only is not required. [Rule 62-296.410, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

EMISSIONS PERFORMANCE TESTING

7. Performance Tests: For each boiler, the permittee shall conduct an initial performance test to validate the actual installed capacity of the burner system (208 MMBtu per hour, maximum) and the design low-NOx burner specification (0.15 lb/MMBtu hour, maximum). The test shall be conducted for at least 60 consecutive minutes when firing only distillate oil. During the test, the following parameters shall be recorded: firing rate (gallons), density (lb/gallon) and heating value of the distillate oil (Btu/lb); and production rate (lb/hour), temperature (° F), and pressure (psig) of the steam. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis of the distillate oil. The tests shall be conducted within 120 days of first firing oil with the modified system. Results of the test shall be submitted to the Department within 45 days of the test date. If the results of the performance test show potential NOx emissions greater than 40 tons per year, the permittee shall submit a PSD permit application or an application to modify this permit to avoid PSD preconstruction review. Applications shall be filed within 90 days of submitting the test report as necessary. [Rule 62-4.070(3), F.A.C.]
8. Emissions Compliance Tests: This permit does not impose any new emissions compliance test requirements. The permittee shall continue to perform emissions compliance testing in accordance with the requirements of the current Title V air operation permit. [Rules 62-4.070(3) and 62-297.310, F.A.C.]
9. 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. [Rule 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

10. Oil Firing Records: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heating value in Btu/lb, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable. At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling. At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month. [Rule 62-4.070(3), F.A.C.]

OTHER APPLICABLE REQUIREMENTS

11. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for changes specified in the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]
12. DAF Filter Material: The permittee may co-fire incidental amounts of de-watered filter material from the Dissolved Aeration Flotation (DAF) system with other authorized fuels. To the extent practicable, the de-watered DAF filter material shall be commingled with bagasse in the existing conveyor system and distributed among the operational boilers. [Rule 62-4.070, F.A.C.] *{Permitting Note: The firing of this material was reviewed in Project No. 0510003-024-AC and Permit No. PSD-FL-333A includes the above requirement. See Appendix I of Permit No. PSD-FL-333A for other requirements.}*

Filename: 0510003-027-AC - Draft Permit

SECTION 4. APPENDICES

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Appendix CF.	Citation Format
Appendix GC.	General Conditions
Appendix SC.	Standard Conditions

SECTION 4. APPENDIX CF

CITATION FORMAT

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

Statutes. 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 Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (not applicable to project);
 - b. Determination of Prevention of Significant Deterioration (not applicable to project); and
 - c. Compliance with New Source Performance Standards (not applicable to project).
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 SC
STANDARD CONDITIONS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities.}

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(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 or organic solvents 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. [Rule 62-296.320(2), 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 percent opacity. [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 five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 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(2), F.A.C.]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

NOTICE OF FINAL PERMIT

JUN - 5 2003

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

- Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

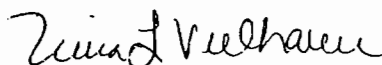
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-022-AC, which authorizes a 3-year boiler maintenance project at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes to correct typographical errors were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

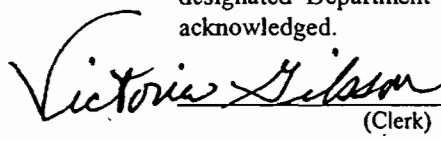
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/3/2003 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 June 3, 2003
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 2, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, or the applicant. Informal comments were received from the EPA Region 4 office. The main concern regarded the issue of determining PSD applicability for the project. Region 4 notes that federal PSD rule revisions issued by EPA on December 31, 2002 allow a comparison of past-actual-to-projected-actual emissions to determine PSD applicability. However, Florida has not yet adopted these revisions. Therefore, Region 4 believes that the appropriate PSD evaluation is to compare past actual emissions with future allowable/potential emissions where future potential emissions can be based on enforceable emissions controls and/or emissions limits.

As stated in the technical evaluation, the Department does not believe that the proposed physical changes will result in any increases in the actual emissions. The types of maintenance activities proposed are routinely performed by the sugar industry during each off season. U.S. Sugar maintains that the activities are routine for this mill and the industry in general. Based on the available information, the Department presumes that the proposed activities for each boiler are routine and not a modification by definition. However, due to the difficulties in making these evaluations as mentioned by Region 4, the Department will issue the minor source permit that requires U.S. Sugar to track and report the progress of maintenance activities each year to further assess the nature of the project.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.

Department of Environmental Protection



Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-022-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: October 1, 2005

PROJECT AND LOCATION

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, 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.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

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

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

"More Protection, Less Process"

Printed on recycled paper.

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through to bagasse fired in the boilers and creates a very abrasive flue gas, which has led to premature tube and component wear. The permit authorizes maintenance, repairs, and replacements to maintain each unit at normal operational levels and reliability. This permit only affects the boilers. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

This section of the permit addresses the following emissions units.

ID	Emission Unit Description
001	Boiler 1 – 255,000 lb/hour steam with a heat input rate of 495.6 MMBtu/hour (24-hour averages)
002	Boiler 2 – 230,000 lb/hour steam with a heat input rate of 447 MMBtu/hour (24-hour averages)
003	Boiler 3 – 130,000 lb/hour steam with a heat input rate of 265 MMBtu/hour (24-hour averages)
009	Boiler 4 – 285,000 lb/hour steam with a heat input rate of 600 MMBtu/hour (24-hour averages)
014	Boiler 7 – 350,000 lb/hour steam with a heat input rate of 738 MMBtu/hour (24-hour averages)

COMPONENT REPAIRS AND REPLACEMENT

- Schedule:** This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]
- Maintenance Activities:** The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:
 - Boiler 1:** tube replacements in the main generating bank, superheater, and air heater.
 - Boiler 2:** tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
 - Boiler 3:** tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
 - Boiler 4:** tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
 - Boiler 7:** stoker repairs; tube replacements in economizer

Replacements shall be made with “functionally equivalent” components that serve the same purpose as the replaced component. The off season maintenance activities are intended to maintain the boilers at current operational levels and reliability for the upcoming cane milling seasons. After further inspection, some activities may not be required to the extent requested and other similar routine repair, replacement, and maintenance activities may be necessary. Routine repairs and replacements that are not mentioned above shall be included in the required summary reports. [Applicant Request; Rule 62-4.070(3), F.A.C.]

EMISSIONS AND PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any emissions standards, operational restrictions, authorized fuels or any other conditions specified in other applicable air construction and operation permits.}

- Permitted Capacities:** The maintenance activities authorized in this permit shall not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project shall not increase the emission rates of any boiler or the cane milling capacity of the plant. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]
5. Capacity Report and Emissions Summary: Within 60 days of completing the last required stack test for all of the boilers during that season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information for each boiler: the test dates; the pollutant tested; the tested emissions rate; the allowable emissions rate; the permitted 24-hour average steam production rate; the steam production rate during the test; and the percent of permitted capacity during the test based on the permitted 24-hour steam production rate. *{Permitting Note: This condition refers to the testing that is already required by the Title V air operation permit.}* [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES
CONTENTS

Appendix CF. Citation Format
Appendix GC. General Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4:120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (NA).
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.

ATTACHMENT USS-EU2-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU2-IV3**ALTERNATIVE METHODS OF OPERATION**

Boiler No. 2 is designed to operate while combusting carbonaceous fuel alone at a maximum heat input rate of 447 MMBtu/hr (maximum 24-hour average) or No. 2 fuel oil alone at a maximum fuel oil heat input rate of 208 MMBtu/hr (maximum 24-hour average). The boiler may also burn small quantities of petroleum-contaminated soils (up to 500 cubic yards per season) and facility-generated, on-specification used oil. The maximum sulfur content in the fuel oil is limited to 0.05 percent by weight. This unit has no limits on hours of operation and may operate for 8,760 hours per year.

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

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.

EMISSIONS UNIT INFORMATION

Section [3],

Boiler No. 4

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. 4

3. Emissions Unit Identification Number: **009**

4. Emissions Unit Status Code:
A

5. Commence Construction Date:

6. Initial Startup Date:

7. Emissions Unit Major Group SIC Code:
20

8. Acid Rain Unit?
 Yes
 No

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:

Traveling grate boiler fired by carbonaceous fuel and fuel oil with a maximum sulfur content of 0.40 percent by weight. Fuel oil can include facility-generated, on-specification used oil.

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Joy Turbulaire Impingement Scrubber, Size 200, Type D

2. Control Device or Method Code(s): **001**

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

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: 300,000 lb/hr steam
3. Maximum Heat Input Rate: 633 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 300,000 lb/hr for carbonaceous fuel firing. The maximum permitted 24-hour average heat input rate for firing carbonaceous fuel is 600 MMBtu/hr, and the maximum permitted 1-hour average heat input rate for firing No. 2 fuel oil is 326 MMBtu/hr (Permit No. 0510003-018-AC).

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

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-4		2. Emission Point Type Code:	
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: 150 feet		7. Exit Diameter: 8.2 feet
8. Exit Temperature: 160 °F	9. Actual Volumetric Flow Rate: 281,000 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 test data.			

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

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: 87.92	5. Maximum Annual Rate: 400,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.24 (dry)	8. Maximum % Ash: 8.4 (dry basis)	9. Million Btu per SCC Unit: 7.2
10. Segment Comment: Based on 633 MMBtu/hr and 3,600 Btu/lb wet bagasse. Annual rate is maximum allowable from Permit No. 0510003-010-AC/PSD-FL-272A. Bagasse may include DAF filter material with incidental amounts of on-specification used oil.		

Segment Description and Rate: Segment 2 of 2

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: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.4	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment: Maximum hourly and annual rates based on 326 MMBtu/hr and 500,000 gallons of fuel oil per year (Permit No. 0510003-018-AC). Includes combustion of facility-generated, on-specification used oil.		

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

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	001		EL
PM ₁₀	001		NS
SO ₂	001		EL
NO _x			EL
CO			EL
VOC			EL
SAM			NS

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3]
Boiler No. 4

Page [1] of [5]
Particulate Matter Total - PM

**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: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 95 lb/hour 216 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.15 lb/MMBtu Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse: 633 MMBtu/hr x 0.15 lb/MMBtu = 95 lb/hr Annual emissions based on heat input rate of 2,880,000 MMBtu during consecutive any 12 months. 2,880,000 MMBtu/yr x 0.15 lb/MMBtu x 1 ton/2,000 lb = 216 ton/yr Fuel Oil: 326 MMBtu/hr x 0.1 lb/MMBtu = 32.6 lb/hr 500,000 gal/yr x 135,000 Btu/gal = 67,500 MMBtu/yr 67,500 MMBtu/yr x 0.1 lb/MMBtu x 1 ton/2,000 lb = 3.4 ton/yr	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.	

EMISSIONS UNIT INFORMATION

Section [3]
Boiler No. 4

POLLUTANT DETAIL INFORMATION

Page [1] of [5]
Particulate Matter Total - PM

**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 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/MMBtu	4. Equivalent Allowable Emissions: 95 lb/hour 216 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.10 lb/MMBtu	4. Equivalent Allowable Emissions: 32.6 lb/hour 3.4 tons/year
5. Method of Compliance: EPA Method 5 or 17	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62-296.406, F.A.C. Emissions representative of fuel oil firing. Annual emissions based on 500,000 gallons per any consecutive 12 months.	

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: SO₂	2. Total Percent Efficiency of Control:
3. Potential Emissions: 155.7 lb/hour 98.6 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.06 lb/MMBtu for bagasse Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Fuel Oil: $142S \text{ lb SO}_2/1,000 \text{ gal} = 142 \times 0.4 \times 2,417 \text{ gal/hr} \div 1,000 = 137.3 \text{ lb/hr}$ Bagasse: $[(633 - 326) \text{ MMBtu/hr} \times 0.06 \text{ lb/MMBtu}] = 18.4 \text{ lb/hr}$ Total Hourly: $137.3 \text{ lb/hr} + 18.4 \text{ lb/hr} = 155.7 \text{ lb/hr}$ Annual: $[500,000 \text{ gal/yr} \times 135,000 \text{ Btu/gal} \times \text{MMBtu}/1\text{E}6 \text{ Btu} \times 0.42 \text{ lb/MMBtu} \div 2,000 \text{ lb/ton}]$ $+ [(2,880,000 - 67,500) \text{ MMBtu/yr} \times 0.06 \text{ lb/MMBtu} \div 2,000 \text{ lb}] = 98.6 \text{ ton/yr}$	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Factors based on carbonaceous fuel firing. Fuel oil sulfur content limited to 0.4 percent. Maximum hourly and annual emissions based on combined fuel oil and carbonaceous fuel firing.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3]
Boiler No. 4

Page [2] of [5]
Sulfur Dioxide - SO₂

**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 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.06 lb/MMBtu	4. Equivalent Allowable Emissions: 38 lb/hour 86.4 tons/year
5. Method of Compliance: EPA Method 6, 6c, or 8.	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Emissions representative of bagasse firing only. Based on carbonaceous fuel and maximum heat input of 2,880,000 MMBtu during any consecutive 12 months.	

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: 0.40% S oil	4. Equivalent Allowable Emissions: 137.3 lb/hour 14.2 tons/year
5. Method of Compliance: Fuel oil analysis	
6. Allowable Emissions Comment (Description of Operating Method): Emissions representative of fuel oil firing. Hourly emissions based on firing 2,417 gal/hr. Annual emissions based on 500,000 gallons per any consecutive 12 months. SO₂ = 142S lb/1,000 gal (AP-42 Table 1.3-1), where S = 0.4.	

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: 155.7 lb/hr	4. Equivalent Allowable Emissions: 155.7 lb/hour 98.6 tons/year
5. Method of Compliance: EPA Method 6, 6c, or 8	
6. Allowable Emissions Comment (Description of Operating Method): Based on maximum fuel oil firing with remainder due to bagasse. (142 x 0.4) lb/1,000 gal x 2,417 gal/hr + [(633 - 326.3) MMBtu/hr x 0.06 lb/MMBtu] = 155.7 lb/hr.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3]
Boiler No. 4

Page [3] of [5]
Nitrogen Oxides - NO_x

**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: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 126.6 lb/hour 288 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.20 lb/MMBtu Reference: Permit Nos. 0510003-017-AV and 0510003-018-AC.	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse: 633 MMBtu/hr x 0.20 lb/MMBtu = 126.6 lb/hr Annual emissions based on heat input rate of 2,880,000 MMBtu during any consecutive 12 months. 2,880,000 MMBtu/yr x 0.20 lb/MMBtu x 1 ton/2,000 lb = 288.0 TPY Fuel Oil: 326 MMBtu/hr x 0.20 lb/MMBtu = 65.2 lb/hr 67,500 MMBtu/yr x 0.20 lb/MMBtu x 1 ton/2,000 lb = 6.75 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

Section [3]
Boiler No. 4

POLLUTANT DETAIL INFORMATION

Page [3] of [5]
Nitrogen Oxides - NO_x

**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 1 of 2

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: 126.6 lb/hour 288 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Based on carbonaceous fuel firing and maximum heat input of 2,880,000 MMBtu during any consecutive 12 months.	

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: 0.20 lb/MMBtu	4. Equivalent Allowable Emissions: 65.2 lb/hour 6.75 tons/year
5. Method of Compliance: EPA Method 7E	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-018-AC. Based on firing of No. 2 distillate fuel oil.	

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):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3]
Boiler No. 4

Page [4] of [5]
Carbon Monoxide - CO

**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: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4,114.5 lb/hour 9,360.0 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 6.5 lb/MMBtu Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: 633 MMBtu/hr x 6.5 lb/MMBtu = 4,114.5 lb/hr Annual emissions based on heat input rate of 2,880,000 MMBtu during any consecutive 12 months. 2,880,000 MMBtu/yr x 6.5 lb/MMBtu x 1 ton/2,000 lb = 9,360 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [3]
Boiler No. 4

Page [4] of [5]
Carbon Monoxide - CO

**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 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 6.5 lb/MMBtu	4. Equivalent Allowable Emissions: 4,114.5 lb/hour 9,360.0 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 bagasse 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):	

EMISSIONS UNIT INFORMATION

Section [3]
Boiler No. 4

POLLUTANT DETAIL INFORMATION

Page [5] of [5]
Volatile Organic Compounds - VOC

**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: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 316.5 lb/hour 720 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.50 lb/MMBtu Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: 633 MMBtu/hr x 0.50 lb/MMBtu = 316.5 lb/hr Annual emissions based on heat input rate of 2,880,000 MMBtu during any consecutive 12 months. 2,880,000 MMBtu/yr x 0.50 lb/MMBtu x 1 ton/2,000 lb = 720 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

Section [3]
Boiler No. 4

POLLUTANT DETAIL INFORMATION

Page [5] of [5]
Volatile Organic Compounds - VOC

**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 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.50 lb/MMBtu	4. Equivalent Allowable Emissions: 316.5 lb/hour 720 tons/year
5. Method of Compliance: EPA Method 18 and 25A	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Emissions representative of bagasse 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):	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

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 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Applies to carbonaceous fuel burning only. Permit 0510003-017-AV.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: Applies to fuel oil burning only. Permit No. 0510003-018-AC.	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System: Continuous Monitor 1 of 9**

1. Parameter Code: PRS	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Custom Design Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors pressure drop across wet scrubber. Monitored to ensure proper operation of scrubber. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor 2 of 9

1. Parameter Code: Nozzle PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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: Monitors wet scrubber spray nozzle pressure. Permit No. 0510003-017-AV.	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 3 of 9

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Rosemount, Inc., or equivalent Model Number: 8711/8712 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors wet scrubber liquid flow rate. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor 4 of 9

1. Parameter Code: Steam TEMP	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Preferred Instruments or equivalent Model Number: PCC-III Controller Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors steam temperature. Permit No. 0510003-017-AV.	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 5 of 9

1. Parameter Code: Steam PRESSURE	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Monitors steam pressure. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor 6 of 9

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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: Monitors steam flow rate. Permit No. 0510003-017-AV.	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 7 of 9

1. Parameter Code: O₂	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Rosemount Analytical, Inc., or equivalent Model Number: 3000 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors flue gas oxygen content. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor 8 of 9

1. Parameter Code: CO	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Thermo Environmental Instruments, Inc., or equivalent Model Number: 48C Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors flue gas carbon monoxide content. Permit No. 0510003-017-AV.	

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 9 of 9

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: ITT Barton or equivalent Model Number: Flowco F500 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors fuel oil flow to Boiler No. 4. No serial number or installation date provided because monitors are routinely replaced to ensure optimum performance. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION

**Section [3]
Boiler No. 4**

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-11</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-12</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-13</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-14</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> 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: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> 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 <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [3]

Boiler No. 4

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-IV1</u> <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: <u>CAM Plan</u> <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU3-IV3</u> <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [3]

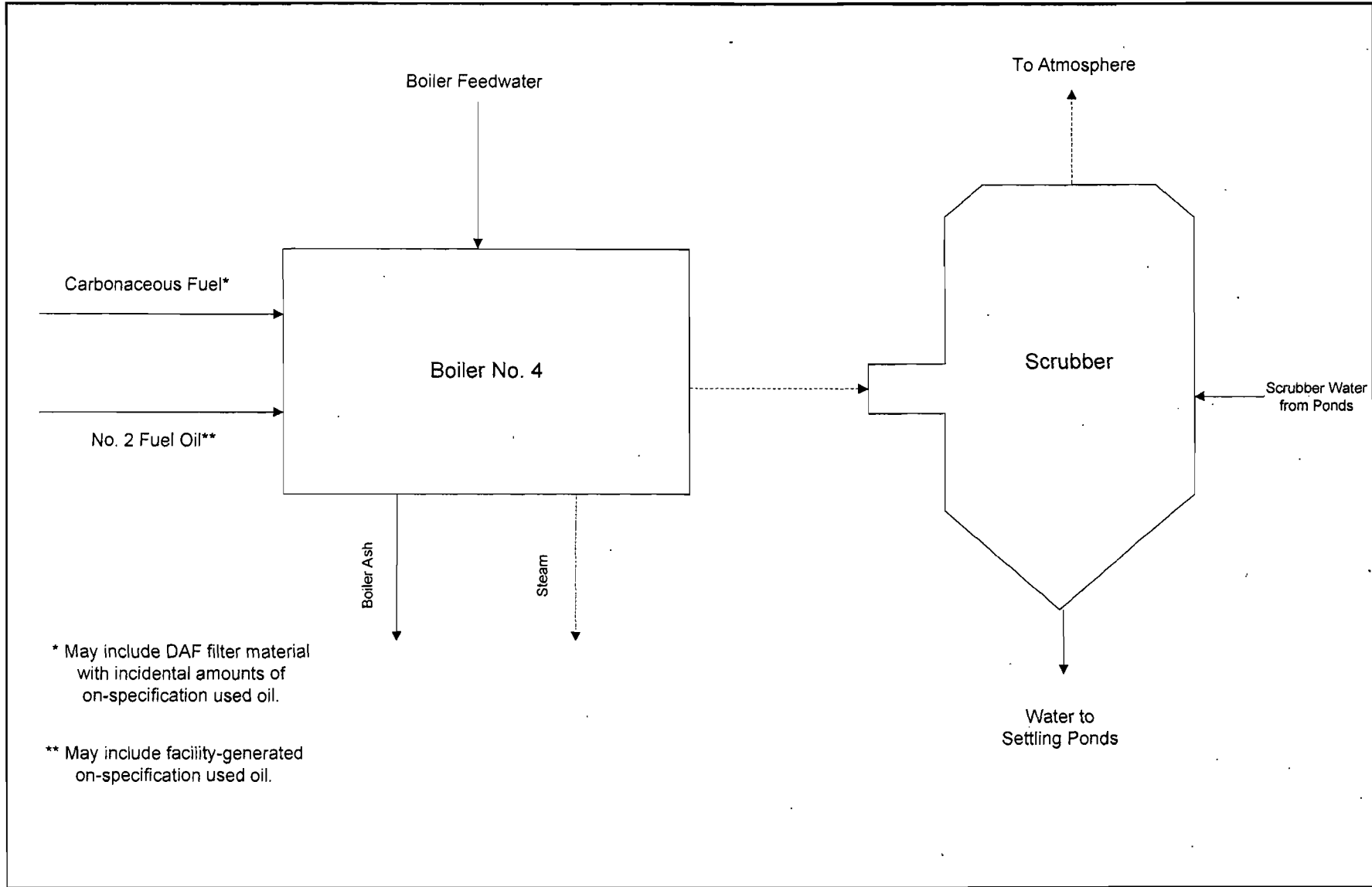
Boiler No. 4

Additional Requirements Comment

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ATTACHMENT USS-EU3-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU3-I1
 Process Flow Diagram
 U.S. Sugar Corporation
 Boiler No. 4

Process Flow Legend	
Solid/Liquid	—————▶
Gas	- - - - -▶
Steam	- · - · -▶

0537540/4/4.4/USS-EU3-I1.VSD
 Date: 05/23/05



ATTACHMENT USS-EU3-I2

FUEL ANALYSIS

ATTACHMENT USS-EU3-I2

BOILER NO. 4 FUEL ANALYSIS

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.4% S max)
Density (lb/gal)	--	6.83 ^c
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910 ^c
Approximate Heating Value (Btu/gal)	--	135,000 ^c
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.1%	84.7% ^d
Hydrogen	5.9%	15.3% ^d
Nitrogen	0.35%	0.18% ^d
Oxygen	40.9%	0.38% ^d
Sulfur	0.08% - 0.24%	0.40% ^e
Ash/Inorganic	0.87% - 8.4%	0.06% ^c
Moisture	49% - 55%	0.51% ^c

Footnotes:

^a Source: Clewiston Mill fuel analysis averages.

^b Wet basis for bagasse. Represents normal minimum.

^c Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984. Represents average fuel characteristics.

^d Source: fuel analysis from Coastal Fuels Marketing, Inc. (9/21/00).

^e Proposed maximum.

ATTACHMENT USS-EU3-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT USS-EU3-I3**U.S. SUGAR CORPORATION
BOILER NO. 4 SCRUBBER EQUIPMENT DESIGN PARAMETERS**

Scrubber Type	Impingement Scrubber
Scrubber Model	Joy Turbulaire
Scrubbant	Water
Packing Material	Type D, Size 200
Outlet Gas Temp (°F)	160
Outlet Gas Flow Rate (acfm)	281,000
Differential Pressure Drop (inches of water)	8 – 11
Scrubbant Flow Rate (gpm)	375 minimum ^a
Scrubbant Pressure (psi)	40 – 55

^aBased on a 3-hour block average.

ATTACHMENT USS-EU3-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU3-I4**PROCEDURES FOR STARTUP AND SHUTDOWN**

During startup and shutdown of the boilers, excess CO, PM, NO_x, and VOC emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions shall be taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 4. The boiler room foreman and operating personnel shall receive proper training on emissions control procedures at least once per year.

Cold Startup

1. Turn on water valves to scrubber spray nozzles to start scrubber.
2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust, if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
8. A cold startup is a startup after the boiler has been down for more than 4 or 5 hours. Typically, a cold startup will require 6 to 12 hours from the first fire to normal working pressure. There may be 10 cold startups per crop season (more or less) depending on excessive rain and mechanical breakdowns.

Hot Startup

1. This type of startup is applicable when the boiler has been shut down for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.

3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. A warm startup is a startup after the boiler has been down for less than 5 hours. Usually, the longer the boiler is down means a longer period will be needed for warm startup. Typically, a warm startup requires 1 to 5 hours, depending on boiler operating conditions. There may be 5 cold startups per crop season (more or less) depending on mechanical breakdowns and mill interruptions.

Shutdown

1. Stop fuel flow to the boiler. Reduce the forced draft, distributor air, overfire air, and induced forced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

ATTACHMENT USS-EU3-I5

OPERATION AND MAINTENANCE PLAN

ATTACHMENT USS-EU3-I5**OPERATION AND MAINTENANCE PLAN****Good Combustion Practices for Boiler No. 4**

The following procedures are based upon Construction Permit No. 0510003-010-AC/PSD-FL-272A for Clewiston Boiler No. 4 dated March 8, 2001. A part of this plan is the attached Startup and Shutdown Procedures.

Purpose of GCP Plan

The determination of Best Available Control Technology for CO, NO_x, and VOC emissions from Boiler No. 4 (EU-009) relied on "good combustion practices." The purpose of this document is to summarize the operational, maintenance, and monitoring procedures that will lead to the minimization of CO and VOC emissions and the optimization of NO_x emissions, consistent with good combustion practices.

Preparation for Operations

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Prior to each harvest season, all instruments for boiler operation and control (including oxygen and carbon monoxide process monitors) are inspected, repaired, and calibrated as required. This is recorded by the instrument shop in its repair log.

Boiler Operation and Controls

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NO_x. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO and VOC Controls

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.
2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
3. Process monitors shall be installed to monitor the oxygen (O₂) content and the carbon monoxide (CO) content of the boiler flue gas. The instrument readouts will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the O₂ and CO flue gas process monitors for combustion control and to ensure sufficient excess air levels. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The oxygen process monitor will include an alarm with a set point at 1.5-percent (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor will include an alarm with a set point at 3,000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor will display both the instantaneous and the 1-hour block average. If the alarm is tripped for either

process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, and firing some fuel oil in place of bagasse. For each such incident, the operator shall summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained.

NO_x Controls

NO_x emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, the application of GCP to minimize CO and VOC emissions may result in increased NO_x emissions. This is because factors, which promote good combustion and result in lower CO and VOC emissions, such as higher excess air and higher combustion temperatures, result in higher NO_x emissions. This is the nature of the combustion process. Therefore, GCP to optimize NO_x emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

Miscellaneous

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule: Fans, pumps, casing, ducting, and scrubber.
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.).

ATTACHMENT USS-EU3-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU3-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS**

62-296.410(2)(b), F.A.C.: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C.: Carbonaceous Fuel Burning Equipment
62-297.310(1), F.A.C.: General Compliance Test Requirements
62-297.310(2)(b), F.A.C.: General Compliance Test Requirements
62-297.310(3), F.A.C.: General Compliance Test Requirements
62-297.310(4), F.A.C.: General Compliance Test Requirements
62-297.310(5), F.A.C.: General Compliance Test Requirements
62-297.310(6), F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)4., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)5., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)10., F.A.C.: General Compliance Test Requirements
62-297.310(8), F.A.C.: General Compliance Test Requirements
62-297.401(1), F.A.C.: EPA Test Method 1
62-297.401(2), F.A.C.: EPA Test Method 2
62-297.401(3), F.A.C.: EPA Test Method 3
62-297.401(4), F.A.C.: EPA Test Method 4
62-297.401(5), F.A.C.: EPA Test Method 5
62-297.401(6), F.A.C.: EPA Test Method 6
62-297.401(6)(c), F.A.C.: EPA Test Method 6C
62-297.401(7), F.A.C.: EPA Test Method 7
62-297.401(7)(e), F.A.C.: EPA Test Method 7E
62-297.401(8), F.A.C.: EPA Test Method 8
62-297.401(9), F.A.C.: EPA Test Method 9
62-297.401(10), F.A.C.: EPA Test Method 10

62-297.401(18), F.A.C.: EPA Test Method 18

62-297.401(25)(a), F.A.C.: EPA Test Method 25A

40 CFR 63.1 – 63.16 – Subpart A – General Provisions: Boiler No. 4 is subject to the notification requirements of Subpart DDDDD.

40 CFR 63.7485 – Subpart DDDDD – Applicability: Boiler No. 4 is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.

40 CFR 63.7490 – Subpart DDDDD – Applicability: Boiler No. 4 is subject to the requirements of Subpart DDDDD for existing boilers.

40 CFR 63.7495 – Subpart DDDDD – Compliance Dates – Boiler No. 4 must meet notification requirements and comply by September 13, 2007.

40 CFR 63.7499 – Subpart DDDDD – Subcategories: Boiler No. 4 is in the large solid fuel subcategory.

40 CFR 63.7506 – Subpart DDDDD – Limited Requirements: Boiler No. 4 must only meet the notification requirements of 63.9(b) at this time.

40 CFR 63.7545 – Subpart DDDDD – Notifications: Boiler No. 4 must submit the required notification by March 12, 2005.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

JUN - 9 2003

NOTICE OF FINAL PERMIT

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-018-AC, which authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

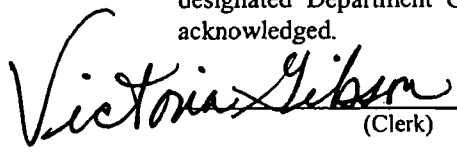
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/6/03 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 June 6, 2003
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems

This permit authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on April 3, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, EPA Region 4, or the NPS. The Department did receive the following comments from the applicant.

1. *Comment:* Boiler 4 should not be subject to NSPS Subpart Db because the firing of distillate oil ($\leq 0.40\%$ sulfur by weight) is a new physical restriction of the burner system. The applicant provided letters from the proposed burner vendors indicating that the system was being designed to accommodate only No. 2 distillate oil only and would not support No. 4 or No. 6 oils. The applicant asked the Department to discuss this issue with EPA Region 4 since this was a federal NSPS issue.

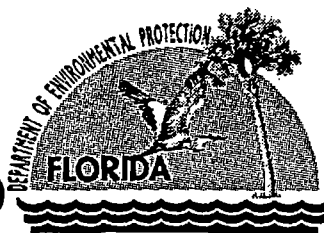
Response: The Department contacted EPA Region 4 and discussed the use of a fuel sulfur limit on Boiler 4 for determining future actual emissions. EPA Region 4 indicated that this could be considered a "physical restriction" if the burner vendor specifies that the new system would not accommodate other fuel oils such as No. 4 and No. 6. The applicant provided this information from the vendor. Therefore, there would be no increase in the hourly SO₂ emissions rate and NSPS Subpart Db does not apply to Boiler 4. The references to this NSPS Subpart Db were removed from the final permit.

2. *Comment:* The applicant noted both Boilers 4 and 7 rarely fire fuel oil alone (without bagasse). This presents an operational hardship in conducting regular tests solely on oil to determine the NO_x emission rate. Information from the burner vendors indicates that the NO_x emission rates will be less than 0.19 lb/MMBtu for Boiler 4 and 0.16 lb/MMBtu for Boiler 7, which are below the permit standard of 0.20 lb/MMBtu. After further discussion with the Department, the applicant agreed to conduct initial testing on oil alone.

Response: The final permit includes a requirement to conduct initial tests within 90 days of first firing oil while firing only oil. The requirements for subsequent tests were removed because the boilers rarely fire oil without also firing bagasse. This is consistent with the previous PSD air permits. In addition, Rule 62-297.310(7)(b), F.A.C. was added, "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."

CONCLUSION

The final action of the Department is to issue the permit with the changes described above. The Department does not consider these changes to be substantial.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-018-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: May 1, 2004

PROJECT AND LOCATION

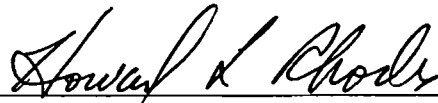
This permit authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

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.). The permittee is authorized to perform the work 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. This permit supplements all previously issued air construction and operation permits for this emissions unit.

SPECIFIC CONDITIONS

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



Howard L. Rhodes, Director
Division of Air Resources Management



(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. This permit authorizes modification of the oil firing systems for Boilers 4 and 7 (Emissions Units 009 and 014), which will increase the maximum heat input rates and provide greater operational reliability. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The facility is a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The facility operates some units subject to the New Source Performance Standards in 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated 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 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. 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.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules and conditions of the permit. A Title V operation permit is required for regular operation. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may require by law. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
009	Boiler 4 is a traveling grate boiler manufactured by Foster Wheeler with a maximum steam production rate of 300,000 pounds per hour at 750° F and 600 psig. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a Type D, Size 200 Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 150 feet tall stack at 160° F with an approximate flow rate of 281,000 acfm.

EQUIPMENT

1. **Oil Firing Upgrade:** The permittee is authorized to replace the existing oil firing system with the following general equipment: two multi-stage combustion low-NOx burners with flame scanner, fuel/steam valve train, steam-atomized center-fired oil gun with ignitor and flame proving rod; a multi-burner windbox; a fuel oil pump set; and a burner management control system. [Design]

PERFORMANCE RESTRICTIONS

2. **Oil Specification:** Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.40% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rules 62-212.400 and 62-296.405, F.A.C.]
3. **Permitted Capacity, Oil Firing:** The maximum heat input rate is 326 MMBtu per hour of heat input from distillate oil firing. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design; Rule 62-120.200(PTE), F.A.C.]
4. **Oil Firing Restrictions:** No more than 2417 gallons of distillate oil shall be fired during any hour and no more than 500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit is based on a previous SO₂ BACT determination.}* [Design; Permit No. PSD-FL-272A; Rule 62-212.400, F.A.C.]

EMISSIONS STANDARDS

5. **PM Emissions:** Emissions of particulate matter (PM) shall not exceed 0.10 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. [Permit No. PSD-FL-272A; Rules 62-296.405 and 62-296.410, F.A.C.]
6. **Visible Emissions:** When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity as determined by EPA Method 9. [Permit No. PSD-FL-272A; Rules 62-296.406 and 62-296.410]
7. **NOx Emissions:** Emissions of nitrogen oxides (NOx) shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.}* [Rules 62-4.070(3) and 62-212.400, F.A.C.]

EMISSIONS PERFORMANCE TESTING

8. **Initial Capacity Tests:** Within 90 days of first fire on oil with the modified system, the permittee shall conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]

9. **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 <i>{Note: Performed as necessary to support other required methods.}</i>
5	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions
9	Visual Determination of the Opacity of Emissions
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates <i>{Note: Performed as necessary to support other required methods.}</i>

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 for testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Appendix SC of Section 4 of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. **Initial Compliance Tests:** Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires very low sulfur distillate oil with considerably restricted oil usage, an initial test for particulate matter when firing only oil is not required. [Permit No. PSD-FL-272A; and Rules 62-4.070(3) and 62-297.310(7)(a), F.A.C.]
11. **Annual Tests:** During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. If oil is co-fired with bagasse during the required annual compliance test, the particulate matter standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Rule 62-297.310(7)(a), F.A.C.]
12. **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. [Rule 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

13. **Test Notification:** The permittee shall notify the Compliance Authority in writing at least fifteen (15) days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.]
14. **Test Reports:** The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

15. Oil Firing Records:

- a. *Methods:* The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.
- b. *Vendor Analysis:* For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.
- c. *Actual Sampling:* At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.
- d. *Fuel Consumption:* At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

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

OTHER APPLICABLE REQUIREMENTS

16. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
014	Boiler 7 is an Alpha Conal Model No. ATT-203-18 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. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a wet sand separator followed by an ABB electrostatic precipitator. Exhaust gases exit a 225 feet tall stack at 335° F with an average flow rate of 355,000 acfm.

EQUIPMENT

1. Oil Firing Upgrade: The permittee is authorized to modify the existing oil firing system as follows: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace two existing oil pumps. [Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The nitrogen content of the distillate oil shall not exceed 0.015% nitrogen by weight as determined by ASTM Method D4629 or equivalent methods approved by the Department. [Permit No. PSD-FL-208; Rules 62-212.400 and 62-296.405, F.A.C.; and 40 CFR 60.42b(j)]
3. Permitted Capacity, Oil Firing: The maximum heat input rate is 326 MMBtu per hour of heat input from distillate oil firing. {Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.} [Design; Rule 62-120.200(PTE), F.A.C.]
4. Oil Firing Restrictions: No more than 2311 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. {Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1).} [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; and 40 CFR 60.44b(l)(1)]

EMISSIONS STANDARDS

5. PM Emissions: Emissions of particulate matter (PM) shall not exceed 0.03 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Methods 5 or 17. [Permit No. PSD-FL-208(BACT); Rules 62-296.405, and 62-296.410, F.A.C.]
6. Visible Emissions: When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity, as determined by EPA Method 9. [40 CFR 60.43b(f); Permit No. PSD-FL-208(BACT)]
7. NOx Emissions: Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. {Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.} [Rule 62-4.070(3), F.A.C.; Permit No. PSD-FL-208(BACT)]

{Permitting Note: The following table summarizes revised maximum emission rates based on the original BACT determinations of Permit No. PSD-FL-208, the limits of this permit, and a heating value of 135,000 Btu per gallon of distillate oil.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

Table A. Estimated Maximum Emission Rates – Oil Firing

Pollutant	Original BACT lb/MMBtu*	Maximum Emission Rates	
		lb/hour	tons/year
CO	0.066	21.5	20.05
NOx	0.20	65.2	60.75
PM	0.03	9.8	9.11
SAM	0.005	1.6	1.52
SO ₂	0.05	16.3	15.19
VOC	0.004	1.3	1.22

EMISSIONS PERFORMANCE TESTING

8. **Design Capacity Tests:** Within 90 days of first fire on oil with the modified system, the permittee shall conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]

9. **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 <i>{Note: Performed as necessary to support other required methods.}</i>
5 or 17	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates <i>{Note: Performed as necessary to support other required methods.}</i>

The above methods are described in Appendix A of 40 CFR 60 and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. **Initial Compliance Tests:** Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires ultra-low sulfur distillate oil, a separate test for particulate matter when firing only oil is not required. If oil is co-fired with bagasse during the required annual compliance test, the particulate standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Permit No. PSD-FL-208; Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

11. **Annual Tests:** During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. [Rule 62-297.310(7)(a), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

12. 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. [Rule 62-297.310(7)(b), F.A.C.]
13. Opacity Monitoring: Appendix ASP specifies an Alternate Sampling Procedure for monitoring opacity in lieu of the NSPS Subpart Db requirements for continuous opacity monitoring. [Permit No. PSD-FL-208; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

RECORDS AND REPORTS

14. Test Notification: The permittee shall notify the Compliance Authority in writing at least thirty (30) days prior to any initial NSPS performance tests and at least fifteen (15) days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and 60.8]
15. Test Reports: The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]
16. Oil Firing Records:
 - a. *Methods*: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.
 - b. *Vendor Analysis*: For each fuel oil delivery, the permittee shall record and retain the following information: the date; the gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.
 - c. *Actual Sampling*: At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.
 - d. *Fuel Consumption*: At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

[Rule 62-4.070(3), F.A.C.; 40 CFR 60.49b]

OTHER APPLICABLE REQUIREMENTS

17. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]
18. NSPS Provisions: Boiler 7 is subject to the applicable portions of Subpart Db of the New Source Performance Standards in 40 CFR 60. A summary of the NSPS Subpart Db requirements is provided in Appendix Db. [40 CFR 60, Subpart Db; Rule 62-204.800, F.A.C.]

SECTION 4. APPENDICES

CONTENTS

- Appendix ASP. Alternate Sampling Procedure for Opacity, Boiler 7
- Appendix CF. Citation Format
- Appendix Db. NSPS Subpart Db Requirements for Boiler 7
- Appendix GC. General Conditions
- Appendix SC. Standard Conditions

SECTION 4. APPENDIX ASP

ALTERNATE SAMPLING PROCEDURE FOR OPACITY, BOILER 7

In accordance with Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996, the following conditions are specified in lieu of the requirement for continuous opacity monitoring.

1. Visible Emissions: In lieu of continuous opacity monitoring, the permittee may use the following procedure in order to determine the opacity of emissions when Boiler No. 7 burns No. 2 fuel oil:
 - a. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test once per daylight shift during the period that the highest oil firing rate occurs;
 - b. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test when the boiler achieves the normal operational load after a cold boiler startup with No. 2 fuel oil;
 - c. Required observations shall be made in accordance with the provisions of EPA Reference Method 9;
 - d. The observer shall maintain a log, which includes all of the information required by EPA Reference Method 9 for each set of observations and the quantity of No. 2 fuel oil being burned at the time of the observations;
 - e. A copy of the observation log shall be submitted to the South District Office of the Department once per calendar quarter if distillate oil was fired during that quarter. Information regarding fuel usage and fuel analysis shall also be submitted to the South district Office on a quarterly basis to verify that the 10 percent annual capacity factor limit is not exceeded;
 - f. The permittee shall follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained, and;
 - g. Permittee shall install and operate a continuous opacity monitor if either the annual capacity factor limit of 10 percent for combustion of No. 2 fuel oil is exceeded, or the applicable visible emission limiting standard in 40 CFR 60.43(f) is not regularly complied with when Boiler No. 7 is operated on No. 2 fuel oil.

[Rules 62-297.401(9), 62-212.400(5), F.A.C., 62-212.400(6), F.A.C., Construction Permit AC26-238006/BACT/PSD-FL-208 dated January 31, 1995, and ASP No. 95-B-01; Administrative Order dated April 1, 1996]

2. COMS: The Department reserves the right to require the permittee to install and operate a continuous opacity monitor pursuant to 40 CFR 60.48b(a), if after investigation, if it is believed that a continuous opacity monitoring system is necessary to more accurately assess the compliance status of the affected source.

[Permit No. PSD-FL-208 dated January 31, 1995; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

SECTION 4. APPENDIX CF
CITATION FORMAT

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX Db
NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

Boiler 7 (EU 014) is subject to all applicable portions of the federal New Source Performance Standards specified in Subpart Db of 40 CFR 60. The following is a summary of these requirements supplemented with Department notes.

60.40b Applicability and Delegation of Authority

- (a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).
- (j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

60.41b Definitions

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydro-desulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (incorporated by reference - see §60.17).

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m³ (70,000 Btu/hour-ft³).

Low heat release rate means a heat release rate of 730,000 J/sec-m³ (70,000 Btu/hour-ft³) or less.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Potential sulfur dioxide emission rate means the theoretical sulfur dioxide emissions (ng/J, lb/million Btu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any

SECTION 4. APPENDIX Db

NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 0.5 lb/million BTU heat input.

60.42b Standard for Sulfur Dioxide

- (j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (2) maintaining fuel receipts as described in §60.49b(r).

{Permitting Note: The permit limits distillate oil for Boiler 7 to $\leq 0.05\%$ sulfur by weight and requires the permittee to maintain fuel receipts.}

60.43b Standard for Particulate Matter

- (b) On and after the date on which the performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce sulfur dioxide emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 0.10 lb/million Btu heat input.

{Permitting Note: The particulate matter standard for oil does not apply because Boiler 7 does not use "conventional technology" or "emerging technology" to reduce sulfur dioxide emissions as defined in the Subpart.}

- (f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

{Permitting Note: The permit includes an equivalent limit for oil firing.}

60.44b Standard for Nitrogen Oxides

- (l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility which commenced construction, modification, or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas.

{Permitting Note: The permit contains enforceable conditions for Boiler 7 limiting the annual capacity factor for firing distillate oil to less than 10%.}

60.45b Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

- (j) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.46b Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides

- (a) The opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction.

SECTION 4. APPENDIX Db

NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

(d) To determine compliance with the opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8 using the following procedures and reference methods:

(7) Method 9 is used for determining the opacity of stack emissions.

{Permitting Note: The permit conditions are consistent with these requirements.}

60.47b Emission Monitoring for Sulfur Dioxide

(f) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.48b Emission Monitoring for Particulate Matter and Nitrogen Oxides

(a) The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

{Permitting Note: In lieu of continuous opacity monitoring, an Alternate Sampling Procedure (ASP) was previously approved after construction of Boiler 7. The ASP is specified in the permit.}

60.49b Reporting and Recordkeeping Requirements

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §60.42b, §60.43b, and §60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B.

(f) For facilities subject to the opacity standard under §60.43b, the owner or operator shall maintain records of opacity.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.

(1) Any affected facility subject to the opacity standards under §60.43b(e) or to the operating parameter monitoring requirements under §60.13(i)(1).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under §60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Quarterly reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the preceding quarter.

{Permitting Note: In lieu of continuous opacity monitoring, an Alternate Sampling Procedure (ASP) was previously approved after construction of Boiler 7. The ASP is specified in the permit.}

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

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GENERAL CONDITIONS

Statutes. 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 Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (X).
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 SC
STANDARD CONDITIONS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities.}

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(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 or organic solvents 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. [Rule 62-296.320(2), 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 percent opacity. [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.]

TESTING REQUIREMENTS

10. **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.]

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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. [Rule 62-297.310(2), F.A.C.]
12. 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.]
13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
- a. *Required Sampling Time*. 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - 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.
- [Rule 62-297.310(4), F.A.C.]
14. 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.]
15. 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.
16. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]
17. 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. [Rule 62-297.310(7)(b), F.A.C.]
18. Test Reports: 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. 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. The test report shall provide

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

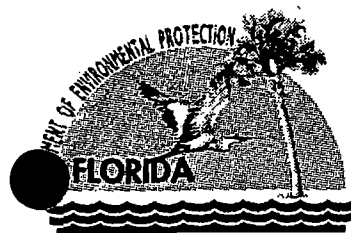
sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- a. The type, location, and designation of the emissions unit tested.
- b. The facility at which the emissions unit is located.
- c. The owner or operator of the emissions unit.
- d. 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.
- e. 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.
- f. 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.
- g. 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.
- h. The date, starting time and duration of each sampling run.
- i. 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.
- j. The number of points sampled and configuration and location of the sampling plane.
- k. 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.
- l. The type, manufacturer and configuration of the sampling equipment used.
- m. Data related to the required calibration of the test equipment.
- n. Data on the identification, processing and weights of all filters used.
- o. Data on the types and amounts of any chemical solutions used.
- p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- q. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- r. All measured and calculated data required to be determined by each applicable test procedure for each run.
- s. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- t. 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.
- u. 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.]

RECORDS AND REPORTS

19. **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 five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. **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(2), F.A.C.]



Department of Environmental Protection

MAY 21 2001

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

May 15, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

William A. Raiola, Vice President
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Minor Revisions
Air Permit No. PSD-FL-272A
Boiler No. 4/Refinery Expansion
Palm Beach County, Florida

Re: U.S. Sugar's Clewiston Sugar Mill and Refinery
Boiler No. 4 and Refinery Expansion
Minor Revisions to Air Permit No. PSD-FL-272A

Dear Mr. Raiola:

On April 26, 2001, the Department received a request from Golder Associates on behalf of U.S. Sugar to make minor revisions to Air Permit No. PSD-FL-272A for boiler No. 4 at the Clewiston sugar mill and refinery. The Department disagrees that it is burdensome and impractical to sample and analyze the fuel oil for sulfur content prior to off-season operation. This condition was not changed. In response to the request, the Department corrected a typographical error on page 10 of the permit and made minor revisions to Appendix GCP regarding the startup and shutdown procedures. These revisions are considered minor and no public notice is required. The revisions are attached and can be inserted directly into the original permit.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.)

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the

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course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

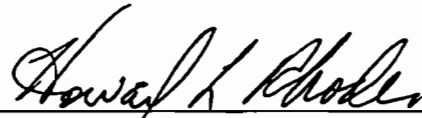
Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing

of a petition or a request for extension of time, this action will not be effective until further order of the Department.

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

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5/18/01 to the person(s) listed:

Mr. William A. Raiola, USSC*
Mr. Dave Buff, Golder Associates ✓
Mr. Ron Blackburn, SD

Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlotte J. Hayes
(Clerk)

5/18/01
(Date)

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

A. EU 009 - Boiler No. 4

- a. **Startup and Shutdown:** The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation.
- b. **Steam Parameters:** The steam pressure (psig), steam temperature (°F), and steam production rate (pounds per hour) shall be continuously recorded with a chart recorder. *{Revised May 2001}*
- c. **Combustion Parameters:** The permittee shall record the oxygen and carbon monoxide contents of flue gas once normal operation is established after startup and at least once per hour of operation. Alternatively, the permittee may install an automated device to record these parameters.
- d. **Wet Scrubber Parameters:** The permittee shall record the following information once normal operation is established after startup and at least once every 3 hours: pressure drop across wet scrubber (inches of water column), scrubber spray nozzle pressure (psi), wet scrubber liquid flow rate (gpm). Alternatively, the permittee may install an automated device to record these parameters.
- e. **Oil Firing:** The permittee shall record the oil-firing rate (gallons) for each 3-hour block of operation. In addition, the permittee shall calculate and record the oil-firing rate (gallons) for each 24-hour block of operation. Oil firing rates may be observed and recorded by hand or automated monitoring equipment.
- f. **Oil Delivery:** For each fuel oil delivery, the permittee shall record and retain the following: the date, the gallons of fuel delivered, and a fuel oil analysis (including the heat content in mMBTU per gallon, the density in pounds per gallon, the sulfur content in percent by weight, and the name of the test method used). A certified analysis supplied by the fuel oil vendor is acceptable.
- g. **Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate, and maintain all monitoring equipment including steam flow meters, steam integrators, strip chart recorders, pressure gages, manometers, scrubber water flow meters, fuel oil flow meters, and all other monitoring devices used to demonstrate compliance with the conditions of this permit. Each device shall be calibrated at least annually. All calibrations and repairs shall be recorded as part of the Daily Operational Records.
- h. **Daily Summary:** For each day of operation, the permittee shall calculate and record the following by the end of the next workday.
 - Hours of operation for the day
 - Steam production rate: pounds per day and pounds per hour (daily average)
 - Heat input: mMBTU per day and mMBTU per hour (daily average)
 - Total oil fired for Boiler No. 4: gallons per day (as determined by data collected from the oil flow meter)

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

23. **Monthly Operations Summary:** To demonstrate compliance with the performance requirements of this permit, the permittee shall calculate and record the following within 10 calendar days of the end of the month.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

GOOD COMBUSTION PRACTICES

The following procedures are based upon U.S. Sugar's most recent submittal received by the Department in January of 2001.

Purpose of GCP Plan

The determination of Best Available Control Technology for CO, NO_x, and VOC emissions from Boiler No. 4 (EU-009) relied on "good combustion practices". The purpose of this document is to summarize the operational, maintenance, and monitoring procedures that will lead to the minimization of CO and VOC emissions and the optimization of NO_x emissions, consistent with good combustion practices.

Preparation for Operations

1. Prior to each harvest season, the boiler proper, its air ductwork, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Prior to each harvest season, all instruments for boiler operation and control (including oxygen and carbon monoxide process monitors) are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

Boiler Operation and Controls

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NO_x. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO and VOC Controls

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.
2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.

3. Process monitors will be installed to monitor the oxygen (O₂) content and the carbon monoxide (CO) content of the boiler flue gas. The instrument readouts will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the O₂ and CO flue gas process monitors for combustion control and to ensure sufficient excess air levels. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The oxygen process monitor will include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor will include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor will display both the instantaneous and the 1-hour block average. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions may include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator will summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained.

NO_x Controls

NO_x emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, the application of GCP to minimize CO and VOC emissions may result in increased NO_x emissions. This is because factors that promote good combustion and result in lower CO and VOC emissions (such as higher excess air and higher combustion temperatures) typically result in higher NO_x emissions. This is the nature of the combustion process for these boilers. Therefore, GCP to optimize NO_x emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

Miscellaneous

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule: Fans, pumps, casing, ducting, and scrubber.
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)

STARTUP AND SHUTDOWN PROCEDURES (Revised May 2001)

U.S. Sugar submitted the following procedures in April of 2001 to supplement the original PSD application for this project.

During startup and shutdown of the boilers, excess CO, PM, NO_x, and VOC emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions shall be taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 4. The boiler room foreman and operating personnel shall receive proper training on emissions control procedures at least once per year.

Cold Startup

1. Turn on water valves to scrubber spray nozzles to start scrubber.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

2. Feed solid fuel into boiler combustion chamber.
3. Start fire in combustion chamber using a propane torch designed for that purpose.
4. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
5. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust, if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first. As the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil flow until burners can be turned off.
7. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.
8. A cold startup is a startup after the boiler has been down for more than 4 or 5 hours. Typically, a cold startup will require 6 to 12 hours from the first fire to normal working pressure. There may be 10 cold startups per crop season (more or less) depending on excessive rain and mechanical breakdowns.

Hot Startup

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner. Continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.
7. A warm startup is a startup after the boiler has been down for less than 5 hours. Usually, the longer the boiler is down means a longer period will be needed for warm startup. Typically, a warm startup requires 1 to 5 hours depending on boiler operating conditions. There may be 5 cold startups per crop season (more or less) depending on mechanical breakdowns mill interruptions.

Shutdown

1. Stop fuel flow to the boiler. Reduce the forced draft, distributor air, overfire air, and induced forced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. The scrubber is turned off after the fire in the boiler is extinguished.

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT**

In the Matter of an
Application for Permit by:

William A. Raiola, Vice President
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-010-AC
PSD Permit No. PSD-FL-272A
Boiler No. 4 and Refinery Expansion
Palm Beach County, Florida

Enclosed is Final Permit No. 0510003-010-AC (PSD-FL-272A). This permit authorizes U.S. Sugar Corporation to complete the installation of emissions units associated with refinery operation and finalizes the changes related to the Boiler No. 4 and refinery expansion. As noted in the Final Determination (attached), minor changes to the draft permit were made by the Department, mostly at the request of the applicant. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

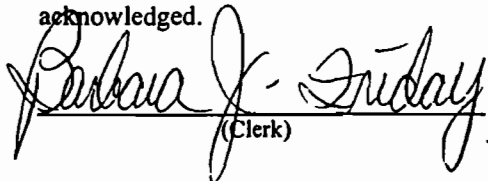
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3/8/01 to the person(s) listed:

Mr. William A. Raiola, USSC*
Mr. Dave Buff, Golder Associates ✓
Mr. Phil Barbaccia, South District Office – DEP

Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 Barbara J. Friday 3/8/01
(Clerk) (Date)

MAR 12 2001

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Permit package on October 27, 2000 that modified operation of several Clewiston sugar mill boilers located at W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on December 27, 2000 and the Department received proof of publication on January 4, 2001. During the 30-day comment period, the Department received comments only from the applicant. The following summarizes the Department's response to each comment and any resulting revision.

APPLICANT'S COMMENTS AND REQUESTS

The Department received written comments from the applicant on November 15, 2000 and January 30, 2001 requesting minor changes. Responses and revisions are summarized below.

Cover Letter and Placard Page

Request: The applicant notes that Mr. Brinson has retired from U. S. Sugar and that Mr. William A. Raiola, Vice President, is now the authorized representative for the Clewiston mill. *Response:* The permit will be revised. ✓

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Request: 3. The applicant requests insertion of the word "net" after 1160 BTU in Footnote "b" of the table to clarify that this is the net BTU difference between the steam enthalpy and the feedwater enthalpy. *Response:* The clarification will be added. ✓

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Request: 6. The applicant requests changing the word "the" to "a" to clarify that a tank different than the tank currently used could be utilized in the future. *Response:* The clarification will be added. ✓

Request: 8. c. The applicant originally requested a lower scrubber flow rate based on previous compliance tests. The January 30th submittal withdrew this request. *Response:* No response required. ✓

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Request: 15. In accordance with a recent Consent Order with the South District Office, the applicant requested a permit revision that required additional VOC testing and perhaps a new VOC limit based on the testing and application of good combustion practices. *Response:* The Consent Order is a stand-alone agreement. The applicant may request revised emissions standards based on additional testing as a permit modification. It would not be sufficient to simply demonstrate that a unit can no longer comply with permitted emissions standards. A test report was received during the processing of this Final Permit indicating that the unit is capable of complying with the current VOC standards. No revision made.

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Request: 17. and 18. The applicant notes that many of the PSD permit conditions have already been met, such as testing. *Response:* The Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new "initial" tests are required as a result of this action. No revision was necessary. ok

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Request: 4. The applicant requested additional clarification to avoid burdensome record keeping and the deletion of steam production limits for Boiler Nos. 4 and 7 because they repetitive. *Response:* The Department ✓

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

added the following statement to clarify, “The steam production chart records are sufficient to demonstrate compliance with these requirements.” The limits will be retained because they specify critical parameters for the Air Quality Analysis, which was the basis of this permit modification.

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Request: 5. The applicant requested additional wording that would allow fuel oil with sulfur content of greater than 1.6%, if SO₂ testing when burning fuel oil demonstrates equivalent SO₂ emissions (due to removal of SO₂ in the boiler/scrubber system when burning fuel oil). The applicant also requests deletion of the fuel sulfur limits for Boiler Nos. 4 and 7 because they are repetitious and unnecessary. *Response:* At the appropriate time, the applicant may request changes to specific permit conditions through the modification process. The limits will be retained because they specify critical parameters for the Air Quality Analysis. No revision made.

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Request: 7.b(1). The applicant initially requested deletion of this condition. The January 30th submittal requested the wording be changed to, “Operation of Boiler No. 7 shall be operated to the greatest extent possible during the off-season, taking into account operating efficiency, steam demands, and boiler availability due to maintenance.” *Response:* Unlike the existing sugar mill boilers, Boiler No. 7 was originally permitted to provide steam to the new refinery during the off-season. U.S. Sugar performed an Air Quality Analysis to demonstrate that operation of existing mill boilers during the off-season as backup units to Boiler No. 7 would not have any adverse impacts. To satisfy modeling requirements, the applicant requested a lower sulfur limit on fuel oil for the off-season and a cap on steam production rates. For these reasons, Condition 7.b(1) was included. To satisfy the applicant’s concerns (as agreed), the Department will clarify this condition to read, “During the off-season, Boiler No. 7 shall be operated as the primary unit to meet the steam demands of the refinery. As restricted by the conditions of this permit, other mill boilers may serve as backup units when Boiler No. 7 is down for maintenance, repair or during periods of unusually low steam demand.” ✓

Request: 10.a. The applicant expressed concern over calculating the “24-hour average” steam production rate based on actual hours rather than 24-hours. *Response:* The intent of this condition is to demonstrate compliance with Condition No. 7 of the same section. To clarify, the condition will be revised to, “For each 24-hour block of operation, the permittee shall record the total steam production rates (pounds, each) for Boiler Nos. 4 and 7 to demonstrate compliance with Condition No. 7 of this section. ~~The permittee shall calculate and record the 24-hour average steam production rate for these units based on the actual operating hours during the 24-hour period.~~” ✓

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Request: 11. The applicant requests that this condition be clarified with the following change, “From this data, the permittee shall calculate and record the **combined** oil firing rates (gallons) for each 3-hour and each 24-hour block of ~~combined~~ operation for Boiler Nos. 1 – 4.” *Response:* Clarification will be added.

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Request: 1,2. The applicant requests the condition to specifically identify that Subpart Kb applies only to EUs 024 and 026. *Response:* The Department will include the following sentence, “The following conditions apply to EUs 024 and 026.” ✓

Request: 5. The applicant requests replacement of the word “facility” with the word “tank” at the end of this condition. *Response:* Permit will be revised. ✓

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

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Request: 5. The applicant requests that the last four sentences of this condition (related to operations outside the specified range) be added to Condition No. 4 for the afterburner temperature of the GCRF. *Response:* The afterburner temperature is a “set” condition for the control equipment. The permit condition addresses short periods of operation below this level. This was not part of the modification under review. No revision made. ?

Request: 9. The applicant notes that certain conditions for the GCRF (such as testing) have already been met. *Response:* Again, the Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new “initial” tests are required as a result of this action. No revision made. ✓

Request: 11. The applicant requests rewording this condition to reflect the actual rule language, which describes production rates during compliance testing and provisions if testing is not performed within 90% of maximum. *Response:* Section III.G. of the permit does include the applicable rule language. The condition is clarifying that testing should be performed within 90% of the production capacity of the GCRF. No revision made. OK

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Request: The applicant notes that construction has been delayed for the three sugar silos (S-14, S-14, and S-15) and the powdered sugar/starch bins (S-16). All emissions units are small controlled sources of particulate matter totaling 1.33 TPY. A two-year extension is requested. *Response:* The Department specified an expiration date of December 31, 2002 to allow for the delayed construction. The project description was also revised to reflect remaining construction activities. ✓

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Request: 6. The applicant notes that certain conditions for the particulate matter sources (such as testing) have already been met. *Response:* Again, the Department notes the comment and is simply providing a full revision so that the PSD permit will be up-to-date. It is recognized that many of the requirements may have been completed. For example, no new “initial” tests are required as a result of this action. No revision made. ok

OTHER CHANGES MADE BY THE DEPARTMENT

Page 1 of 25

During the processing of the Final Permit for this project, the applicant noted that vacuum pan No. 7 remained under construction. The original air construction permit issued in 1996 has an expiration date of October 25, 2001. Although vacuum pan No. 7 was purchased and received in 1997, it was not immediately installed due to a change in sugar market conditions. The applicant now intends to install this equipment and requests that this activity be clarified in the permit. Other than small amounts of isopropyl alcohol, no emissions are directly associated with this unit. The Department included installation of vacuum pan No. 7 in the project description on Page 1 with the remaining construction activities.

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During the processing of the Final Permit for this project, the applicant submitted CO and VOC test data, which was required by original Permit No. PSD-FL-272. Based on the test data and the applicant’s proposal, the Department is required to reopen the PSD permit and establish process parameters for the flue gas oxygen content and CO concentration. The Department and applicant agreed to include such parameters into this final permit. On page 7, Specific Condition No. 9 was revised to include an alarm set point of 1.5% for the flue gas

FINAL DETERMINATION

United States Sugar Corporation – Clewiston Sugar Mill (PSD-FL-272A)

oxygen content and 3000 ppm for the flue gas CO concentration, both based on a 1-hour block average. Minor revisions were also made to Appendix GCP (Good Combustion Practices).

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Section III.C., Description for Emissions Unit 025: Based on the latest response by the applicant, the Department corrected the volume of the storage tank serving Boiler Nos. 1-3 from 600,000 gallons to 400,000 gallons.

CONCLUSION

The Department considers the revisions to be minor. The final action of the Department is to issue the permit with the changes described above.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:
William A. Raiola, Vice President

Permit No.	0510003-010-AC
PSD No.	PSD-FL-272A
Project:	Boiler No 4 and Refinery Expansion, Revised
SIC No.	2061, 2062
Expires:	December 31, 2002

PROJECT AND LOCATION

This permit authorizes the United States Sugar Corporation to modify operations at its existing sugar mill and refinery. Specifically, the permit allows increased operation of Boiler No. 4 and the existing refinery operation. The only new construction authorized by this permit the installation of three new sugar conditioning silos (emissions points S-14, S-14, and S-15 of EU 019), the installation of additional powdered sugar/starch silos (emissions point S-16 of EU-020), and the installation of vacuum pan No. 7. The revised permit includes new conditions that reflect the air quality analysis based on the ISC PRIME model.

This facility is located at W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The UTM coordinates are Zone 17, 506.1 km E, and 2956.9 km N.

STATEMENT OF BASIS

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct and modify the emissions units 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).

APPENDICES

The attached appendices are a part of this permit:

Appendix A	Terminology
Appendix BD	Summary of Previous BACT Determination
Appendix GC	General Permit Conditions
Appendix GCP	Good Combustion Practices Plan


Howard L. Rhodes, Director
Division of Air Resources Management

Date: 3/7/01

"More Protection, Less Process"

Printed on recycled paper.

**PSD AIR CONSTRUCTION PERMIT
SECTION I. FACILITY INFORMATION**

FACILITY DESCRIPTION

This facility consists of an existing sugar mill and refinery. Sugarcane is harvested from nearby fields and transported to the mill by train or truck. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze the juice from the cane. The cane 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. The primary air pollution sources in the mill are the bagasse/oil-fired Boilers Nos. 1 through 4 with wet scrubbers for particulate matter control and the bagasse/oil-fired Boiler No. 7 with an electrostatic precipitator to control particulate matter. Air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with duct collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

PROJECT DETAILS

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	Bagasse Boiler No. 1 with wet scrubber (255,000 pounds of steam per hour)
002	Bagasse Boiler No. 2 with wet scrubber (230,000 pounds of steam per hour)
003	Bagasse Boiler No. 3 with wet scrubber (130,000 pounds of steam per hour)
004	Bagasse Boiler No. 5 (inactive, permanently shut down)
005	Bagasse Boiler No. 6 (inactive, permanently shut down)
009	Bagasse Boiler No. 4 with wet scrubber (300,000 pounds of steam per hour)
014	Bagasse Boiler No. 7 with electrostatic precipitator (385,000 pounds of steam per hour)
015	VHP sugar dryer with baghouse
016	White sugar dryer with baghouse
017	Granular carbon regenerative furnace with afterburner and wet scrubber
018	Three vacuum pickup systems, each controlled with a baghouse
019	Six conditioning silos, each controlled with a baghouse
020	Screening/distribution and sugar/starch bins each controlled with baghouses
021	Alcohol emissions
022	Packaging dust collector
* 023	Two propane-fired sock dryers
024	NSPS fuel storage tank for Boiler No. 4
025	Common fuel storage tank for Boiler Nos. 1 - 3
026	NSPS fuel storage tank for Boiler No. 7

Project No. 0510003-009-AC (Permit No. PSD-FL-272): For the original project, net emissions increases of CO, NOx, PM/PM10, SAM, SO2, and VOC were significant and the permit established emissions standards for these pollutants based on the Best Available Control Technology. Permit issuance was based on an Air Quality Analysis with ISCST3 modeling, increased stack heights for Boiler Nos. 1 – 3, and lower sulfur contents for Boiler Nos. 1 – 3. However, the permit allowed the facility to regain the higher sulfur content oil for use in Boiler Nos. 1 – 3 if a revised Air Quality Analysis demonstrated compliance with the AAQS and PSD increments.

Project No. 0510003-010-AC (Permit No. PSD-FL-272A): The permittee raised the stacks of Boiler Nos. 1-3 to 213 feet. A revised Air Quality Analysis based on the ISC PRIME model resolved potential adverse ambient

**PSD AIR CONSTRUCTION PERMIT
SECTION I. FACILITY INFORMATION**

impacts and demonstrated compliance with the AAQS and PSD increments. This model was able to evaluate ambient impact contributions resulting from downwash from each stack. EPA Region 4 approved the non-guideline model for use with this project. Although Boiler Nos. 1 - 3 regain the use of fuel oil containing no more than 2.5% sulfur by weight, additional constraints were used in the analysis, which are included as conditions in this permit.

REGULATORY CLASSIFICATION

HAPs: Based on the most recent information for bagasse-fired boilers, this facility is a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is not subject to the acid rain provisions of the Clean Air Act (Title IV).

Title V Major Source: This facility is a Title V major source of air pollution because potential emissions of at least one regulated criteria air pollutant, such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), or volatile organic compounds (VOC) exceeds 100 tons per year.

PSD Major Source: This facility is a PSD major source of air pollution because potential emissions are greater than 250 tons per year for at least one criteria pollutant, in accordance with Rule 62-212.400, Prevention of Significant Deterioration (PSD) of Air Quality. Therefore, each modification to this facility resulting in emissions increases greater than the Significant Emissions Rates specified in Table 62-212.400-2 also requires a PSD review and Best Available Control Technology (BACT) determination.

NSPS Sources: Fuel oil storage tanks (Emissions Unit Nos. 024 and 026) are subject to regulation under the New Source Performance Standards of 40 CFR 60, Subpart Kb.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit and are on file with the Department. They are specifically related to this permitting action.

- EPA Region 4's approval on November 4, 1999 of the ISC Prime model for use with this project.
- Initial permit application received June 25, 1999, associated correspondence to make complete, and final permit issued on November 22, 1999.
- Permit application for revision received January 6, 2000 and associated correspondence to make complete.

PSD AIR CONSTRUCTION PERMIT
SECTION II. ADMINISTRATIVE PERMITTING REQUIREMENTS

1. **Permitting Authorities:** All documents related to applications for permits to construct or modify emissions units requiring a PSD applicability review and determination of BACT shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number 850/488-0114. Minor modifications and Title V operating permit applications shall be submitted to the South District Office, Florida Department of Environmental Protection at 2295 Victoria Avenue, Suite 364 in Fort Myers, Florida 33902-2549 and phone number (941) 332-6975.
2. **Compliance Authorities:** All documents related to reports, tests, and notifications shall be submitted to the South District Office, Florida Department of Environmental Protection at 2295 Victoria Avenue, Suite 364 in Fort Myers, Florida 33902-2549 and phone number (941) 332-6975.
3. **Terminology:** The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. *Appendix A* lists frequently used abbreviations and explains the format used to cite rules and regulations referenced in this permit.
4. **General Conditions:** The permittee is subject to and shall operate under the attached General Conditions listed in *Appendix GC* of this permit. General conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
5. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.). The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. **New or Additional Conditions:** Pursuant to Rule 62-4.080, F.A.C., 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.]
7. **Expiration:** For good cause, the permittee may request that this construction permit be extended. Such a request shall be submitted at least 60 days before the expiration of the permit to the Department's Bureau of Air Regulation. [Rules 62-210.300(1), 62-4.080, and 62-4.210, F.A.C.]
8. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit must be obtained prior to the beginning of construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
9. **Operation Permit Required:** This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. In accordance with Chapter 62-213, F.A.C, the permittee shall apply for a Title V operation permit on the appropriate application form with compliance test results and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting and Compliance Authorities. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

A. EU 009 - Boiler No. 4

This portion of the permit addresses the following emissions unit.

EU No.	Emissions Unit Description
009	<p>Boiler No. 4: A traveling grate boiler manufactured by Foster Wheeler capable of producing a maximum of 300,000 pounds of steam per hour at 750° F and 600 psig. The unit has two burners with two oil guns each and the following restricted maximum heat inputs:</p> <p><i>Bagasse Firing:</i> 633 mmBTU per hour (This is equivalent to producing 300,000 pounds of steam per hour when firing 88 tons of wet bagasse per hour, assuming a heat content of 3600 BTU per pound of wet bagasse. Typically wet bagasse contains 50-55% moisture and less than 0.1% sulfur by weight.)</p> <p><i>Bagasse With Maximum Oil Firing:</i> 530 mmBTU per hour (This is 225 mmBTU per hour from firing a maximum of 1500 gallons of oil per hour and 305 mmBTU per hour from firing 42.4 tons of wet bagasse to produce 300,000 pounds of steam per hour.)</p> <p>Particulate matter emissions are controlled by a Type D, Size 200 Joy Turbulaire wet impingement scrubber. A nominal 250 to 500 gallons per minute of water is supplied to the spray nozzles at approximately 50 psig. The differential pressure drop across the wet scrubber is maintained between 8 and 11 inches of water column. Exhaust gases exit the wet scrubber at an average flow rate of 281,000 ACFM at 160° F. The stack is 150 feet high (GEP stack height is 225 feet high).</p>

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

- BACT Determinations:** Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfuric acid mist (SAM), sulfur dioxide (SO2), and volatile organic compounds (VOC). In addition, this emissions unit is subject to Rule 62-296.410, F.A.C. which regulates visible emissions and particulate matter emissions from carbonaceous fuel fired equipment.

PERFORMANCE RESTRICTIONS

- Hours of Operation:** The hours of operation for this unit are not restricted (8,760 hours per year). [Rule 62-210.200, F.A.C., Definitions - PTE]
- Permitted Capacity:** Steam production, heat input, and bagasse firing shall not exceed the following limits.

Averaging Period	Steam Pressure ^a	Steam Temperature ^a	Steam Production (lb / hour)	Heat Input ^b (mmBTU / hour)	Wet Bagasse Firing ^b (tons / hour)
1-hour	600 psig	750° F	300,000	633	88
24-hour	600 psig	750° F	285,000	600	83

^a Steam temperature and pressure are design parameters. Changes to these parameters resulting from boiler aging or modification shall be reported to the Department and may require a permit modification.

^b Based on: 55% thermal efficiency of the boiler when firing bagasse; wet bagasse containing 55% moisture and a heat content of 3600 BTU/lb; and 1160 BTU (net) per pound of steam at 600 psig and 750° F with standard feed water conditions of 900 psig and 250° F. ✓

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

A. EU 009 - Boiler No. 4

No more than 400,000 tons of bagasse shall be fired during any consecutive 12 months. In addition, the total heat input to this boiler shall not exceed 2,880,000 mmBTU during any consecutive 12 months. Compliance with the steam limits shall be determined by continuous monitoring of the steam temperature, steam pressure, and steam production rate. The heat input and bagasse consumption limits shall be calculated and recorded in accordance with the record keeping requirements of this permit. [Rule 62-210.200, F.A.C., Definitions - PTE]

4. **Operating Procedures:** The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all boiler operators and supervisors shall be properly trained to operate and maintain the bagasse boiler and pollution control equipment in accordance with the guidelines and procedures established by each equipment manufacturer. The training shall include all "Good Combustion Practices" including those specified in *Appendix GCP* of this permit. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400 (BACT), F.A.C.]
5. **Startup/Shutdown:** During startup and shutdown of this boiler, the operators shall take all reasonable precautions to prevent and minimize the magnitude and duration of any excess emissions. *Appendix GCP* identifies the Good Combustion Practices for this boiler including the permittee's current startup and shutdown procedure. [Rule 62-210.700(1), F.A.C.]
6. **Fuel Oil:** Any fuel oil fired in Boiler No. 4 shall be No. 6 fuel oil (or a superior grade) containing no more than 0.70% sulfur by weight from a dedicated storage tank. The sulfur content of the fuel shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. Boiler No. 4 shall fire no more than 1500 gallons in any hour and no more than 500,000 gallons in any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. Compliance with these limits shall be determined by the monitoring and record keeping requirements of this permit. [Applicant Request, Rule 62-210.200 (Definitions - PTE) and Rule 62-212.400 (BACT), F.A.C.]
7. **Common Conditions:** See Section III.B., "Common Conditions for Boiler Nos. 1 - 7" for other performance restrictions.

CONTROL EQUIPMENT AND TECHNIQUES

8. **Wet Scrubber:** To control emissions of particulate matter, the permittee shall install, operate, and maintain a Type D, Size 200 Joy Turbulaire wet impingement scrubber. To ensure the annular throttling gap is being properly maintained, this system shall provide constant make-up water overflow to the scrubber as indicated by the weir box. The wet scrubber shall also be equipped with the following monitoring equipment.
 - a. A **manometer** (or equivalent) shall be installed to measure the scrubber pressure drop in inches of water column. The pressure drop across the scrubber shall be maintained between 8 and 11 inches of water column.
 - b. A **pressure gage** shall be installed to monitor the water supply pressure to the scrubber nozzles. This pressure shall be maintained between 40 and 55 psi.
 - c. A **flow meter** shall be installed to measure the water flow rate to the scrubber spray nozzles. This flow rate shall be maintained above 375 gallons per minute, based on a 3-hour block average.

The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations. The permittee shall read and record each scrubber parameter once

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

A. EU 009 - Boiler No. 4

normal operations have been established after startup and at least once every 3 hours. Should any monitored parameter fall outside the specified operating range, the permittee shall investigate the cause and take corrective action to regain operation within the specified range. In addition, the permittee shall begin reading and recording all monitored parameters at 30-minute intervals until successive readings indicate operation within the specified range. The permittee may elect to install an automated recorder to satisfy the recording requirements. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400 (BACT), F.A.C.]

9. **Good Combustion Practices:** The boiler operator shall use the Good Combustion Practices (GCPs) defined in *Appendix GCP* to minimize emissions of CO, NO_x, PM/PM₁₀ and VOC from this boiler. As a critical part of the GCPs, the permittee shall install, calibrate, operate, and maintain process monitors to indicate the oxygen and carbon monoxide content of the exhaust flue gas in the boiler furnace. The oxygen process monitor shall include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. It shall display both the instantaneous and the 1-hour block average of the flue gas oxygen content (in percent oxygen). The CO process monitor shall include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. It shall display both the instantaneous and the 1-hour block average of the flue gas CO concentration (in ppm). Readouts of these process monitors shall be provided in the boiler control room. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator shall summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained. It is noted that the monitored flue gas carbon monoxide content is for the purpose of determining efficient combustion and may not be representative of the actual CO emissions from the stack. Operation outside of the specified operating range for either monitored parameter is not a violation of this permit, in and of itself. However, continued or frequent operation outside of the specified operating range for either monitored parameter without corrective action may be considered circumvention of "good combustion practices". [Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.]

EMISSION LIMITING STANDARDS

10. **CO Standard:** Carbon monoxide emissions shall not exceed 6.5 pounds per mmBTU of total heat input based on a 3-hour test average as determined by EPA Method 10. Emissions performance testing for CO and NO_x shall be conducted concurrently. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
11. **NO_x Standard:** Nitrogen oxide emissions shall not exceed 0.20 pounds per mmBTU of heat input from bagasse firing based on a 3-hour test average as determined by EPA Method 7 or 7E. Emissions performance testing for CO and NO_x shall be conducted concurrently. [Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
12. **PM/PM₁₀:** Particulate matter emissions shall not exceed 0.15 pounds per mmBTU of heat input from bagasse firing nor 0.10 pounds per mmBTU of heat input from oil firing based on a 3-run test average as

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- determined by EPA Method 5. Compliance when firing both fuels shall be determined by prorating the emissions standards based on the heat input from each fuel. [Applicant Request; Rules 62-296.410(2)(b)2. and 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
13. **Visible Emissions:** Visible emissions from the boiler stack shall not exceed 20% opacity except for one, 2-minute period per hour of up to 40% opacity as determined by DEP Method 9. [Applicant Request; Rules 62-296.410(2)(b)1. and 62-212.400 (BACT), F.A.C.]
 14. **SO₂ Standard:** Emissions of sulfur dioxide shall not exceed 0.06 pounds per mMBTU of heat input from bagasse firing based on a 3-run test average as determined by EPA Methods 6, 6C, or 8. This standard shall also serve as a surrogate for sulfuric acid mist (SAM) emissions, which are estimated to be 0.01 pounds per mMBTU of heat input from bagasse firing as determined by EPA Method 8. Emissions of SO₂ and SAM from fuel oil firing are limited by the sulfur content restrictions specified by this permit. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A]
 15. **VOC Standard:** Emissions of regulated volatile organic compounds shall not exceed 0.50 pounds (as propane) per mMBTU of total heat input based on a 3-run test average as determined by EPA Method 18 and EPA Method 25A, modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector. Total VOC emissions shall be determined by EPA Method 25A and reported in terms of pounds per mMBTU as propane. EPA Method 18 shall be used to determine emissions of methane and reported in terms of pounds per mMBTU as propane. Emissions of regulated VOC shall be defined as the difference between the total VOC emissions and methane emissions reported in terms of pounds per mMBTU as propane. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.; 40 CFR 60, Appendix A; and ASP No. 96-H-01]

PERFORMANCE TESTING REQUIREMENTS

16. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - a. **EPA Method 5**, "Determination of Particulate Emissions from Stationary Sources".
 - b. **EPA Method 6 or 6C**, "Determination of Sulfur Dioxide Emissions from Stationary Sources".
 - c. **EPA Method 7 or 7E**, "Determination of Nitrogen Oxide Emissions from Stationary Sources".
 - d. **EPA Method 8**, "Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources".
 - e. **DEP Method 9**, "Visual Determination of the Opacity of Emissions from Stationary Sources".
 - f. **EPA Method 10**, "Determination of Carbon Monoxide Emissions from Stationary Sources". All CO tests shall be conducted concurrently with NO_x emissions tests.
 - g. **EPA Methods 18 and 25A**, "Determination of Volatile Organic Concentrations". This method may be modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector.
 - h. **ASME Boiler Efficiency Short Form Method**, "Boiler Thermal Efficiency Test Method". (This test shall demonstrate, in part, adherence to the maintenance provisions of the Good Combustion Practices Plan.)

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During each SO₂ performance test, the permittee shall sample and analyze the bagasse fuel for sulfur content. The sulfur content shall be used to calculate the potential uncontrolled SO₂ emissions as well as the control efficiency during the test. This information shall be submitted in the test report.

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

17. **Initial Tests Required:** Initial compliance with the allowable emission standards specified in this permit shall be determined within 90 days after issuance of this final permit. Initial tests for each emission standard shall be conducted for CO, NO_x, PM/PM₁₀, SO₂, VOC, visible emissions, and the boiler thermal efficiency. In addition, an initial test shall be conducted for SAM to validate the emissions estimate. If initial SAM testing validates the estimated emissions, compliance for SAM shall be assumed as long as the boiler remains in compliance with the SO₂ standards. If initial SAM testing indicates higher emissions than estimated, the Department shall require additional testing. [Rule 62-297.310(7)(a)1., F.A.C.]
18. **Annual Performance Tests:** During each federal fiscal year (October 1st to September 30th), the permittee shall conduct annual performance tests for CO, NO_x, PM, VOC, and visible emissions to demonstrate compliance with the emissions standards specified in this permit. If the initial SO₂ performance test indicates SO₂ emissions are greater than 0.03 lb/mmBTU of heat input, the permittee shall conduct an annual performance test to demonstrate compliance with the SO₂ emissions standard. If the initial boiler thermal efficiency test, indicates an efficiency of less than 50%, the permittee shall conduct an annual test. [Rules 62-212.400 (BACT), 62-4.070(3), and 62-297.310(7)(a)4., F.A.C.]
19. **Tests Prior to Renewal:** During the federal fiscal year (October 1st to September 30th) prior to renewal of the air operation permit, the permittee shall conduct emissions performance tests for CO, NO_x, PM, SO₂, VOC, visible emissions and boiler thermal efficiency to demonstrate compliance with the emissions standards and conditions specified in this permit. If the boiler thermal efficiency test, indicates an efficiency of less than 50%, the permittee shall conduct annual tests. If maintenance and repair result in regaining a boiler thermal efficiency of 50% or more, testing may revert back to the federal fiscal year prior to renewal. [Rules 62-212.400 (BACT), 62-4.070(3), F.A.C.]
20. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the boiler or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]
21. **Monitoring of Test Parameters:** During any required test, the permittee shall monitor and record the scrubber pressure drop, the scrubber water supply line pressure, the scrubber water flow rate, the flue gas oxygen content, and the flue gas carbon monoxide content at 15 minute intervals. The permittee shall monitor and record the steam production rate, steam temperature, steam pressure, feed water flow rate, feed water temperature, feed water pressure, and oil flow rate and calculate and record the bagasse consumption rate and the heat input for each run. [Rule 62-297.310(5), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

22. **Daily Operational Records:** To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.

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A. EU 009 - Boiler No. 4

- a. **Startup and Shutdown:** The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation.
- b. **Steam Parameters:** The steam ^{pressure} temperature (psig), steam temperature (°F), and steam production rate (pounds per hour) shall be continuously recorded with a chart recorder.
- c. **Combustion Parameters:** The permittee shall record the oxygen and carbon monoxide contents of flue gas once normal operation is established after startup and at least once per hour of operation. Alternatively, the permittee may install an automated device to record these parameters.
- d. **Wet Scrubber Parameters:** The permittee shall record the following information once normal operation is established after startup and at least once every 3 hours: pressure drop across wet scrubber (inches of water column), scrubber spray nozzle pressure (psi), wet scrubber liquid flow rate (gpm). Alternatively, the permittee may install an automated device to record these parameters.
- e. **Oil Firing:** The permittee shall record the oil-firing rate (gallons) for each 3-hour block of operation. In addition, the permittee shall calculate and record the oil-firing rate (gallons) for each 24-hour block of operation. Oil firing rates may be observed and recorded by hand or automated monitoring equipment.
- f. **Oil Delivery:** For each fuel oil delivery, the permittee shall record and retain the following: the date, the gallons of fuel delivered, and a fuel oil analysis (including the heat content in mmBTU per gallon, the density in pounds per gallon, the sulfur content in percent by weight, and the name of the test method used). A certified analysis supplied by the fuel oil vendor is acceptable.
- g. **Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate, and maintain all monitoring equipment including steam flow meters, steam integrators, strip chart recorders, pressure gages, manometers, scrubber water flow meters, fuel oil flow meters, and all other monitoring devices used to demonstrate compliance with the conditions of this permit. Each device shall be calibrated at least annually. All calibrations and repairs shall be recorded as part of the Daily Operational Records.
- h. **Daily Summary:** For each day of operation, the permittee shall calculate and record the following by the end of the next workday.
 - Hours of operation for the day
 - Steam production rate: pounds per day and pounds per hour (daily average)
 - Heat input: mmBTU per day and mmBTU per hour (daily average)
 - Total oil fired for Boiler No. 4: gallons per day (as determined by data collected from the oil flow meter)

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

23. **Monthly Operations Summary:** To demonstrate compliance with the performance requirements of this permit, the permittee shall calculate and record the following within 10 calendar days of the end of the month.

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- Hours of operation for the month
- Steam production rate: pounds per month
- Heat input: mmBTU per month, mmBTU per consecutive 12 months
- Wet bagasse consumption rate: tons per month and tons per consecutive 12 months
- Total oil fired for Boiler No. 4: gallons per month and gallons per consecutive 12 months
- For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for the month.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. If recorded data indicates operation outside of the specified permit limits for steam production, heat input, wet bagasse consumption, or the oil firing rates, then the permittee shall submit a written notification and summary to the Compliance Authorities within ten (10) calendar days of recording the data. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
001	Bagasse Boiler No. 1 with wet scrubber (255,000 pounds of steam per hour)
002	Bagasse Boiler No. 2 with wet scrubber (230,000 pounds of steam per hour)
003	Bagasse Boiler No. 3 with wet scrubber (130,000 pounds of steam per hour)
004	Bagasse Boiler No. 5 (inactive, permanently shut down)
005	Bagasse Boiler No. 6 (inactive, permanently shut down)
009	Bagasse Boiler No. 4 with wet scrubber (300,000 pounds of steam per hour)
014	Bagasse Boiler No. 7 with electrostatic precipitator (385,000 pounds of steam per hour)

The PSD permit for Boiler No. 4 (PSD-FL-272A) was issued based on an Air Quality Analysis using the ISC PRIME model that contained several operational constraints on existing emissions units. These constraints are now enforceable conditions of the permit and are in addition to any limits imposed by other valid permits. Modification of these constraints would require modification of the PSD permit and a new Air Quality Analysis.

PERFORMANCE RESTRICTIONS

1. **Permanent Shutdown:** Boiler Nos. 5 and 6 shall remain permanently shut down and rendered incapable of operation. These units are no longer available as "standby" units. Any proposed future operation of either boiler would require a preconstruction review permit as a "new" unit. [Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
2. **Modified Stack Heights:** The stacks for Boiler Nos. 1, 2, and 3 shall be maintained at a minimum of 213 feet in height. [Design, Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
3. **Crop Season:** For this facility, the sugarcane crop season is defined as October through April and the off-season is defined as May through September. [Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]
4. **Capacities:** For each boiler, the maximum 1-hour operating capacities shall not exceed:
 - a. **Boiler No. 1:** 255,000 pounds of steam per hour, 495 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - b. **Boiler No. 2:** 230,000 pounds of steam per hour, 447 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - c. **Boiler No. 3:** 130,000 pounds of steam per hour, 265 mmBTU per hour of total heat input, and 900 gallons of oil per hour
 - d. **Boiler No. 4:** 300,000 pounds of steam per hour, 633 mmBTU per hour of total heat input, and 1500 gallons of oil per hour
 - e. **Boiler No. 7:** 385,000 pounds of steam per hour, 812 mmBTU per hour of total heat input, and 1839 gallons of oil per hour

← Asked for 3-hr averages

{Permitting Note: No additional record keeping requirements are imposed by these conditions. The steam production chart records are sufficient to demonstrate compliance with these requirements.}

} Good

[Design, Supporting Air Quality Analysis for PSD-FL-272A]

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

5. Fuel Oil Sulfur Contents

- a. **Boiler Nos. 1 - 3, Crop Season:** From October through April of each year, any fuel oil fired in Boiler Nos. 1 - 3 shall contain no more than 2.50% sulfur by weight.
- b. **Boiler Nos. 1 - 3, Off-Season:** From May through September of each year, any fuel oil fired in Boiler Nos. 1 - 3 shall contain no more than 1.60% sulfur by weight. In April of each year, a composite sample from the common tank shall be taken and analyzed for the sulfur content. Within 5 days of obtaining the results, a report of the fuel sulfur content shall be submitted to the Compliance Authority. If the sulfur content is higher than 1.60% sulfur by weight, the permittee shall purchase additional oil to blend down to the permit limit before any fuel from the common tank is authorized for firing during the off-season. An additional composite sample shall be taken from the common tank after blending and analyzed for the fuel sulfur content. Within 5 days of obtaining the results, a report of the fuel sulfur content shall be submitted to the Compliance Authority. It is a violation of this permit to fire fuel from the common tank without filing a report with the Compliance Authority that demonstrates compliance with the lower fuel sulfur limit. Thereafter, only fuel oil containing no more than 1.60% sulfur by weight shall be purchased and added to the common tank during the off-season. It is the permittee's responsibility to appropriately plan for and stage fuel purchases to comply with this condition. *per/16
here*
- c. **Boiler No. 4:** Any fuel oil fired in Boiler No. 4 shall contain no more than 0.70% sulfur by weight.
- d. **Boiler No. 7:** Any distillate oil fired in Boiler No. 7 shall contain no more than 0.05% sulfur by weight.

The permittee shall maintain fuel records that indicate compliance with the above conditions for each fuel oil purchase at each tank. The sulfur content shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. For each shipment, a certified analysis supplied by the fuel oil vendor is sufficient to demonstrate compliance.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

6. Fuel Oil Consumption

- a. **Boiler Nos. 1 - 4, Crop Season:** From October through April of each year, the total fuel oil consumption for Boiler Nos. 1 - 4 shall not exceed 16,200 gallons during any 3-hour period and 88,800 gallons during any 24-hour period.
- b. **Boiler Nos. 1 - 4, Off-Season:** From May through September of each year, the total fuel oil consumption for Boiler Nos. 1 - 4 shall not exceed 11,700 gallons during any 3-hour period and 54,000 gallons during any 24-hour period.

The permittee shall install, calibrate, operate, and maintain individual fuel oil flow meters with integrators.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

7. Steam Production

a. **Crop Season and Off-Season**

285,000 lb/hr

- (1) Boiler No. 4 shall not produce more than 6,840,000 pounds of steam during any 24-hour period.
- (2) Boiler No. 7 shall not produce more than 8,400,000 pounds of steam during any 24-hour period.

350,000 lb/hr

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B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

b. Off-Season (May through September)

- (1) During the off-season, Boiler No. 7 shall be operated as the primary unit to meet the steam demands of the refinery. As restricted by the conditions of this permit, other mill boilers may serve as backup units when Boiler No. 7 is down for maintenance, repair or during periods of unusually low steam demand. ✓
- (2) For Boiler Nos. 1 - 4, no more than three of these boilers shall operate simultaneously.
- (3) For Boiler Nos. 1 - 4, the total steam production shall not exceed 1,845,000 pounds of steam during any 3-hour period.
615,000 lb/hr
- (4) For Boiler Nos. 1 - 4, the total steam production shall not exceed 10,800,000 pounds of steam during any 24-hour period.
450,000 lb/hr

The permittee shall install, calibrate, operate, and maintain equipment to continuously record the steam production rates. The permittee shall also install, calibrate, operate, and maintain a steam flow integrator to record the accumulated steam flow rate.

[Applicant Request, Supporting Air Quality Analysis for PSD-FL-272A]

8. **Modifications:** A request to modify any of these conditions shall be accompanied by a revised Air Quality Analysis that demonstrates compliance with the Ambient Air Quality Standards and PSD increments for the revised conditions.

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

PERFORMANCE TESTING

9. **SO₂ Tests:** To validate the SO₂ emission factor for Boiler Nos. 1 - 3, the permittee shall conduct emissions performance tests in accordance with EPA Method 6 or 6C for at least one of these boilers when firing only bagasse. The initial test shall be conducted between October 1, 2000 and February 1, 2001. Thereafter, at least one of these boilers shall be tested within the 12-month period prior to renewal of the air operation permit. Tests need not be conducted on the same boiler. Based on the results of the performance tests, the Compliance Authority may require additional testing or an additional Air Quality Analysis.

{Permitting Note: The expected emission factor is 0.06 pounds of SO₂ per mmBTU when firing only bagasse. This is not a permit limit for Boiler Nos. 1 - 3. Performance tests, notifications, reports, etc., are subject to the requirements listed in Section III.G. of this permit.}

[Supporting Air Quality Analysis for PSD-FL-272A]

REPORTING AND RECORD KEEPING REQUIREMENTS

10. Steam Production

- a. **Crop Season and Off-Season:** For each 24-hour block of operation, the permittee shall record the total steam production rates (pounds, each) for Boiler Nos. 4 and 7 to demonstrate compliance with Condition No. 7 of this section.
- b. **Off-Season**
 - (1) From May through September, the permittee shall record the individual and total steam production rates (pounds) for Boiler Nos. 1 - 4 for each 3-hour block when three of the boilers are in operation.

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

B. EU 001, 002, 003, 004, 005, 009, and 014 - Common Conditions for Boiler Nos. 1 - 7

- (2) From May through September, the permittee shall record the individual and total steam production rates (pounds) for Boiler Nos. 1 - 4 for each 24-hour block of operation.

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

11. Fuel Oil Consumption: For Boiler Nos. 1 - 4, the permittee shall record the oil-firing rates (gallons) for each 3-hour block of operation. From this data, the permittee shall calculate and record the combined oil firing rates (gallons) for each 3-hour and each 24-hour block of operation for Boiler Nos. 1 - 4. ✓

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

12. Fuel Sulfur Content: For each fuel oil delivery, the permittee shall record and retain the following: the date, identification of the tank, the gallons of fuel delivered, the fuel oil analysis including the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable. This condition applies to each tank supplying fuel to any boiler.

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

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C. EU 024, 025, and 026 - Fuel Tanks for Boilers

This portion of the permit addresses the following regulated emissions unit.

EU No.	Emission Unit Description
024	NSPS fuel storage tank for Boiler No. 4: Tank with a storage capacity of 100,000 gallons of No. 6 fuel oil (or a superior grade) containing no more than 0.7% sulfur by weight. Constructed in 2000.
025	Common fuel storage tank for Boiler Nos. 1 – 3: Tank with a storage capacity of 400,000 gallons of No. 6 fuel oil (or a superior grade) containing no more than 2.50% sulfur by weight. Constructed prior to 1984.
026	NSPS fuel storage tank for Boiler No. 7: Tank with a storage capacity of 200,000 gallons of No. 2 distillate oil (or a superior grade) containing no more than 2.50% sulfur by weight. Constructed in 1996.

Note: The above description is based upon information provided in the application and is for informational purposes only.

RULE APPLICABILITY

The following two conditions apply only to EUs 024 and 026:

1. **Applicability:** NSPS Subpart Kb applies to each storage vessel with a capacity greater than or equal to 10,300 gallons (40 cubic meters) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.110b(a)]
2. **Exemption from Portions of the NSPS:** Vessels with a capacity greater than or equal to 40,000 gallons (151 cubic meters) storing a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb, *except* for the record keeping requirements specified in permit conditions 4 and 5 below. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.110b(c)]

RECORD KEEPING REQUIREMENTS

3. **Signs:** The permittee shall clearly mark each tank with the following statements:
 - a. "Tank for Boiler Nos. 1 -3: From October through April, only fuel oil containing 2.50% sulfur by weight or less may be added to and stored in this tank. From May through September, only fuel oil containing 1.60% sulfur by weight or less may be added to and stored in this tank."
 - b. "Tank for Boiler No. 4: Only fuel oil containing 0.70% sulfur by weight or less may be added to and stored in this tank."
 - c. "Tank for Boiler No. 7: Only distillate oil containing 0.05% sulfur by weight or less may be added to and stored in this tank."
4. **Records:** For EU 024 and 026, the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.116b(b)]
5. **Record Retention:** For EU 024 and 026, the permittee shall keep a copy of this record for the life of the tank. [Rule 62-204.800(7)(b)16., F.A.C. and 40 CFR 60.116b(a)]

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D. EU 017 - Granular Carbon Regenerative Furnace

This portion of the permit addresses the following regulated emissions unit.

EU No.	Emission Unit Description
017	<p><u>Granular carbon regenerative furnace (GRCF, S-12)</u>: Granular carbon is used to remove colorants and VOC emissions during the decolorization process. Heat from the furnace is used to drive off the colorants and VOC emissions and regenerate the carbon for reuse. VOC emissions are controlled by a direct flame afterburner and particulate matter emissions by a wet venturi/tray scrubber system:</p> <p><i>Afterburner</i>: Zero Hearth Type (10'-9" OD x 8 HTH) furnace manufactured by BSP Thermal Systems, Inc. designed for the following specifications: 1200° F to 1400° F design temperature; 10,600 to 16,300 acfm flow rate; 0.5 to 0.75 seconds exhaust gas residence time; and a 92% destruction efficiency. The furnace and afterburner will fire approximately 90 gallons per hour and a maximum of 788,400 gallons per year.</p> <p><i>Wet Scrubber System</i>: High energy venturi wet scrubber with tray type wet scrubber designed for the following specifications: 160° F and 4300 acfm outlet gas flow; 12 to 30 inches of water across venturi scrubber with a 36 gpm flow rate; 3 to 8 inches of water across the tray scrubber with 230 gpm flow rate; and a 97% particulate removal efficiency.</p>

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

- BACT Determinations**: Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfuric acid mist (SAM), sulfur dioxide (SO2), and volatile organic compounds (VOC).

PERFORMANCE RESTRICTIONS

- Hours of Operation**: The hours of operation for this unit are not restricted (8,760 hours per year). [Rule 62-210.200, F.A.C., Definitions - PTE]
- Allowable Fuel**: Only No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight shall be fired in the granular carbon regenerative furnace and associated afterburner. The fuel sulfur content shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rule 62-212.400(BACT), F.A.C.]

CONTROL EQUIPMENT

- GCRF Afterburner**: The permittee shall install, operate, and maintain an afterburner designed to destroy at least 92% of the VOC emissions during regeneration of the carbon bed as part of the decolorization process. The afterburner shall be designed with a control temperature of between 1200° F and 1400° F and an exhaust gas residence time of between 0.5 and 0.75 seconds. Excluding initial startup, shutdown, and malfunction, the afterburner temperature shall be maintained at 1200° F or higher except for up to 6 total minutes each hour during which the temperature shall not fall below 1000°F.[Rule 62-212.400 (BACT), F.A.C.]
- GCRF Wet Scrubber**: The permittee shall install, operate, and maintain a wet venturi / tray scrubber system designed to control at least 97% of the maximum particulate emissions during regeneration of the

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

D. EU 017 - Granular Carbon Regenerative Furnace

carbon bed as part of the decolorization process. The venturi scrubber shall be designed for a pressure drop of between 12 to 30 inches of water column. The wet tray scrubber shall be designed for a pressure drop of between 3 to 8 inches of water column. Separate manometers (or equivalent devices) shall be installed, operated, and maintained to indicate the pressure drop across each control device. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment. [Rule 62-212.400 (BACT), F.A.C.]

EMISSION LIMITING STANDARDS

6. **PM Standards:** Emissions of particulate matter shall not exceed 0.7 pounds per hour (after control) from the granular carbon regenerative furnace as determined by EPA Method 5. In addition, visible emissions shall not exceed 10% opacity (excluding water vapor) as determined by EPA Method 9. [Rule 62-212.400 (BACT), F.A.C.]
7. **VOC Standard:** Emissions of volatile organic compounds shall not exceed 1.0 pound per hour (after control) from the granular carbon regenerative furnace as determined by EPA Method 25A reported in terms of propane. EPA Method 18 may be used to subtract methane from the total VOC measured by EPA Method 25A. [Rule 62-212.400 (BACT), F.A.C.]

PERFORMANCE TESTING REQUIREMENTS

8. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - a. **EPA Method 5,** "Determination of Particulate Emissions from Stationary Sources".
 - b. **DEP Method 9,** "Visual Determination of the Opacity of Emissions from Stationary Sources".
 - c. **EPA Method 25A,** "Determination of Volatile Organic Concentrations."

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

9. **Tests Required:** Initial compliance with the allowable emission standards specified for this emissions unit shall be determined within 90 days after issuance of this final permit. Initial tests shall be conducted for PM, VOC, and visible emissions to demonstrate compliance with the emissions standards. An annual test shall be conducted for visible emissions. After initial compliance is sufficiently demonstrated by initial PM and VOC performance testing, compliance may be assumed as long as the emissions unit remains in compliance with the visible emissions standard and monitoring requirements for the afterburner and wet scrubbing system. In addition, these tests shall be performed during the federal fiscal year (October 1st to September 30th) prior to renewing the air operation permit. [Rule 62-297.310(7)(a)1., F.A.C.]
10. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

D. EU 017 - Granular Carbon Regenerative Furnace

11. Monitoring of Test Parameters: During any required test, the permittee shall monitor and record the afterburner temperature and wet scrubber pressure differentials at 15-minute intervals. The tests shall be conducted at 90% of production capacity. [Rule 62-297.310(5), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

12. Operations Log: At least once per shift, the permittee shall observe and record the afterburner temperature and the wet scrubber pressure differentials. The permittee may install automated equipment to continuously record these parameters. For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for each month. [Rule 62-4.070(3), F.A.C.]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

E. EU 021 - Alcohol Emissions and EU 023 - Propane-Fired Sock Heaters

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
021	Alcohol usage
023	Two propane-fired heaters are used to dry baghouse socks from the refinery and dryer baghouses. Each 0.165 mmBTU per hour heater fires approximately 1.75 gallons of propane per hour and a maximum of 15,295 gallons of propane per year.

Note: The above description is based upon information provided in the application and is for informational purposes only.

APPLICABLE STANDARDS AND REGULATIONS

1. **BACT Determinations:** Pursuant to Rule 62-212.400, F.A.C., this emissions unit is subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfuric acid mist (SAM), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

PERFORMANCE RESTRICTIONS

2. **Allowable Fuel:** Only commercially available propane shall be fired in the sock heaters. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.]
3. **Visible Emissions:** Visible emissions of 5% opacity or less from the sock heaters shall be an indicator of good combustion as determined by EPA Method 9. If visible emissions are above 5% opacity, the permittee shall investigate the cause and take the necessary corrective actions. There is no initial or periodic testing required for this condition. [Rule 62-4.070(3), F.A.C.]
4. **Alcohol Emissions:** Alcohol usage from the sugar refinery shall not exceed 30,000 pounds per consecutive 12 months. Compliance shall be determined by the purchase records and the Material Data Safety Sheets (MSDS) for these products. The permittee shall calculate and record the alcohol emissions for submittal of the Annual Operating Report and at the request of the Department. [Applicant Request; Rule 62-212.400 (BACT), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

5. **Records:** The permittee shall keep records sufficient to document the amount of propane fired in the heaters and alcohol used for reporting in the Annual Operations Report. [Rule 62-210.370(3), F.A.C.]

**PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

F. EU 015, 016, 018, 019, 020, AND 022 - MISCELLANEOUS PARTICULATE SOURCES

This portion of the permit addresses the following regulated emissions units.

EU No.	Emissions Unit Description
015	VHP sugar dryer with baghouse (S-11)
016	White sugar dryer with baghouse (S-10)
018	Vacuum Systems: Screening/distribution vacuum with baghouse (S-1); 100 lb bagging vacuum with baghouse (S-2); 5 lb bagging vacuum with baghouse (S-3)
019	Six conditioning silos with baghouses (S-7, S-8, S-9, S-13, S-14, and S-15)
020	Screening/distribution and powdered sugar/starch bins with baghouses (S-5, S-6, and S-16)
022	Packaging baghouse (S-4)

Note: The above description is based upon information provided in the application and is for informational purposes only.

CONTROL EQUIPMENT AND TECHNIQUES

1. **Baghouses:** The permittee shall install, operate, and maintain high efficiency baghouses designed to control at least 99.9% of the particulate matter emitted from each emissions unit and point. There are no limits on the hours of operation (8760 hours per year). [Applicant Request; Rule 62-212.400, F.A.C.]

PERFORMANCE RESTRICTIONS

2. **Production Restrictions:** No more than 2000 tons of refined sugar per day nor 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2200 tons of refined sugar per day nor 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Applicant Request; Rule 62-210.200 (Definitions - PTE), F.A.C.]

EMISSION LIMITING STANDARDS

3. **PM Limits:** The following table identifies the limits on particulate matter emissions from these emissions units.

EU No.	POINT ID	DSCFM	lb/hour	Ton/Year
015	S-11	110,042	1.63	7.14
016	S-10	94,488	1.44	6.30
018	S-1	990	0.06	0.28
	S-2	872	0.06	0.28
	S-3	984	0.06	0.28
019	S-7	2641	0.06	0.25
	S-8	2641	0.06	0.25
	S-9	2641	0.06	0.25
	S-13	2641	0.06	0.25
	S-14	2641	0.06	0.25
	S-15	2641	0.06	0.25
020	S-5	2668	0.06	0.25
	S-6	8735	0.19	0.82
	S-16	6128	0.13	0.58
022	S-4	9589	0.21	0.90
Totals			4.20	18.33

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

F. EU 015, 016, 018, 019, 020, AND 022 - MISCELLANEOUS PARTICULATE SOURCES

4. **Visible Emissions:** As a surrogate for particulate matter, visible emissions shall not exceed 5% opacity from any of these emissions units or points. [Applicant Request; Rule 62-212.400, F.A.C.]

PERFORMANCE TESTING REQUIREMENTS

5. **Performance Test Methods:** Compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.

- a. **EPA Method 5,** "Determination of Particulate Emissions from Stationary Sources".
- b. **DEP Method 9,** "Visual Determination of the Opacity of Emissions from Stationary Sources".

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C.

6. **Tests Required:** Initial compliance with the visible emissions standard specified for these emissions units shall be determined within 90 days after issuance of this final permit. Compliance with the particulate matter emissions standard shall be assumed as long as the emission unit remains in compliance with the visible emissions standard. In addition, the visible emissions tests shall be performed during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)1., F.A.C.]
7. **Tests After Substantial Modifications:** All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C.]

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SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

EMISSION LIMITING AND PERFORMANCE STANDARDS

1. **General Visible Emissions Standard:** Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20% opacity. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]
2. **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.]
3. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants that cause or contribute to an objectionable odor. An objectionable odor is defined as 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(203), F.A.C.]
4. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department's district office and, if applicable, appropriate local program. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the permittee's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
5. **Circumvention:** No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
6. **Excess Emissions:**
 - (a) Excess emissions resulting from start-up, shutdown or malfunction of any emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
 - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Excess emission provisions can not be used to vary any NSPS requirement from any subpart of 40 CFR 60.

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

7. **Test Methods:** The appropriate test methods are specified in the permit, Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. The following test methods may also be required as part of these tests.
 - a. **EPA Method 1, "Sample and Velocity Traverses for Stationary Sources".**

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G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

- b. **EPA Method 2**, "Determination of Stack Gas Velocity and Volumetric Flow Rate".
 - c. **EPA Method 3**, "Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight".
 - d. **EPA Method 4**, "Determination of Moisture Content in Stack Gases".
8. **Required Number of Test Runs:** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the permittee, 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.]
9. **Operating Rate During Testing:** Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the 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. [Rule 62-297.310(2), F.A.C.]
10. **Calculation of Emission Rate:** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
11. **Test Procedures:** Test procedures and methods shall meet all applicable requirements of Rule 62-297.310(4), F.A.C. [Rule 62-297.310(4), F.A.C.]
12. **Determination of Process Variables:** [Rule 62-297.310(5), F.A.C.]
- (a) **Required Equipment:** The permittee 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.
13. **Required Stack Sampling Facilities:** Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29

PSD AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

G. COMMON CONDITIONS FOR ALL EMISSIONS UNITS

CFR Part 1910, Subparts D and E. Sampling facilities shall also conform to the requirements of Rule 62-297.310(6), F.A.C. [Rule 62-297.310(6), F.A.C.]

14. **Test Notification:** The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial performance tests for NSPS sources and at least 15 days prior to any other required tests. Notification shall include 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 permittee. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8]
15. **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 permittee of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

16. **Records:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
17. **Data Availability:** The minimum data availability for recorded monitoring data shall be at least 90% on a monthly basis. [Applicant Request]
18. **Test Reports:** The permittee 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. 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*. 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 applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
19. **Excess Emissions Report:** If excess emissions occur, the permittee shall notify the Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rule 62-4.130, F.A.C.]
20. **Excess Emissions Report - Malfunctions:** In case of excess emissions resulting from malfunctions, each 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.]
21. **Annual Operating Report for Air Pollutant Emitting Facility:** The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Compliance Authority by March 1 of the following year. [Rule 62-210.370(3), F.A.C.]

SECTION IV.

APPENDIX A - TERMINOLOGY

ABBREVIATIONS AND ACRONYMS

- BACT - Best Available Control Technology
- DARM - Division of Air Resource Management
- EPA - United States Environmental Protection Agency
- DEP - State of Florida, Department of Environmental Protection
- °F - Degrees Fahrenheit
- F.A.C. - Florida Administrative Code
- F.S. - Florida Statute
- SOA - Specific Operating Agreement
- UTM - Universal Transverse Mercator

RULE CITATIONS

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, permit numbers, and identification numbers.

Florida Administrative Code (F.A.C.) Rules:

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

- Where:* 62 - refers to Title 62 of the Florida Administrative Code (F.A.C.)
- 62-213 - refers to Chapter 62-213, F.A.C.
- 62-213.205 - refers to Rule 62-213.205, F.A.C.

Facility Identification (ID) Number:

Example: Facility ID No. 099-0001

- Where:* 099 - 3 digit number indicates that the facility is located in Palm Beach County
- 0221 - 4 digit number assigned by state database identifies specific facility

New Permit Numbers:

Example: Permit No. 099-2222-001-AC or 099-2222-001-AV

- Where:* AC - identifies permit as an Air Construction Permit
- AV - identifies permit as a Title V Major Source Air Operation Permit
- 099 - 3 digit number indicates that the facility is located in Palm Beach County
- 2222 - 4 digit number identifies a specific facility
- 001 - 3 digit sequential number identifies a specific permit project

Old Permit Numbers:

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

- Where:* AC - identifies permit as an Air Construction Permit
- AO - identifies permit as an Air Operation Permit
- 123456 - 6 digit sequential number identifies a specific permit project

SECTION IV.

APPENDIX BD - SUMMARY OF DEPARTMENT'S BACT DETERMINATIONS

The following table summarizes the BACT emissions standards and control technology established in initial Permit No. PSD-FL-272.

Pollutant	Controls	Emission Standard
<i>EU 009 - Bagasse Boiler No.4</i>		
CO	Good Combustion Practices	6.5 lb/mmBTU
NOx	Bagasse Firing, Good Combustion Practices	0.20 lb/mmBTU
PM/PM10	Bagasse Firing, Good Combustion Practices	0.15 lb/mmBTU
	Oil Firing, Good Combustion Practices	0.10 lb/mmBTU
	Visible Emissions	VE < 20% opacity, except 40% for 2 min./hour
SO2 (SAM)	Fuel Oil Sulfur Limit	0.7% sulfur by weight
	Bagasse Firing	0.06 lb/mmBTU
VOC	Good Combustion Practices	0.50 lb/mmBTU, as propane
<i>EU 024 - NSPS Fuel Storage Tank for Boiler No. 4 (Record Keeping Requirements Only)</i>		
<i>EU 017 - Granular Carbon Regenerative Furnace with Afterburner and Wet Scrubber</i>		
PM/PM10	Controlled by Afterburner and Wet Scrubbing System	0.7 lb/hr
	Surrogate PM Standard	Visible emissions < 10% opacity
SO2	Fuel Oil Sulfur Limit	0.05% sulfur by weight
VOC	Controlled by Afterburner	1.0 lb/hr, as propane
<i>EU 023 - Two propane-fired sock dryers</i>		
All	Fuel Specification	Commercially Available Propane
	Work Practice Standard for Good Combustion	Visible Emissions < 5% opacity
<i>EU 021 - Alcohol Usage</i>		
VOC	Alcohol Usage Limit	< 30,000 pounds per 12 months
<i>EUs 015,016, 018, 019, 020, and 022 - Miscellaneous Particulate Sources</i>		
PM	Surrogate Standard	Visible Emissions < 5% opacity

SECTION IV.

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

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

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

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

SECTION IV.

APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

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

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

GOOD COMBUSTION PRACTICES

The following procedures are based upon U.S. Sugar's most recent submittal received by the Department in January of 2001.

Purpose of GCP Plan

The determination of Best Available Control Technology for CO, NOx, and VOC emissions from Boiler No. 4 (EU-009) relied on "good combustion practices". The purpose of this document is to summarize the operational, maintenance, and monitoring procedures that will lead to the minimization of CO and VOC emissions and the optimization of NOx emissions, consistent with good combustion practices.

Preparation for Operations

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Prior to each harvest season, all instruments for boiler operation and control (including oxygen and carbon monoxide process monitors) are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

Boiler Operation and Controls

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NOx. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO and VOC Controls

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
3. Process monitors will be installed to monitor the oxygen (O₂) content and the carbon monoxide (CO) content of the boiler flue gas. The instrument readouts will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the O₂ and CO flue gas process monitors for combustion control and to ensure sufficient excess air levels. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The oxygen process monitor will include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor will include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor will display both the instantaneous and the 1-hour block average. If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions may include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, firing some fuel oil in place of bagasse. For each such incident, the operator will summarize the corrective actions taken and the approximate time when operation within the target parameter(s) was regained.

NOx Controls

NOx emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, the application of GCP to minimize CO and VOC emissions may result in increased NOx emissions. This is because factors that promote good combustion and result in lower CO and VOC emissions (such as higher excess air and higher combustion temperatures) typically result in higher NOx emissions. This is the nature of the combustion process for these boilers. Therefore, GCP to optimize NOx emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

Miscellaneous

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule: Fans, pumps, casing, ducting, and scrubber.
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)

STARTUP AND SHUTDOWN PROCEDURE

The following procedure was submitted by U.S. Sugar as a supplement to the PSD application received on June 25, 1999.

During startup and shutdown of the boilers, excess CO, PM, NOx, and VOC emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions shall be taken to minimize the magnitude and duration of excess emissions during startup and

SECTION IV.

APPENDIX GCP - GOOD COMBUSTION PRACTICES PLAN

shutdown of Boiler No. 4. The boiler room foreman and operating personnel shall receive proper training on emissions control procedures at least once per year.

Cold Startup (approximately 4 to 5 hours)

1. Feed solid fuel into boiler construction chamber.
2. Start fire in combustion chamber using a propane torch designed for that purpose.
3. As boiler heats up and starts to make steam, continuously observe the boiler and scrubber water levels, and stack plume.
4. Light a burner at the lowest rate, continue to observe the stack plume and adjust if necessary, by adjusting fuel, atomizing steam, and air to obtain proper combustion.
5. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil flow until burners can be turned off.
6. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.

Hot Startup (approximately 1 hour)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
3. Light a burner, continue to observe the stack plume, water levels, and burners.
4. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
5. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce the forced draft, distributor air, overfire air, and induced forced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

NOTICE OF FINAL PERMIT

JUN - 5 2003

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

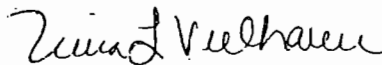
Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-022-AC, which authorizes a 3-year boiler maintenance project at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes to correct typographical errors were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

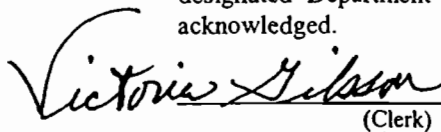
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/3/2003 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

June 3, 2003
(Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 2, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

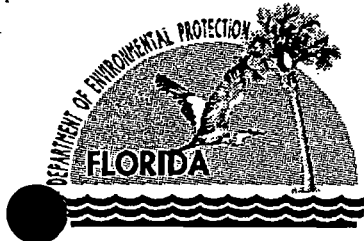
COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, or the applicant. Informal comments were received from the EPA Region 4 office. The main concern regarded the issue of determining PSD applicability for the project. Region 4 notes that federal PSD rule revisions issued by EPA on December 31, 2002 allow a comparison of past-actual-to-projected-actual emissions to determine PSD applicability. However, Florida has not yet adopted these revisions. Therefore, Region 4 believes that the appropriate PSD evaluation is to compare past actual emissions with future allowable/potential emissions where future potential emissions can be based on enforceable emissions controls and/or emissions limits.

As stated in the technical evaluation, the Department does not believe that the proposed physical changes will result in any increases in the actual emissions. The types of maintenance activities proposed are routinely performed by the sugar industry during each off season. U.S. Sugar maintains that the activities are routine for this mill and the industry in general. Based on the available information, the Department presumes that the proposed activities for each boiler are routine and not a modification by definition. However, due to the difficulties in making these evaluations as mentioned by Region 4, the Department will issue the minor source permit that requires U.S. Sugar to track and report the progress of maintenance activities each year to further assess the nature of the project.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-022-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: October 1, 2005

PROJECT AND LOCATION

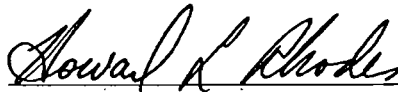
This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

STATEMENT OF BASIS

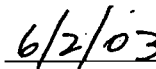
This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the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

CONTENTS

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



Howard L. Rhodes, Director
Division of Air Resources Management



(Date)

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through to bagasse fired in the boilers and creates a very abrasive flue gas, which has led to premature tube and component wear. The permit authorizes maintenance, repairs, and replacements to maintain each unit at normal operational levels and reliability. This permit only affects the boilers. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

This section of the permit addresses the following emissions units.

ID	Emission Unit Description
001	Boiler 1 – 255,000 lb/hour steam with a heat input rate of 495.6 MMBtu/hour (24-hour averages)
002	Boiler 2 – 230,000 lb/hour steam with a heat input rate of 447 MMBtu/hour (24-hour averages)
003	Boiler 3 – 130,000 lb/hour steam with a heat input rate of 265 MMBtu/hour (24-hour averages)
009	Boiler 4 – 285,000 lb/hour steam with a heat input rate of 600 MMBtu/hour (24-hour averages)
014	Boiler 7 – 350,000 lb/hour steam with a heat input rate of 738 MMBtu/hour (24-hour averages)

COMPONENT REPAIRS AND REPLACEMENT

- Schedule:** This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]
- Maintenance Activities:** The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:
 - Boiler 1:** tube replacements in the main generating bank, superheater, and air heater.
 - Boiler 2:** tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
 - Boiler 3:** tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
 - Boiler 4:** tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
 - Boiler 7:** stoker repairs; tube replacements in economizer

Replacements shall be made with “functionally equivalent” components that serve the same purpose as the replaced component. The off season maintenance activities are intended to maintain the boilers at current operational levels and reliability for the upcoming cane milling seasons. After further inspection, some activities may not be required to the extent requested and other similar routine repair, replacement, and maintenance activities may be necessary. Routine repairs and replacements that are not mentioned above shall be included in the required summary reports. [Applicant Request; Rule 62-4.070(3), F.A.C.]

EMISSIONS AND PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any emissions standards, operational restrictions, authorized fuels or any other conditions specified in other applicable air construction and operation permits.}

- Permitted Capacities:** The maintenance activities authorized in this permit shall not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project shall not increase the emission rates of any boiler or the cane milling capacity of the plant. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]
5. Capacity Report and Emissions Summary: Within 60 days of completing the last required stack test for all of the boilers during that season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information for each boiler: the test dates; the pollutant tested; the tested emissions rate; the allowable emissions rate; the permitted 24-hour average steam production rate; the steam production rate during the test; and the percent of permitted capacity during the test based on the permitted 24-hour steam production rate. *{Permitting Note: This condition refers to the testing that is already required by the Title V air operation permit.}* [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

CONTENTS

Appendix CF. Citation Format
Appendix GC. General Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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

"001" identifies the specific permit project

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (NA).
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.

ATTACHMENT USS-EU3-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU3-IV3**ALTERNATIVE METHODS OF OPERATION**

Boiler No. 4 is permitted to operate while combusting carbonaceous fuel alone at a heat input rate of 633 MMBtu/hr (maximum 1-hour average) and 600 MMBtu/hr (maximum 24-hour average); No. 2 fuel oil alone at a maximum fuel oil heat input rate of 326 MMBtu/hr; or a combination of carbonaceous fuel and No. 2 fuel oil at a combined maximum heat input of 633 MMBtu/hr (maximum 1-hour average). Carbonaceous fuel may include DAF filter material containing incidental amounts of on-specification used oil.

The unit is limited to a maximum of 500,000 gallons of No. 2 residual fuel oil for a 12-month period and 2,417 gallons per hour. The sulfur content of No. 2 fuel oil is limited to 0.4 percent by weight. No. 2 fuel oil may include facility-generated, on-specification used oil. The hours of operation for this unit are not restricted (8,760 hours per year).

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

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.

EMISSIONS UNIT INFORMATION

Section [4]

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: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 20	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: _____ MW

11. Emissions Unit Comment:
Spreader-stoker, vibrating grate boiler fired by carbonaceous fuel and distillate fuel oil (Grade Nos. 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 [4]

Boiler No. 7

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

**Electrostatic Precipitator
Wet Sand Separator**

2. Control Device or Method Code(s): **010, 099**

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

**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: 335 °F	9. Actual Volumetric Flow Rate: 285,000 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 recent stack testing. Stack diameter reflects replacement of upper portion of Boiler No. 7 stack with stack from Boiler No. 3.			

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

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: 112.78	5. Maximum Annual Rate: 897,900	6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur: 0.24 (dry)	8. Maximum % Ash: 8.4 (dry basis)	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 maximum) and annual rate based on a heat input rate of 738 MMBtu/hr (24-hour maximum). Both annual and hourly maximums were based on a heating value of 3,600 Btu/lb wet bagasse (Permit No. 0510003-017-AV).			

Segment Description and Rate: Segment 2 of 2

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: 135	
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 (Permit No. 0510003-024-AC).			

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

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
PM ₁₀	099	010	EL
SO ₂			EL
NO _x			EL
CO			EL
VOC			EL
SAM			EL
Benzene - H017			NS
Formaldehyde - H095			NS
Total Hazardous Air Pollutants - HAPs			NS
Hydrogen Chloride - H106			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: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 24.4 lb/hour 97 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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		7. Emissions Method Code: 0	
8. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.03 \text{ lb/MMBtu} = 24.4 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.03 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 97 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.03 \text{ lb/MMBtu} = 9.8 \text{ lb/hr}$ Annual: $4,500,000 \text{ gal/yr} \times 135,000 \text{ Btu/gal} = 607,500 \text{ MMBtu/yr}$ $607,500 \text{ MMBtu/yr} \times 0.03 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 9.1 \text{ ton/yr}$			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Particulate Matter Total - PM

**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 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. Emissions representative of bagasse firing only.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.03 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):	

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Particulate Matter - PM₁₀

**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: PM₁₀	2. Total Percent Efficiency of Control:
3. Potential Emissions: 24.4 lb/hour 97 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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	7. Emissions Method Code: 0
8. Calculation of Emissions: Equal to PM emissions.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing.	

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Particulate Matter - PM₁₀

**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 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. Emissions representative of bagasse 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):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Boiler No. 7

Sulfur Dioxide - SO₂

**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: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 138 lb/hour 550 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.17 \text{ lb/MMBtu} = 138 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.17 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 550 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.05 \text{ lb/MMBtu} = 16.3 \text{ lb/hr}$ Annual: $607,500 \text{ MMBtu/yr} \times 0.05 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 15.2 \text{ TPY}$			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Factors based on carbonaceous fuel firing.			

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide - SO₂

**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 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 bagasse 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):	

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Nitrogen Oxides - NO_x

**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: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 203 lb/hour 809 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.25 lb/MMBtu Reference: Permit No. 0510003-017-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.25 \text{ lb/MMBtu} = 203 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.25 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 809 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.20 \text{ lb/MMBtu} = 65.2 \text{ lb/hr}$ Annual: $607,500 \text{ MMBtu/yr} \times 0.20 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 60.8 \text{ TPY}$	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Boiler No. 7

Nitrogen Oxides - NO_x

**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 1 of 2

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 lb/hour 809 tons/year
5. Method of Compliance: EPA Method 7 or 7E	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-017-AV. Based on carbonaceous fuel firing.	

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: 0.20 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.	

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):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Boiler No. 7

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Carbon Monoxide - CO

**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: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 568.4 lb/hour 2,262 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.70 \text{ lb/MMBtu} = 568.4 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.70 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 2,262 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.066 \text{ lb/MMBtu} = 21.5 \text{ lb/hr}$ Annual: $607,500 \text{ MMBtu/yr} \times 0.066 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 20.0 \text{ TPY}$	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Carbon Monoxide - CO

**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 1 of 2

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 bagasse 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: 0.066 lb/MMBtu	4. Equivalent Allowable Emissions: 21.5 lb/hour 20.0 tons/year
5. Method of Compliance: EPA Method 10	
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):	

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds - VOC

**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: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 172.1 lb/hour 685 tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.212 \text{ lb/MMBtu} = 172.1 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.212 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 685 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.004 \text{ lb/MMBtu} = 1.30 \text{ lb/hr}$ Annual: $607,500 \text{ MMBtu/yr} \times 0.004 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 1.2 \text{ TPY}$	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.	

EMISSIONS UNIT INFORMATION

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Boiler No. 7

POLLUTANT DETAIL INFORMATION

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Volatile Organic Compounds - VOC

**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 1 of 2

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 bagasse 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: 0.004 lb/MMBtu	4. Equivalent Allowable Emissions: 1.3 lb/hour 1.2 tons/year
5. Method of Compliance: EPA Method 25 and 25A in conjunction with Method 18	
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):	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [4]
Boiler No. 7

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Sulfuric Acid Mist - SAM

**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: SAM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 13.8 lb/hour 55 tons/year		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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. Calculation of Emissions: Bagasse: Hourly: $812 \text{ MMBtu/hr} \times 0.017 \text{ lb/MMBtu} = 13.8 \text{ lb/hr}$ Annual: $738 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.017 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 55 \text{ TPY}$ No. 2 Fuel Oil: Hourly: $326 \text{ MMBtu/hr} \times 0.005 \text{ lb/MMBtu} = 1.63 \text{ lb/hr}$ Annual: $607,500 \text{ MMBtu/yr} \times 0.005 \text{ lb/MMBtu} \times 1 \text{ ton}/2,000 \text{ lb} = 1.5 \text{ TPY}$			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Maximum emissions representative of bagasse firing only.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Sulfuric Acid Mist - SAM

**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 1 of 2

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 bagasse 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: 0.005 lb/MMBtu	4. Equivalent Allowable Emissions: 1.63 lb/hour 1.5 tons/year
5. Method of Compliance: EPA Method 8, when required	
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):	

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

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 **2****

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: Rule 62-212.400(5), F.A.C., and Permit 0510003-017-AV.	

Visible Emissions Limitation: Visible Emissions Limitation **2 of **2****

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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: Permit No. 0510003-018-AC.	

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

H. CONTINUOUS MONITOR INFORMATION**Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor 1 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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.	

EMISSIONS UNIT INFORMATIONSection **[4]**Boiler No. **7****H. CONTINUOUS MONITOR INFORMATION****Complete if this emissions unit is or would be subject to continuous monitoring.****Continuous Monitoring System:** Continuous Monitor **3** of **4**

1. Parameter Code: Steam Pressure Monitor	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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 measurment instrument. Permit No. 0510003-017-AV.	

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: TEMP	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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.	

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-I1</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-I2</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-I3</u> <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-I4</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-I5</u> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> 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 <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [4]

Boiler No. 7

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-IV1</u> <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input checked="" type="checkbox"/> Attached, Document ID: <u>CAM Plan</u> <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>USS-EU4-IV3</u> <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [4]

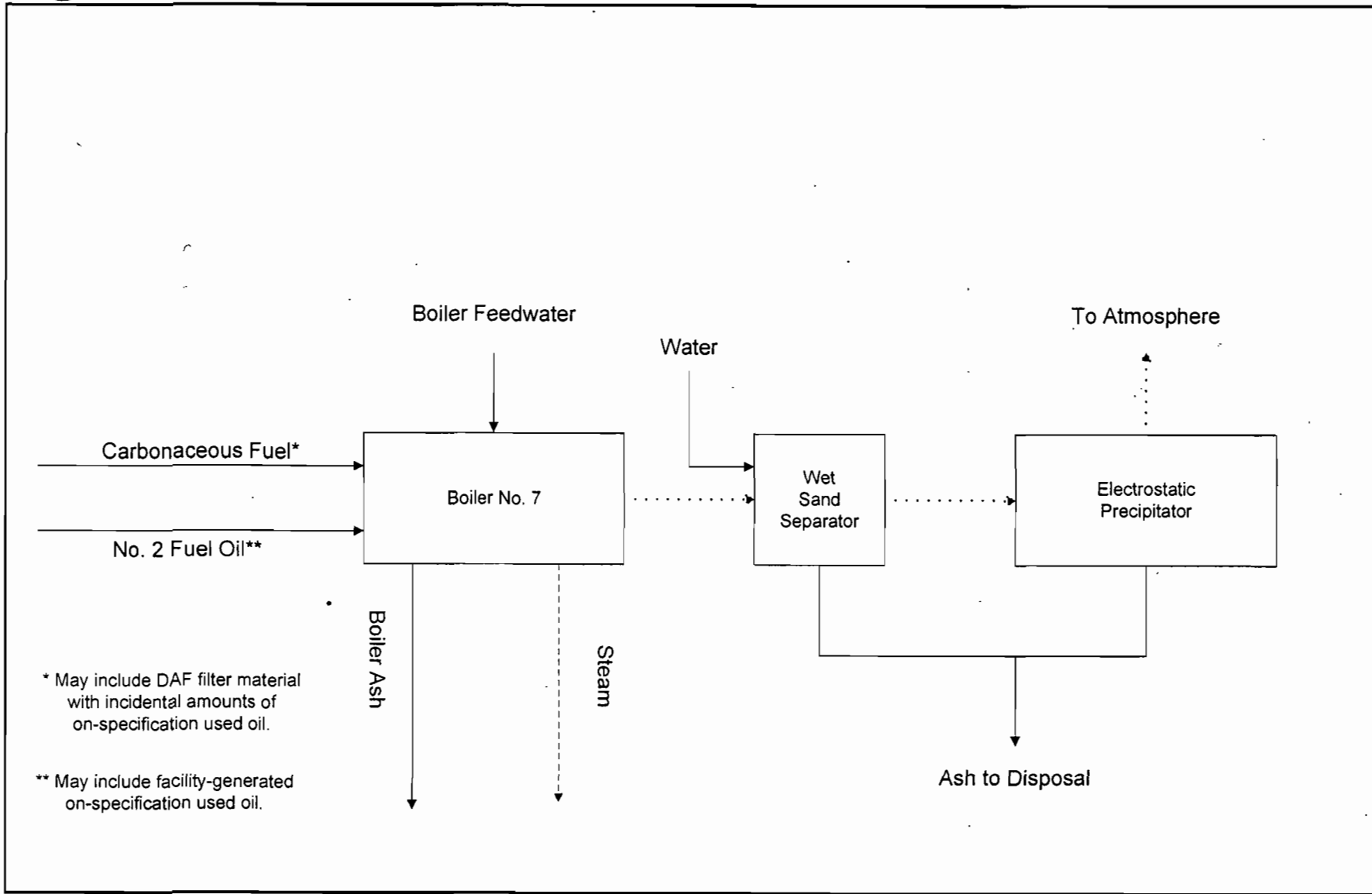
Boiler No. 7

Additional Requirements Comment

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ATTACHMENT USS-EU4-I1

PROCESS FLOW DIAGRAM



Attachment USS-EU4-11
 Process Flow Diagram
 U.S. Sugar Corporation
 Clewiston Mill, Florida

Process Flow Legend
 Solid/Liquid ———>
 Air>
 Steam - - - ->

Boiler No. 7
 Path/File: 0537540/4/4.4/USS-EU4-11.vsd
 Date: 5/24/05



ATTACHMENT USS-EU4-I2

FUEL ANALYSIS

ATTACHMENT USS-EU4-I2

Boiler No. 7 Fuel Analysis

Parameter	Fuel	
	Carbonaceous Fuel ^a	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	--	6.83
Approximate Heating Value (Btu/lb)	3,600 ^b	19,910
Approximate Heating Value (Btu/gal)	--	135,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.1%	84.7%
Hydrogen	5.9%	15.3%
Nitrogen	0.35%	0.015% ^c
Oxygen	40.9%	0.38%
Sulfur	0.08% - 0.24%	0.05% ^c
Ash/Inorganic	0.87% - 8.4%	0.06% ^d
Moisture	49% - 55%	0.51% ^d

Represents typical values.

^a Source: Clewiston Mill fuel analysis averages.

^b Wet basis for bagasse. Represents normal minimum.

^c Permit limits, Permit No. 0510003-017-AV.

^d Source: Perry's Chemical Engineer's Handbook. Sixth Edition, 1984.
Represents average fuel characteristics.

ATTACHMENT USS-EU4-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment USS-EU4-I3a
Control Equipment Parameters for Boiler No. 7
at U. S. Sugar Clewiston Mill

WET SAND SEPARATOR

Control Device Type	Wet Cyclone
Manufacturer and Model No.	Custom Design
Flue Gas Temp (°F)	350
Flue Gas Flow Rate (acfm)	355,000
Moisture (% Volume)	28.1
Cyclone Diameter (ft)	19
Cyclone Height (ft)	32
No. of Spray Nozzles (Cyclone)	3
No. of Spray Nozzles (Inlet Duct)	15
Total Water Flow to Nozzles (gpm)	40

Attachment USS-EU4-I3b

Control Equipment Parameters and Particulate Removal Efficiency Derivation for Boiler No. 7
Electrostatic Precipitator; U. S. Sugar Clewiston Mill

Manufacturer and Model No.	ABB ESP Model 1 Only FTA 3X30.0 M-104-120		
Flue Gas Temp (°F)	350		
Flue Gas Flow Rate (acfm)	355,000		
Moisture (% Volume)	28.1		
No. of Precipitators	1		
No. of Chambers	1		
No. of Cells per Chamber	1		
Number of Fields	3		
Field Height (ft)	39.37		
Field Depth, each (ft)	9.84		
Total Treatment Length (ft)	29.62		
Number Gas Passages (total)	26		
Spacing Gas Passages (inches)	15.75		
Total Installed Collection Area per Precipitator (ft ²)	60,456		
Pollutants	Inlet Loading (lb/hr)	Outlet Loading (lb/hr)	Control Efficiency %
Particulate Matter	1,379	20.299	98.52

Note: ESP parameters represent supplier design specifications.

Sample calculations:

$$\text{Control efficiency (\%)} = [(\text{inlet loading} - \text{outlet loading}) / \text{inlet loading}] \times 100$$

ATTACHMENT USS-EU4-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT USS-EU4-I4**PROCEDURES FOR STARTUP AND SHUTDOWN**

Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown of Boiler No. 7. Boiler room foreman and operating personnel have received proper training on emissions control procedures.

Cold Startup (approximately 6 to 12 hours)

1. Turn on wet sand separator.
2. Light a fuel oil burner at the lowest rate, continue to observe the stack plume and adjust, if necessary, by adjusting fuel, atomizing air, and air to obtain proper combustion.
3. Activate electrostatic precipitator (ESP).
4. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off.
5. Continue to observe the stack plume, wet sand separator water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, wet sand separator, and ESP to maintain optimum operating conditions.
6. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Hot Startup (approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shut down for a short period of time and is still hot.
2. Turn on wet sand separator.
3. Check the boiler and wet sand separator water level, and circulating pump, and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. Activate ESP.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first; as the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the

burner fuel until the burners can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.

7. Continue to observe the stack plume, wet sand separator water level, and carbonaceous fuel level, making adjustments to drafts, fuel, wet sand separator, and ESP to maintain optimum operating conditions.
8. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Stop fuel flow to the boiler, reduce the forced draft, distributor air, overfire air, and induced draft.
2. Continue to observe the stack plume and water levels and make adjustments to maintain safe and optimum operating conditions.
3. After fuel flow is stopped, deactivate ESP and turn off wet sand separator.

ATTACHMENT USS-EU4-I5

OPERATION AND MAINTENANCE PLAN

ATTACHMENT USS-EU4-I5a

**OPERATION AND MAINTENANCE PLAN FOR
ELECTROSTATIC PRECIPITATOR**

1.0 PURPOSE OF O&M PLAN

An air construction permit was issued by the Florida Department of Environmental Protection (FDEP) for Clewiston Boiler No. 7 on January 31, 1995 9AC26-238006; PSD-FL-208). Specific Condition No. 13 of this permit requires that the permittee submit to FDEP an operation and maintenance (O&M) plan that will allow the permittee to monitor the emissions control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. Boiler No. 7 employs an electrostatic precipitator (ESP) for the control of particulate matter emissions. The O&M plan presents procedures for operating and maintaining the ESP serving Boiler No. 7.

2.0 OPERATING PROCEDURES

Clewiston Boiler No. 7 operating personnel will be trained in the proper operation of the ESP. The following sections describe operating guidelines for the ESP.

2.1 STARTUP PROCEDURES

During startup of the ESP, excessive moisture can sometimes cause sparking which makes it imperative that the ESP penthouse heating requirements be followed. ESP penthouse temperatures must be high enough to eliminate potential for spark-over on the insulator surfaces due to surface moisture. The penthouse pressurization and heating system should be in operation for no less than 24 hours prior to the scheduled energization of the ESP.

An ESP air load test should be performed after any significant ESP downtime to ensure that the unit is ready for operation and had no internal grounds or control problems. A successful air load test results in achieving maximum secondary current and voltage, without spark-over, with only a slight ambient airflow through the ESP.

Rapping and evacuation systems should be brought on-line in advance of ESP energization to remove any particulate build-up that may have accumulated during the downtime. Material build-up should be removed during the shutdown sequence to avoid hardening of the dust due to moisture absorption.

After a successful air load test is completed and rapping and evacuations systems have been brought online, the ESP is ready for energization.

Good combustion practices should be followed during oil firing. The remaining ESP fields should be energized as bagasse fuel is introduced into the boiler furnace. Once the boiler and ESP system is up and running normally, all ESP controls can be placed on full automatic operation.

2.2 NORMAL OPERATION

During normal operating, the ESP instruments provide information relevant to the operation of the ESP equipment as well as the process components upstream. Boiler operating personnel periodically review ESP instrument readings to maintain proper operation and to recognize when corrective action is needed.

Precipitation that is effective will yield high voltages and low currents (secondary) at the inlet of the ESP. This trend will gradually reverse in the direction of gas flow. Likewise, sparking can be relatively brisk at the inlet field because 80 percent of the particulate is energized and preferably collected there. Sparking should decrease in the direction of gas flow in a manner that yields little or no sparking at the outlet. The actual magnitude of target electrical readings for the ESP are not as important as compliance with the power and sparking trends described above.

Heavy sparking throughout the ESP is typically a sign that the internals are heavily coated or that the process has burdened the ESP with ultra high resistivity dust. This can be a function of the chemical make-up of the fuel, the exit gas temperature, available moisture and other factors. A distinct lack of sparking and reduced operation of electrical equipment (with a dirty stack) is a sign that extremely low resistivity conditions are present. Again, this condition can be related to fuel, temperature or moisture. In such cases, boiler operation should be checked and corrected if necessary.

In order to maintain proper operation of the ESP, Boiler No. 7 ESP electrical readings will be recorded and periodically reviewed by qualified personnel. Additional measures taken by U.S. Sugar to maintain proper operation include the following:

1. Rapping should continue in the automatic mode for the duration of continuous operation. The rapping cycle times should be optimized to eliminate over-rapping to the extent possible.
2. Hopper evacuation equipment will be checked regularly to ensure proper operation.

3. The ESP penthouse pressurization system will be checked for proper operation on a regular basis.

2.3 SHUTDOWN PROCEDURES

The ESP should remain energized up to and including the shutdown of the forced draft (FD) fan. To ensure maximum cleaning of the ESP internals, rapping systems should be operated continuously during the shutdown process and after the fan shutdown if possible. This will ensure the ESP internals are clean and ready for the next operating sequence.

For extended shutdowns, air should be forced through the ESP to minimize the local accumulation of moisture on the internals. In addition, the penthouse pressurization/heating system should be operated during periods of high humidity.

3.0 MAINTENANCE PROCEDURES

U.S. Sugar maintains the ESP consistent with good maintenance practices established by the ESP manufacturer, EPSCON.

ATTACHMENT USS-EU4-15b**OPERATION AND MAINTENANCE PLAN FOR
CO AND VOC EMISSIONS****1.0 PURPOSE OF O&M PLAN**

An air construction permit was issued by the Florida Department of Environmental Protection (FDEP) for Clewiston Boiler No. 7 on January 31, 1995 (AC26-238006; PSD-FL-208). Specific Condition No. 22 of this permit requires that carbon monoxide (CO) and volatile organic compound (VOC) emissions from Boiler No. 7 be maintained at the lowest possible level through implementation of an Operation and Maintenance (O&M) plan that has been approved by FDEP. The O&M plan presents operating procedures and guidelines for the minimization of CO and VOC emissions, consistent with good combustion practices and the pollution control equipment installed on the boiler.

2.0 PREPARATION FOR OPERATION

1. The boiler, air ductwork, and air heaters will be properly cleaned, inspected, and repaired during routine boiler maintenance.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand, and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for proper mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam, and air registers.
8. The settings of the combustion controls and linkages to fuel feeders, forced draft fan, and overfire air fan will be checked during routine boiler maintenance.
9. All instruments for boiler operation and control will be inspected, repaired, and calibrated as required during routine boiler maintenance. These activities will be recorded by the instrument shop in its repair log.

3.0 BOILER OPERATION AND CONTROLS

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler operations so as to minimize emissions of CO and VOC. This instructional program is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions of CO and VOC.

4.0 CO AND VOC CONTROLS

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP). To provide reasonable assurance that GCP are being employed, the following procedures will be implemented:

Startup Procedures

1. During startup of the boiler, the fuel feed and combustion air are gradually increased. Care is taken not to overload the fuel bed, until a clean, brisk fire is obtained over the entire grate area. If excessive smoking is observed during the startup period, the amount of fuel being fed to the grates is reduced until the condition is corrected.
2. After a good burning fuel bed is established over the entire grate, the fuel bed is checked for proper distribution by observing through the observation sight glasses in the side walls.
3. During the startup period, all of the stoker control components are normally operated on manual, and the maximum stoker operation is limited to about 40 percent of rated capacity.
4. All fuel feed and air control linkages are adjusted prior to switching the stoker over to the automatic control mode. During this adjustment, the settings are made at minimum fuel feed, maximum fuel feed, and several points between.

Normal Operation

1. Reasonably clean settling chambers are maintained in the furnace, breaching and heat traps, where cinders can accumulate.
2. The combustion control system is kept in proper adjustment and working freely.
3. The fans and fan blades are periodically cleaned, and any blades that may have become loose or damaged are repaired.
4. The grates are examined periodically to be certain that all air holes are open.
5. The fuel and air are maintained in proper proportion to the extent practicable so that fuel burns cleanly and the amount of smoke is minimized.

6. Ash present in the ash pits is removed as necessary in order to minimize any furnace draft upsets.
7. At 3- to 4-month intervals, or as operating experience indicates, the stoker and forced draft fan are stopped to clean out the siftings chamber(s).
8. After the siftings chambers have been cleaned, all access doors and ash pit doors are tightly closed and sealed to minimize air leakage.
9. At regular intervals, checks are made to identify air leaks at all air-swept fuel distributor spout joints and between spout and mounting plate. If any leaks are detected, the joint is repaired with furnace cement as necessary.
10. At regular intervals, checks are made for air leaks between the air supply duct, damper housing, and fuel distributor spouts. If any leaks are detected, the leaks are repaired with furnace cement.
11. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
12. Once per day, during the day shift, the boiler is given a walk-around inspection with the following items being checked and repaired as needed, and in coordination with the production schedule:
 - A. Fans
 - B. Pumps
 - C. Casing
 - D. Ducting
 - E. Electrostatic precipitator
13. On every shift, burners are inspected and cleaned if dirty.
14. On every shift, precautions are taken as necessary to control visible emissions of fugitive particulate matter (dust, bagasse, etc.)
15. The boiler operator will maintain the desired steam rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in the highest possible excess air) in order to promote good combustion.
16. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will

log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.

17. Bagasse moisture content will be maintained at or below 55 percent to the extent practical.

Shutdown of Boiler

1. When the slag furnace has cooled, the interior components of the stoker are inspected, and any slag or other obstructions to the air openings of the grates are removed.
2. Any slag formation on the front wall is removed.
3. The boiler is inspected to identify any air leaks that may have developed between the grates and the walls of the boiler. Repair as needed.
4. The internal lower surfaces of the air-swept fuel distributor spouts are inspected to determine wear rates. This will determine need for replacement during a scheduled outage.

ATTACHMENT USS-EU4-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT USS-EU4-IV1**IDENTIFICATION OF APPLICABLE REQUIREMENTS**

62-296.410(2)(b), F.A.C.: Carbonaceous Fuel Burning Equipment
62-296.410(3), F.A.C.: Carbonaceous Fuel Burning Equipment
62-297.310(1), F.A.C.: General Compliance Test Requirements
62-297.310(2)(b), F.A.C.: General Compliance Test Requirements
62-297.310(3), F.A.C.: General Compliance Test Requirements
62-297.310(4), F.A.C.: General Compliance Test Requirements
62-297.310(5), F.A.C.: General Compliance Test Requirements
62-297.310(6), F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)4., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)5., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C.: General Compliance Test Requirements
62-297.310(7)(a)10., F.A.C.: General Compliance Test Requirements
62-297.310(8), F.A.C.: General Compliance Test Requirements
62-297.401(1), F.A.C.: EPA Test Method 1
62-297.401(2), F.A.C.: EPA Test Method 2
62-297.401(3), F.A.C.: EPA Test Method 3
62-297.401(4), F.A.C.: EPA Test Method 4
62-297.401(5), F.A.C.: EPA Test Method 5
62-297.401(6), F.A.C.: EPA Test Method 6
62-297.401(6)(c), F.A.C.: EPA Test Method 6C
62-297.401(7), F.A.C.: EPA Test Method 7
62-297.401(7)(e), F.A.C.: EPA Test Method 7E
62-297.401(8), F.A.C.: EPA Test Method 8
62-297.401(9), F.A.C.: EPA Test Method 9
62-297.401(10), F.A.C.: EPA Test Method 10

62-297.401(18), F.A.C.: EPA Test Method 18

62-297.401(25)(a), F.A.C.: EPA Test Method 25A

40 CFR 63.1 – 63.16 – Subpart A – General Provisions: Boiler No. 7 is subject to the notification requirements of Subpart DDDDD.

40 CFR 63.7485 – Subpart DDDDD – Applicability: Boiler No. 7 is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.

40 CFR 63.7490 – Subpart DDDDD – Applicability: Boiler No. 7 is subject to the requirements of Subpart DDDDD for existing boilers.

40 CFR 63.7495 – Subpart DDDDD – Compliance Dates – Boiler No. 7 must meet notification requirements and comply by September 13, 2007.

40 CFR 63.7499 – Subpart DDDDD – Subcategories: Boiler No. 7 is in the large solid fuel subcategory.

40 CFR 63.7506 – Subpart DDDDD – Limited Requirements: Boiler No. 7 must only meet the notification requirements of 63.9(b) at this time.

40 CFR 63.7545 – Subpart DDDDD – Notifications: Boiler No. 7 must submit the required notification by March 12, 2005.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

GOLDER ASSOCIATES INC.

JUN 24 2003

GAINESVILLE

David B. Struhs
Secretary

NOTICE OF ADMINISTRATIVE PERMIT CORRECTION

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William A. Raiola, V.P. of Sugar Processing Operations
United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Re: U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-018-AC
Boilers 4/7, Modified Oil Firing Systems
Administrative Permit Correction

Dear Mr. Raiola:

On June 6, 2003, the Department issued an air construction permit authorizing an upgrade to the oil firing systems for Boilers 4 and 7. On June 19, 2003, the Department received a letter from the engineer of record, David Buff, requesting an amendment of this permit. The final permit specifies the maximum oil firing rate for Boiler 7 as 2311 gallons per hour, which is consistent with the original application. However, U.S. Sugar later modified this information in a letter dated December 18, 2002. The correct maximum oil firing rate for Boiler 7 should be the same as Boiler 4, which is 2417 gallons per hour. The Department reviewed the file and agrees that the permit should be amended to reflect the slightly higher oil firing rate. Permit No. 0510003-018-AC is hereby amended as follows:

Final Permit, Page 7 of 9, Performance Restrictions:

- Oil Firing Restrictions: No more than ~~2417~~2311 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1). The hourly firing rate was amended from 2311 to 2417 gallons per hour on June 20, 2003.}* [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; and 40 CFR 60.44b(l)(1)]

The change is considered a correction that is necessary to properly reflect information provided during the application process. In accordance with Rule 62-210.360, F.A.C., the Department determines that an administrative permit correction is appropriate. Also attached is a revised Page 7 that incorporates the amendment. Please replace the original page in your final permit with the corrected version. If you have any questions regarding this matter, please contact Jeff Koerner at 850/921-9536.

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

"More Protection, Less Process"

Printed on recycled paper.

Executed in Tallahassee, Florida.

Trina L. Vielhauer

GOLDER ASSOCIATES INC.

Trina Vielhauer, Chief
Bureau of Air Regulation

JUN 24 2003

GAINESVILLE

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Administrative Permit Correction was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on

6/23/03 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Victoria Gibson June 23, 2003
(Clerk) (Date)

Enclosures

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
014	Boiler 7 is an Alpha Conal Model No. ATT-203-18 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. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a wet sand separator followed by an ABB electrostatic precipitator. Exhaust gases exit a 225 feet tall stack at 335° F with an average flow rate of 355,000 acfm.

EQUIPMENT

5. **Oil Firing Upgrade:** The permittee is authorized to modify the existing oil firing system as follows: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace two existing oil pumps. [Design]

PERFORMANCE RESTRICTIONS

6. **Oil Specification:** Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The nitrogen content of the distillate oil shall not exceed 0.015% nitrogen by weight as determined by ASTM Method D4629 or equivalent methods approved by the Department. [Permit No. PSD-FL-208; Rules 62-212.400 and 62-296.405, F.A.C.; and 40 CFR 60.42b(j)]
7. **Permitted Capacity, Oil Firing:** The maximum heat input rate is 326 MMBtu per hour of heat input from distillate oil firing. {Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.} [Design; Rule 62-120.200(PTE), F.A.C.]
8. **Oil Firing Restrictions:** No more than 2417 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. {Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1). The hourly firing rate was amended from 2311 to 2417 gallons per hour on June 20, 2003.} [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; and 40 CFR 60.44b(l)(1)]

EMISSIONS STANDARDS

9. **PM Emissions:** Emissions of particulate matter (PM) shall not exceed 0.03 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Methods 5 or 17. [Permit No. PSD-FL-208(BACT); Rules 62-296.405, and 62-296.410, F.A.C.]
10. **Visible Emissions:** When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity, as determined by EPA Method 9. [40 CFR 60.43b(f); Permit No. PSD-FL-208(BACT)]
11. **NOx Emissions:** Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. {Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.} [Rule 62-4.070(3), F.A.C.; Permit No. PSD-FL-208(BACT)]

{Permitting Note: The following table summarizes revised maximum emission rates based on the original BACT determinations of Permit No. PSD-FL-208, the limits of this permit, and a heating value of 135,000 Btu per gallon of distillate oil.

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



JUN 19 2003

June 16, 2003

0337546

BUREAU OF AIR REGULATION

Florida Department of Environmental Protection
Department of Air Resources Management
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399-2400

Attention : Mr. Jeffery Koerner, P. E.

RE: United States Sugar Corporation (U.S. Sugar) – Clewiston Mill
Boiler No. 4 and Boiler No. 7 Fuel Oil Burning Increase
Air Permit No. 0510003-018-AC

Dear Mr. Koerner:

U.S. Sugar is in receipt of the Department's final permit for the above-referenced project. Our review of the final permit revealed there may have been a minor typographical error regarding Boiler No. 7. In Section 3.B., Condition 4, it is stated that the maximum oil firing rate shall be no more than 2,311 gallons per hour (gal/hr). In the original application for Boiler No. 7, this was the correct figure. However, in Golder's letter to the Department dated December 18, 2002, the oil usage figure was revised to 2,416.7 gal/hr. This corresponded to a maximum heat input rate of 326 million British thermal units per hour (MMBtu/hr). This maximum heat input rate is correctly reflected in the final permit, but it appears that the maximum oil usage rate was not updated.

We request that a minor amendment to the construction permit be issued to address this request. Please call or e-mail me if you have any questions concerning this request.

Sincerely,

GOLDER ASSOCIATES INC.

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, P.E., Q.E.P.
Principal Engineer
Florida P. E. # 19011

DB/nav

cc: Don Griffin
Ron Blackburn, DEP

L061603

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

JUN - 9 2003

NOTICE OF FINAL PERMIT

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-018-AC, which authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

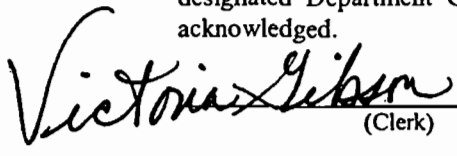
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/6/03 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 June 6, 2003
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems

This permit authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on April 3, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, EPA Region 4, or the NPS. The Department did receive the following comments from the applicant.

1. *Comment:* Boiler 4 should not be subject to NSPS Subpart Db because the firing of distillate oil ($\leq 0.40\%$ sulfur by weight) is a new physical restriction of the burner system. The applicant provided letters from the proposed burner vendors indicating that the system was being designed to accommodate only No. 2 distillate oil only and would not support No. 4 or No. 6 oils. The applicant asked the Department to discuss this issue with EPA Region 4 since this was a federal NSPS issue.

Response: The Department contacted EPA Region 4 and discussed the use of a fuel sulfur limit on Boiler 4 for determining future actual emissions. EPA Region 4 indicated that this could be considered a "physical restriction" if the burner vendor specifies that the new system would not accommodate other fuel oils such as No. 4 and No. 6. The applicant provided this information from the vendor. Therefore, there would be no increase in the hourly SO₂ emissions rate and NSPS Subpart Db does not apply to Boiler 4. The references to this NSPS Subpart Db were removed from the final permit.

2. *Comment:* The applicant noted both Boilers 4 and 7 rarely fire fuel oil alone (without bagasse). This presents an operational hardship in conducting regular tests solely on oil to determine the NO_x emission rate. Information from the burner vendors indicates that the NO_x emission rates will be less than 0.19 lb/MMBtu for Boiler 4 and 0.16 lb/MMBtu for Boiler 7, which are below the permit standard of 0.20 lb/MMBtu. After further discussion with the Department, the applicant agreed to conduct initial testing on oil alone.

Response: The final permit includes a requirement to conduct initial tests within 90 days of first firing oil while firing only oil. The requirements for subsequent tests were removed because the boilers rarely fire oil without also firing bagasse. This is consistent with the previous PSD air permits. In addition, Rule 62-297.310(7)(b), F.A.C. was added, "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."

CONCLUSION

The final action of the Department is to issue the permit with the changes described above. The Department does not consider these changes to be substantial.

Department of Environmental Protection



Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-018-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: May 1, 2004

PROJECT AND LOCATION

This permit authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, 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.). The permittee is authorized to perform the work 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. This permit supplements all previously issued air construction and operation permits for this emissions unit.

SPECIFIC CONDITIONS

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

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. This permit authorizes modification of the oil firing systems for Boilers 4 and 7 (Emissions Units 009 and 014), which will increase the maximum heat input rates and provide greater operational reliability. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The facility is a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The facility operates some units subject to the New Source Performance Standards in 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated 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 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. 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.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules and conditions of the permit. A Title V operation permit is required for regular operation. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may require by law. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
009	Boiler 4 is a traveling grate boiler manufactured by Foster Wheeler with a maximum steam production rate of 300,000 pounds per hour at 750° F and 600 psig. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a Type D, Size 200 Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 150 feet tall stack at 160° F with an approximate flow rate of 281,000 acfm.

EQUIPMENT

1. Oil Firing Upgrade: The permittee is authorized to replace the existing oil firing system with the following general equipment: two multi-stage combustion low-NOx burners with flame scanner, fuel/steam valve train, steam-atomized center-fired oil gun with ignitor and flame proving rod; a multi-burner windbox; a fuel oil pump set; and a burner management control system. [Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.40% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rules 62-212.400 and 62-296.405, F.A.C.]
3. Permitted Capacity, Oil Firing: The maximum heat input rate is 326 MMBtu per hour of heat input from distillate oil firing. {*Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.*} [Design; Rule 62-120.200(PTE), F.A.C.]
4. Oil Firing Restrictions: No more than 2417 gallons of distillate oil shall be fired during any hour and no more than 500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. {*Permitting Note: The annual oil firing limit is based on a previous SO₂ BACT determination.*} [Design; Permit No. PSD-FL-272A; Rule 62-212.400, F.A.C.]

EMISSIONS STANDARDS

5. PM Emissions: Emissions of particulate matter (PM) shall not exceed 0.10 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. [Permit No. PSD-FL-272A; Rules 62-296.405 and 62-296.410, F.A.C.]
6. Visible Emissions: When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity as determined by EPA Method 9. [Permit No. PSD-FL-272A; Rules 62-296.406 and 62-296.410]
7. NOx Emissions: Emissions of nitrogen oxides (NOx) shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. {*Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.*} [Rules 62-4.070(3) and 62-212.400, F.A.C.]

EMISSIONS PERFORMANCE TESTING

8. Initial Capacity Tests: Within 90 days of first fire on oil with the modified system, the permittee shall conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]

9. **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 <i>{Note: Performed as necessary to support other required methods.}</i>
5	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions
9	Visual Determination of the Opacity of Emissions
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates <i>{Note: Performed as necessary to support other required methods.}</i>

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 for testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Appendix SC of Section 4 of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. **Initial Compliance Tests:** Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires very low sulfur distillate oil with considerably restricted oil usage, an initial test for particulate matter when firing only oil is not required. [Permit No. PSD-FL-272A; and Rules 62-4.070(3) and 62-297.310(7)(a), F.A.C.]
11. **Annual Tests:** During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. If oil is co-fired with bagasse during the required annual compliance test, the particulate matter standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Rule 62-297.310(7)(a), F.A.C.]
12. **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. [Rule 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

13. **Test Notification:** The permittee shall notify the Compliance Authority in writing at least fifteen (15) days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.]
14. **Test Reports:** The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler No. 4

15. Oil Firing Records:

- a. *Methods:* The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.
- b. *Vendor Analysis:* For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.
- c. *Actual Sampling:* At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.
- d. *Fuel Consumption:* At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

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

OTHER APPLICABLE REQUIREMENTS

16. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
014	Boiler 7 is an Alpha Conal Model No. ATT-203-18 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. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a wet sand separator followed by an ABB electrostatic precipitator. Exhaust gases exit a 225 feet tall stack at 335° F with an average flow rate of 355,000 acfm.

EQUIPMENT

1. Oil Firing Upgrade: The permittee is authorized to modify the existing oil firing system as follows: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace two existing oil pumps. [Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The nitrogen content of the distillate oil shall not exceed 0.015% nitrogen by weight as determined by ASTM Method D4629 or equivalent methods approved by the Department. [Permit No. PSD-FL-208; Rules 62-212.400 and 62-296.405, F.A.C.; and 40 CFR 60.42b(j)]
3. Permitted Capacity, Oil Firing: The maximum heat input rate is 326 MMBtu per hour of heat input from distillate oil firing. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design; Rule 62-120.200(PTE), F.A.C.]
4. Oil Firing Restrictions: No more than 2311 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1).}* [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; and 40 CFR 60.44b(l)(1)]

EMISSIONS STANDARDS

5. PM Emissions: Emissions of particulate matter (PM) shall not exceed 0.03 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Methods 5 or 17. [Permit No. PSD-FL-208(BACT); Rules 62-296.405, and 62-296.410, F.A.C.]
6. Visible Emissions: When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity, as determined by EPA Method 9. [40 CFR 60.43b(f); Permit No. PSD-FL-208(BACT)]
7. NOx Emissions: Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.}* [Rule 62-4.070(3), F.A.C.; Permit No. PSD-FL-208(BACT)]

{Permitting Note: The following table summarizes revised maximum emission rates based on the original BACT determinations of Permit No. PSD-FL-208, the limits of this permit, and a heating value of 135,000 Btu per gallon of distillate oil.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

Table A. Estimated Maximum Emission Rates – Oil Firing

Pollutant	Original BACT lb/MMBtu*	Maximum Emission Rates	
		lb/hour	tons/year
CO	0.066	21.5	20.05
NOx	0.20	65.2	60.75
PM	0.03	9.8	9.11
SAM	0.005	1.6	1.52
SO ₂	0.05	16.3	15.19
VOC	0.004	1.3	1.22

EMISSIONS PERFORMANCE TESTING

8. **Design Capacity Tests:** Within 90 days of first fire on oil with the modified system, the permittee shall conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]
9. **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 <i>{Note: Performed as necessary to support other required methods.}</i>
5 or 17	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates <i>{Note: Performed as necessary to support other required methods.}</i>

The above methods are described in Appendix A of 40 CFR 60 and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. **Initial Compliance Tests:** Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires ultra-low sulfur distillate oil, a separate test for particulate matter when firing only oil is not required. If oil is co-fired with bagasse during the required annual compliance test, the particulate standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Permit No. PSD-FL-208; Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
11. **Annual Tests:** During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. [Rule 62-297.310(7)(a), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Boiler No. 7

12. 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. [Rule 62-297.310(7)(b), F.A.C.]
13. Opacity Monitoring: Appendix ASP specifies an Alternate Sampling Procedure for monitoring opacity in lieu of the NSPS Subpart Db requirements for continuous opacity monitoring. [Permit No. PSD-FL-208; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

RECORDS AND REPORTS

14. Test Notification: The permittee shall notify the Compliance Authority in writing at least thirty (30) days prior to any initial NSPS performance tests and at least fifteen (15) days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and 60.8]
15. Test Reports: The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]
16. Oil Firing Records:
 - a. *Methods*: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.
 - b. *Vendor Analysis*: For each fuel oil delivery, the permittee shall record and retain the following information: the date; the gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.
 - c. *Actual Sampling*: At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.
 - d. *Fuel Consumption*: At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

[Rule 62-4.070(3), F.A.C.; 40 CFR 60.49b]

OTHER APPLICABLE REQUIREMENTS

17. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]
18. NSPS Provisions: Boiler 7 is subject to the applicable portions of Subpart Db of the New Source Performance Standards in 40 CFR 60. A summary of the NSPS Subpart Db requirements is provided in Appendix Db. [40 CFR 60, Subpart Db; Rule 62-204.800, F.A.C.]

SECTION 4. APPENDICES

CONTENTS

- Appendix ASP. Alternate Sampling Procedure for Opacity, Boiler 7
- Appendix CF. Citation Format
- Appendix Db. NSPS Subpart Db Requirements for Boiler 7
- Appendix GC. General Conditions
- Appendix SC. Standard Conditions

SECTION 4. APPENDIX ASP

ALTERNATE SAMPLING PROCEDURE FOR OPACITY, BOILER 7

In accordance with Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996, the following conditions are specified in lieu of the requirement for continuous opacity monitoring.

1. Visible Emissions: In lieu of continuous opacity monitoring, the permittee may use the following procedure in order to determine the opacity of emissions when Boiler No. 7 burns No. 2 fuel oil:
 - a. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test once per daylight shift during the period that the highest oil firing rate occurs;
 - b. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test when the boiler achieves the normal operational load after a cold boiler startup with No. 2 fuel oil;
 - c. Required observations shall be made in accordance with the provisions of EPA Reference Method 9;
 - d. The observer shall maintain a log, which includes all of the information required by EPA Reference Method 9 for each set of observations and the quantity of No. 2 fuel oil being burned at the time of the observations;
 - e. A copy of the observation log shall be submitted to the South District Office of the Department once per calendar quarter if distillate oil was fired during that quarter. Information regarding fuel usage and fuel analysis shall also be submitted to the South district Office on a quarterly basis to verify that the 10 percent annual capacity factor limit is not exceeded;
 - f. The permittee shall follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained, and;
 - g. Permittee shall install and operate a continuous opacity monitor if either the annual capacity factor limit of 10 percent for combustion of No. 2 fuel oil is exceeded, or the applicable visible emission limiting standard in 40 CFR 60.43(f) is not regularly complied with when Boiler No. 7 is operated on No. 2 fuel oil.

[Rules 62-297.401(9), 62-212.400(5), F.A.C., 62-212.400(6), F.A.C., Construction Permit AC26-238006/BACT/PSD-FL-208 dated January 31, 1995, and ASP No. 95-B-01; Administrative Order dated April 1, 1996]

2. COMS: The Department reserves the right to require the permittee to install and operate a continuous opacity monitor pursuant to 40 CFR 60.48b(a), if after investigation, if it is believed that a continuous opacity monitoring system is necessary to more accurately assess the compliance status of the affected source.

[Permit No. PSD-FL-208 dated January 31, 1995; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

SECTION 4. APPENDIX CF
CITATION FORMAT

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX Db
NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

Boiler 7 (EU 014) is subject to all applicable portions of the federal New Source Performance Standards specified in Subpart Db of 40 CFR 60. The following is a summary of these requirements supplemented with Department notes.

60.40b Applicability and Delegation of Authority

- (a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).
- (j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

60.41b Definitions

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydro-desulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (incorporated by reference - see §60.17).

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m³ (70,000 Btu/hour-ft³).

Low heat release rate means a heat release rate of 730,000 J/sec-m³ (70,000 Btu/hour-ft³) or less.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Potential sulfur dioxide emission rate means the theoretical sulfur dioxide emissions (ng/J, lb/million Btu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any

SECTION 4. APPENDIX Db
NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 0.5 lb/million BTU heat input.

60.42b Standard for Sulfur Dioxide

- (j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (2) maintaining fuel receipts as described in §60.49b(r).

{Permitting Note: The permit limits distillate oil for Boiler 7 to $\leq 0.05\%$ sulfur by weight and requires the permittee to maintain fuel receipts.}

60.43b Standard for Particulate Matter

- (b) On and after the date on which the performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce sulfur dioxide emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 0.10 lb/million Btu heat input.

{Permitting Note: The particulate matter standard for oil does not apply because Boiler 7 does not use "conventional technology" or "emerging technology" to reduce sulfur dioxide emissions as defined in the Subpart.}

- (f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

{Permitting Note: The permit includes an equivalent limit for oil firing.}

60.44b Standard for Nitrogen Oxides

- (l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility which commenced construction, modification, or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas.

{Permitting Note: The permit contains enforceable conditions for Boiler 7 limiting the annual capacity factor for firing distillate oil to less than 10%.}

60.45b Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

- (j) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.46b Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides

- (a) The opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction.

SECTION 4. APPENDIX Db
NSPS SUBPART Db REQUIREMENTS FOR BOILER 7

(d) To determine compliance with the opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8 using the following procedures and reference methods:

(7) Method 9 is used for determining the opacity of stack emissions.

{Permitting Note: The permit conditions are consistent with these requirements.}

60.47b Emission Monitoring for Sulfur Dioxide

(f) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.48b Emission Monitoring for Particulate Matter and Nitrogen Oxides

(a) The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

{Permitting Note: In lieu of continuous opacity monitoring, an Alternate Sampling Procedure (ASP) was previously approved after construction of Boiler 7. The ASP is specified in the permit.}

60.49b Reporting and Recordkeeping Requirements

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §60.42b, §60.43b, and §60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B.

(f) For facilities subject to the opacity standard under §60.43b, the owner or operator shall maintain records of opacity.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.

(1) Any affected facility subject to the opacity standards under §60.43b(e) or to the operating parameter monitoring requirements under §60.13(i)(1).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under §60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Quarterly reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the preceding quarter.

{Permitting Note: In lieu of continuous opacity monitoring, an Alternate Sampling Procedure (ASP) was previously approved after construction of Boiler 7. The ASP is specified in the permit.}

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

Statutes. 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 Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (X).
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 SC
STANDARD CONDITIONS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities.}

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(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 or organic solvents 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. [Rule 62-296.320(2), 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 percent opacity. [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.]

TESTING REQUIREMENTS

10. **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.]

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. 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. [Rule 62-297.310(2), F.A.C.]
12. 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.]
13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
- a. *Required Sampling Time*. 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. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - 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.
- [Rule 62-297.310(4), F.A.C.]
14. 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.]
15. 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.
16. Test Notification: 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. [Rule 62-297.310(7)(a)9, F.A.C.]
17. 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. [Rule 62-297.310(7)(b), F.A.C.]
18. Test Reports: 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. 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. The test report shall provide

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

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:

- a. The type, location, and designation of the emissions unit tested.
- b. The facility at which the emissions unit is located.
- c. The owner or operator of the emissions unit.
- d. 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.
- e. 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.
- f. 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.
- g. 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.
- h. The date, starting time and duration of each sampling run.
- i. 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.
- j. The number of points sampled and configuration and location of the sampling plane.
- k. 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.
- l. The type, manufacturer and configuration of the sampling equipment used.
- m. Data related to the required calibration of the test equipment.
- n. Data on the identification, processing and weights of all filters used.
- o. Data on the types and amounts of any chemical solutions used.
- p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- q. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- r. All measured and calculated data required to be determined by each applicable test procedure for each run.
- s. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- t. 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.
- u. 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.]

RECORDS AND REPORTS

19. **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 five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. **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(2), F.A.C.]



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

November 14, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Senior Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: DEP File No.: 0510003-006-AC
Permit No. AC 26-238006 (PSD-FL-208)
Clewiston Facility, Boiler No. 7

Dear Mr. Brinson:

The Department has reviewed your request to utilize alternative Department-approved methods when conducting the initial compliance tests on Boiler No. 7. In particular you wish to use the instrumental Method 7E to determine nitrogen oxides emissions in lieu of the wet chemistry Method 7. You also wish to have the option to use Method 8 that measures sulfuric acid mist and sulfur dioxide emissions simultaneously instead of employing Method 6 which measures only sulfur dioxide. For reference, the instrumental Method 6C is acceptable in lieu of the wet Method 6 for determining sulfur dioxide emissions. The request is acceptable and the above referenced mentioned permit is hereby amended as follows:

SPECIFIC CONDITION No. 20

Sulfur dioxide emissions from Boiler No. 7, while it is burning 100% bagasse fuel, shall not exceed 0.17 lb/million Btu heat input, as determined by EPA reference Method 6, 6C, or 8 and in accordance with 40 CFR 60, Appendix A. Sulfuric acid mist emissions from Boiler No. 7, while it is burning 100% bagasse fuel, shall not exceed 0.017 lb/million Btu heat input, as determined by EPA Reference Method 8 and in accordance with 40 CFR 60, Appendix A.

SPECIFIC CONDITION No. 21

Nitrogen oxides emissions, expressed as NO₂, shall not exceed 185 lbs/hr as determined by EPA Reference Method 7 or 7E and in accordance with 40 CFR 60, Appendix A. The fuel oil shall contain no more than 0.015% nitrogen, by weight, as determined using ASTM D4629.

A person whose substantial interests are affected by this permit amendment may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of this permit amendment. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further order of the Department.

When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11-14-97 to the person(s) listed:

Mr. Murray T. Brinson, U.S. Sugar *
Mr. David A. Buff, P.E.
Mr. David Knowles, SD
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS

Clerk Stamp

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

Teri Jaker
clerk)

11-14-97
(Date)



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 31, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Senior Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: DEP File No.: 0510003-005-AC
Permit No. AC 26-238006 (PSD-FL-208)
Clewiston Facility, Boiler No. 7

Dear Mr. Brinson:

The Department has reviewed your request to extend the current construction permit and to allow additional time to conduct performance tests on Boiler No. 7 at the Clewiston facility. The expiration date of the above mentioned permit is hereby extended from March 31, 1998 to June 1, 1999 and amended as follows:

SPECIFIC CONDITION No. 14. Performance Stack Tests

Within 60 mill operating days after achieving the maximum capacity at which this unit will be operated but no later than 180 mill operating days after initial (I) startup and annually (A) thereafter, the permittee shall conduct performance tests for: sulfur dioxide (I and upon permit renewal), sulfuric acid mist (I), particulate matter (I, A), nitrogen oxides (I, A), volatile organic compounds (I, A), and carbon monoxide (I, A) while burning bagasse. The performance tests shall be conducted in accordance with the provisions of 40 CFR 60.45b and 60.46b. ~~If Boiler No. 7 is unable to conduct the initial performance test due to long term shutdown, the permittee is required to notify the Department within the specified time frames above upon restart (by telephone, to be followed by confirmation in writing) and also to conduct a performance test as soon as practicable thereafter but not later than 30 days after restart.~~ Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined at 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then Boiler 7 may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once Boiler No. 7 is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. Results of the tests shall be submitted to the Department's South Florida District office within 45 days after testing. The Department's South Florida District office shall be notified 30 days prior to any compliance test to allow witnessing.

A person whose substantial interests are affected by this permit amendment may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of this permit amendment. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code. Mediation is not available for this action.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10-31-97 to the person(s) listed:

Mr. Murray T. Brinson, U.S. Sugar*
Mr. David A. Buff, P.E.
Mr. David Knowles, SD
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Robert Van Voorhees, Bryan Cave LLP

Clerk Stamp

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

Kevin Joban
(clerk)

10-31-97
(Date)



Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT MODIFICATION

February 14, 1997

CERTIFIED MAIL NO. P 482 208 840
RETURN RECEIPT REQUESTED

In the Matter of an Application
for permit by:

Murray T. Brinson
Vice President Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Facility I.D. No: 0510003
DEP Permit Numbers: 0510003-004-AC
Hendry County - AP

The applicant, United States Sugar Corporation, applied on December 23, 1996 to the Department of Environmental Protection for a permit modification to permit 051003-001-AC for adding new equipment and an increase in emission limits for the sugar refinery. The increase in emissions was to be offset by a reduction in emissions from Boiler No. 7. This was not acceptable to EPA so U.S. Sugar withdrew the applications for emissions increase from the new equipment and emissions decrease from Boiler No. 7. U.S. Sugar applied on February 3, 1997 for a permit modification to reduce the allowable operation of the new equipment to 320 days per year. This will avoid increasing emissions above the PSD significant limit there by avoiding PSD review. The following changes (additions) to the permit are hereby entered and are now a part of the permit:

SPECIFIC CONDITION:

FROM:

1. The total hours of operation of the dryer/cooler unit, the granular carbon regeneration furnace, the bulk loadout operation are not restricted. The total hours of operation of each of the vacuum pickup points (Units No. 1, 2, 3, and 4) shall not exceed 4,380 hours per calendar year. [Reference Construction Permit Application Dated August 12, 1996]

TO:

1. The total hours of operation of the dryer/cooler unit, conditioning silos, screened sugar bins, distribution bins, screening and distribution, packaging and palletizing, bagging, powdered sugar/starch bins, vacuum pickup units 2 - 5, the granular carbon regeneration furnace and the bulk loadout operation are restricted to 320 days, 7,680 hours per year. The total hours of operation of each of the vacuum pickup points (Units No. 1, 6, and 7) and the V.H.P. sugar dryer shall not exceed 3,600 hours per calendar year. Please replace Table 3-1, dated 8/13/96 with Table 3-1, dated 1/28/97, Table 3-2, dated 1/31/97 and Table 3-3 dated 1/30/97 (enclosed). [Reference Revised Construction Permit Application Dated January 31, 1997]

ADD Under Required Testing:

17. Sulfur Dioxide tests are required on the carbon regeneration furnace to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA Method 6 or 6c as published in 40 CFR-60 Appendix A, or State approved equivalent method. Such test shall be conducted within 30 days after full production is achieved. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Reference Rules 62-297.310(7)(a)9 and 62-297.401(6), F.A.C.]

Renumber Specific Conditions 17 - 19 as 18 - 20.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-2400, within 14 days of receipt of this Permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

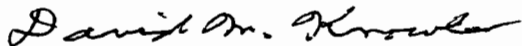
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code (F.A.C.).

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C.. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
ENVIRONMENTAL PROTECTION



David M. Knowles, P.E.
District Air Program Administrator
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881
(941) 332-6975

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on February 14, 1997 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.57(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Louis Karp 2-14-97
(Clerk) (Date)

DMK/JRS/jw

Enclosures

Copies furnished to:
David A. Buff, P.E.

Table 3-1. Summary of PM/PM10 Emissions from the Baghouses Associated With the Mill Expansion, U.S. Sugar Corporation

Source / Vent Name	Stack Number	Control Type	Manufacturer/Model ^a	Design Capacity	Control Efficiency (percent)	Operating Hours	PM/PM10 Emissions		
							(gr/dscf)	(lb/hr)	(TPY)
Vacuum Pickup Unit No. 1	S-1	Baghouse	Hoffman	3,000 dscfm	99.9	3,600	0.0025	0.064	0.116
Vacuum Pickup Unit No. 2	S-2	Baghouse	Hoffman	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Vacuum Pickup Unit No. 3	S-3	Baghouse	Hoffman	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Vacuum Pickup Unit No. 4	S-4	Baghouse	Hoffman	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Vacuum Pickup Unit No. 5	S-5	Baghouse	Hoffman	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Vacuum Pickup Unit No. 6	S-6	Baghouse	Hoffman	3,000 dscfm	99.9	3,600	0.0025	0.064	0.116
Vacuum Pickup Unit No. 7	S-7	Baghouse	Hoffman	3,000 dscfm	99.9	3,600	0.0025	0.064	0.116
White Sugar Dryer	S-8	Baghouse	Mikropul	91,000 dscfm	99.9	7,680	0.00184 ^b	1.436 ^c	5.51
Conditioning Silo No. 2	S-9	Baghouse	Torit & Day 100PJD8	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Conditioning Silos No. 4	S-10	Baghouse	Torit & Day 100PJD8	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Conditioning Silos No. 6	S-11	Baghouse	Torit & Day 100PJD8	3,000 dscfm	99.9	7,680	0.0025	0.064	0.247
Screened Sugar Bins	S-12	Baghouse	Torit & Day 100PJD8	100 dscfm	99.9	7,680	0.0025	0.0021	0.0082
Distribution Bins	S-13	Baghouse	Torit & Day 100PJD8	100 dscfm	99.9	7,680	0.0025	0.0021	0.0082
Screening and Distribution	S-14	Baghouse	Torit & Day 100PJD8	3,200 dscfm	99.9	7,680	0.0025	0.069	0.263
Packaging and Palletizing Area	S-15	Baghouse	Torit & Day 36PJD8	1,000 dscfm	99.9	7,680	0.0025	0.021	0.082
Bagging Operations	S-16	Baghouse	Torit & Day 100PJD8	11,900 dscfm	99.9	7,680	0.0025	0.255	0.979
Powdered Sugar / Starch Bins	S-17	Baghouse	Torit & Day 100PJD8 & 9PJD8	5,940 dscfm	99.9	7,680	0.0025	0.127	0.489
V.H.P. Sugar Dryer	S-18	Baghouse	Mikropul	103,000 dscfm	99.9	3,600	0.00184 ^b	1.625 ^c	2.925
							Total =	4.18	12.34

Footnotes:

^a Manufacturer and model are supplied for informational purposes only. Final design specifications will be similar but, manufacturer may differ.^b Back calculated from guaranteed emission rate and design flow rate.^c Manufacturer's guaranteed emission rate. See dryer baghouses manufacturer emission data.

Note: dscfm = dry standard cubic foot per minute.

gr/dscf = grains per dry standard cubic foot

lb/hr = pounds per hour

TPY = tons per year

Table 3-2. Emissions From Granular Carbon Regeneration Furnace, USSC
Clewiston Mill Expansion

Pollutant	Manufacturer's Design(a) (lb/hr)	Maximum Estimated Emissions	
		lb/hr	TPY (b)
PM / PM10	0.65 (c)	0.65	2.5
NOx	3.0	3.0	11.5
SO2	0.49 (d)	0.49	1.89
CO	3.0	3.0	11.5
VOC	1.0	1.0	3.8

- Notes: (a) Estimated emissions obtained from design information provided by BSP Thermal Systems, Inc.
- (b) Based on 7,680 hours per year of operation.
- (c) Based on uncontrolled emissions of 32.5 lb/hr and 98 % control efficiency with wet scrubber system.
- (d) Based on No. 2 fuel oil combustion only. See carbon regeneration furnace data for calculations. Scrubber SO2 removal is not considered.

Table 3-3. Potential Emissions of VOC from Alcohol Usage, USSC Clewiston Mill Expansion

Material	VOC Content	Maximum Sugar Production (TPY)	Annual Pounds of Material Used	Potential VOC Emissions (TPY)
Isopropyl Alcohol (a)	100%	704,000	29,216	14.61

(a) Isopropyl alcohol (IPA) usage based on 1 quart IPA per 100,000 lb of sugar.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

April 9, 1996

Certified Mail—Return Receipt Requested

Mr. Murray T. Brinson.
Vice President, Sugar Processing
U.S. Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Enclosed is a copy of an administrative order concerning the request for approval to use periodic EPA Method 9 opacity evaluations in lieu of the continuous opacity monitor required by 40 CFR 60 Subpart Db for visible emissions from Boiler No. 7.

If you have any questions about the above, please call Ramesh Menon at 904/488-6140, or write to me.

Sincerely,

Michael D. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section
Bureau of Air Monitoring and
Mobile Sources

/MH

Enclosure

cc: Pat Comer, FDEP
David Knowles, FDEP South District
David Buff, KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	Permit No.	AC 26-238006
)		PSD-FL-208
United States Sugar Corporation,)		AO 26-242733
)		
Petitioner.)	ASP No.	95-B-01

ORDER ON REQUEST
FOR
ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), United States Sugar Corporation, petitioned for approval to use periodic EPA Method 9 opacity evaluations in lieu of a continuous opacity monitor for visible emissions from Petitioner's Boiler No. 7 (AC 26-238006/PSD-FL-208 and AO 26-242733) located in Hendry County.

Having considered Petitioner's written request and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. Petitioner's Boiler No. 7 is an industrial boiler regulated under 40 CFR 60, Subpart Db which burns bagasse as the primary fuel and low sulfur No. 2 fuel oil as the supplemental fuel. Pursuant to 40 CFR 60.48b(a), Petitioner is required to install, calibrate, operate, and maintain a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere when burning No. 2 fuel oil.

2. The federally enforceable construction permit, permit number AC 26-238006/PSD-FL-208, limits Petitioner to an annual firing capacity of no more than 10 percent for No. 2 fuel oil.

3. On May 2, 1995, Petitioner specifically requested approval of a periodic EPA Method 9 evaluation protocol for Boiler No. 7 during those periods when No. 2 fuel oil is burned. [Exhibit 1]

4. Petitioner described the proposed opacity protocol as follows:

"A Method 9-trained and certified visible emission observer performs a 6-minute opacity test once a daylight shift during the period of the highest anticipated fuel oil firing rate.

A Method 9-trained and certified visible emission observer performs a 6-minute opacity test when Boiler No. 7 achieves the normal operational load after a cold boiler startup with No. 2 oil.

If the opacity readings exceed 10 percent, the observer continues the readings for another 12 minutes to obtain two additional data sets for a total of 3 data sets.

The observer logs in the reading results along with the date and time and submits the data to the Department's South District Office once per calendar quarter if distillate oil was fired during that quarter. As required by specific condition 24 of Air Construction Permit AC 26-238006/PSD-FL-208, fuel usage and fuel analysis data will be submitted to the Department's South District Office on a quarterly basis to verify that the 10 percent capacity limit is not exceeded." [Exhibit 1]

5. Petitioner further stated, "U.S. Sugar Corporation will follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained." [Exhibit 1]

6. As justification for the use of the alternate opacity monitoring procedure, Petitioner stated, "In light of the infrequency with which Boiler No. 7 will be burning No. 2 fuel oil and in light of the low ash content of No. 2 fuel oil emissions, U.S. Sugar requests the establishment and approval of the alternate opacity monitoring protocol set forth at Exhibit A, which has been deemed an acceptable alternative by U.S. EPA and Region IV." [Exhibit 1]

7. The Region 4 Office of the U.S. EPA has determined that an annual capacity factor of ten percent constitutes infrequent operation for purposes of alternative methods pursued under 40 CFR 60.13(i)(2). [Exhibit 2]

8. The Region 4 Office of the U.S. EPA recommends approval of Petitioner's request with minor revisions. [Exhibit 2]

9. Pursuant to the federally approved State Implementation Plan (SIP) [Rule 62-297.330(1)(b)3., F.A.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 with an applicable opacity standard is twelve minutes.

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider Petitioner's request pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.340(2), F.A.C., the Department may

require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emission if, after investigation, it is believed that any applicable emission standard or condition of a permit is being violated.

3. Petitioner has provided reasonable justification that proposed periodic EPA Method 9 evaluations of opacity will provide a sufficient substitute for the required continuous opacity monitoring providing the capacity factor of 10 percent for combustion of No. 2 fuel oil is not exceeded and the applicable visible emission limiting standard in 40 CFR 60.43b(f) is not exceeded when Boiler No. 7 is operated on No. 2 fuel oil.

ORDER

Having considered Petitioner's written request and supporting documentation, it is hereby ordered that:

1. In lieu of continuous opacity monitoring, Petitioner may use the following procedure in order to determine the opacity of emissions when Boiler No. 7 burns No. 2 fuel oil:

1.1 An individual who is trained in the use of EPA Method 9 and currently certified as a visible emission observer by the State of Florida shall perform a twelve-minute opacity test once per daylight shift during the period that the highest oil firing rate occurs;

1.2 An individual who is trained in the use of EPA Method 9 and currently certified as a visible emission observer by the State of Florida shall perform a twelve-minute opacity test when the boiler achieves the normal operational load after a cold boiler startup with No. 2 fuel oil;

1.3 Observations required pursuant to 1.1 and 1.2 shall be made in accordance with the provisions of EPA Method 9;

1.4 The observer shall maintain a log which includes all of the information required by EPA Method 9 for each set of observations and the quantity of No. 2 oil being burned at the time of observation;

1.5 A copy of the observation log shall be submitted to the Department's South District Office once per calendar quarter if distillate oil was fired during that quarter. Information regarding fuel usage and fuel analysis shall also be submitted to the Department's South District Office on a quarterly basis to verify that the 10 percent capacity limit is not exceeded;

2. Petitioner shall follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained; and,

3. Petitioner shall install and operate a continuous opacity monitor if either the capacity factor of 10 percent for combustion of No. 2 fuel oil is exceeded or the applicable visible emission limiting standard in 40 CFR 60.43b(f) is not regularly complied with when Boiler No. 7 is operated on No. 2 fuel oil.

4. The Department reserves the right to require Petitioner to install and operate a continuous opacity monitor pursuant to 40 CFR 60.48b(a), if after investigation, if it is believed that a continuous opacity monitoring system is necessary to more accurately assess the compliance status of the affected source.

PETITION FOR ADMINISTRATIVE REVIEW

1. A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3200, within 21 days of receipt of this Order. The petitioner shall mail a copy of the petition to the applicant at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

2. The petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, and the Department File Number;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts which each petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action.

3. If a petition is filed, the administrative hearing process

is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform with the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3200. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

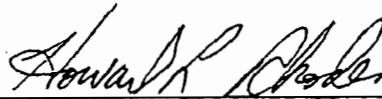
4. This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3200; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 15th day of April, 1996 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES
Director
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a true copy of the foregoing was mailed to Mr. Murray T. Brinson, Vice President. Sugar Processing, United States Sugar Corporation, Post Office Drawer 1207, Clewiston, Florida 33440, on this 1st day of April 1996.

Clerk Stamp

FILED AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk. receipt of which is hereby acknowledged.

Martha J. Powell 4/1/96
Clerk Date



May 2, 1995

Mr. Clair H. Fancy, P.E., Chief
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: United States Sugar Corp. - Clewiston Boiler No. 7
DEP File No. AC26-238006/PSD-FL-208
Request for Alternate Opacity Monitoring Procedure

Dear Mr. Fancy:

On behalf of U.S. Sugar Corporation, we respectfully request that the Department approve an alternate opacity monitoring procedure for Clewiston Boiler No. 7 pursuant to 40 CFR 60.13(i)(2) and Rule 62-297.620, F.A.C.

Clewiston Boiler No. 7 will be an industrial boiler regulated under 40 CFR 60, Subpart Db. It will fire bagasse as its primary fuel and very low sulfur No. 2 distillate oil ("No. 2 fuel oil") as a supplemental fuel.

When burning No. 2 fuel oil, Boiler No. 7 is subject to the opacity standards in 40 CFR 60.43b(f)¹ and Rule 62-296.800(2)(a)3, F.A.C.² Specific Condition 9 of the above-referenced construction permit limits the annual capacity for No. 2 fuel oil to no more than 10 percent. This is a federally-enforceable requirement.

40 CFR 60.13(i)

40 CFR 60.13(i)(2) allows facility owners or operators to propose alternative opacity monitoring methods for facilities that are operated infrequently.³

¹ 40 CFR 60.43b(f) prohibits the atmospheric discharge of gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

² Rule 62-296.800(2)(a)3, F.A.C. adopts and incorporates by reference 40 CFR 60, Subpart Db.

³ 40 CFR 60.13(i)(2) states:

Exhibit 1

Mr. Clair H. Fancy, P.E., Chief

May 2, 1995

Page 2



In a memorandum dated January 19, 1993, John B. Rasnic, Director, Stationary Source Compliance Division, USEPA (copy enclosed), confirmed that a 10 percent annual capacity factor can reasonably be considered "infrequent operation." Accordingly, a Subpart Db boiler with a 10 percent annual capacity for No. 2 fuel oil would be allowed to use an alternative opacity monitoring method.

The Rasnic Memorandum outlines one possible alternative monitoring program for "infrequently operated" facilities that is considered acceptable under 40 CFR 60.13(i)(2). U.S. Sugar proposes to adopt this alternative monitoring protocol whenever No. 2 Fuel Oil is being combusted in Boiler No. 7. (See Exhibit A).

Rule 62-297.620, F.A.C.

Rule 62-297.620, F.A.C. allows owners or operators of emissions units to request an alternate emissions test methodology for an emissions unit by demonstrating that the proposed alternative is adequate to demonstrate compliance with applicable emissions limiting standards.

U.S. Sugar requests that the Department approve the proposed alternative opacity monitoring protocol for Boiler No. 7 set forth at Exhibit A.

Currently, no independent Florida rule in Chapter 62-297, F.A.C. requires the installation of a continuous monitoring device to measure the opacity of emissions from Clewiston Boiler No. 7. Rule 62-297.500, F.A.C., cited in specific condition 9 of the above-referenced construction permit, was repealed on November 23, 1994. Thus, such monitoring is required only under Subpart Db, which has been incorporated by reference in the Florida Rules.

In light of the infrequency with which Boiler No. 7 will be burning No. 2 fuel oil and in light of the low ash content of No. 2 fuel oil emissions, U.S. Sugar requests the establishment and approval of the alternate opacity monitoring protocol set forth at Exhibit A, which has been deemed an acceptable alternative by U.S. EPA and Region IV.

"After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

- (2) Alternative monitoring requirements when the affected facility is infrequently operated."

Mr. Clair H. Fancy, P.E., Chief

May 2, 1995

Page 3



Please contact me or Bob Van Voorhees (202-508-6014) if you have any questions about this request.

Sincerely,

David A. Buff, P.E.

Principal Engineer

Enclosure

cc: Ai Linero, DEP
Mike Harley, DEP
Cleve Hoiladay, DEP
David Knowles, DEP South District
Jewell Harper, EPA Region IV
Stan Kukier, EPA Region IV
John Bunyak, NPS
Murray Brinson, U.S. Sugar
Peter Briggs, U.S. Sugar
Don Griffin, U.S. Sugar
Robert Van Voorhees, Bryan Cave
File (2)

Exhibit A

Proposed Alternative Opacity Monitoring Protocol for Clewiston Boiler No. 7

- A Method 9-trained and certified visible emission observer performs a 6-minute opacity test once a daylight shift during the period of the highest anticipated fuel oil firing rate.
- A Method 9-trained and certified visible emission observer performs a 6-minute opacity test when Boiler No. 7 achieves the normal operational load after a cold boiler startup with No. 2 oil.
- If the opacity readings exceed 10 percent, the observer continues the readings for another 12 minutes to obtain two additional data sets for a total of 3 data sets.
- The observer logs in the reading results along with the data and time and submits the data to the Department's South District Office once per calendar quarter if distillate oil was fired during that quarter. As required by specific condition 24 of Air Construction Permit AC26-238006/PSD-FL-208, fuel usage and fuel analysis data will be submitted to the Department's South District Office on a quarterly basis to verify that the 10 percent capacity limit is not exceeded.
- U.S. Sugar Corporation will follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4APT-AEB

SEP 11 1995

Mr. Michael D. Harley, P.E., DEE
Administrator
Emissions Monitoring Section
Air Resources Management Division
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Alternative Opacity Monitoring Procedure Proposed for U.S.
Sugar Corporation Boiler No. 7, Clewiston, Florida

Dear Mr. Harley:

This letter is in response to your August 15, 1995, request for a determination regarding an alternative opacity monitoring method proposed for the referenced boiler. The primary and backup fuels for the boiler are bagasse and low sulfur No. 2 fuel oil, respectively. The boiler is subject to 40 C.F.R. Part 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), and under 40 C.F.R. §60.48b(a) a continuous opacity monitor (COM) must be installed and operated when fuel oil is burned. The federally enforceable construction permit for the boiler contains a ten percent annual capacity factor limit for fuel oil, and based upon the provisions of 40 C.F.R. §60.13(i)(2), U.S. Sugar is seeking approval for an alternative opacity monitoring method. 40 C.F.R. §60.13(i)(2) allows owners and operators to propose alternative monitoring methods for infrequently operated sources.

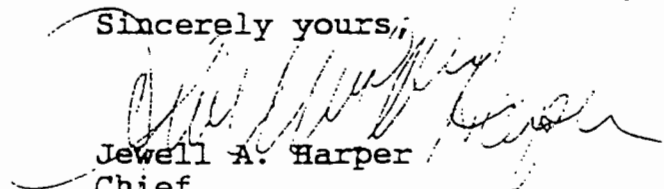
Based upon an alternative opacity monitoring method previously approved by the U.S. Environmental Protection Agency (EPA), Region 4 believes that the plan submitted for Boiler No. 7 can be approved if some minor changes are made. In the enclosed determination dated January 19, 1993, approval for an alternative opacity monitoring method based upon EPA Method 9 was approved for a gas-fired boiler that used No. 2 fuel as a backup fuel. This determination for Emory University indicated that an annual capacity factor of ten percent constitutes infrequent operation for purposes of alternative methods pursued under 40 C.F.R. §60.13(i)(2). In addition, the Emory University determination specified procedures for conducting Method 9 readings as an alternative to opacity monitoring and required that boiler manufacturer recommended maintenance schedules and procedures be followed in order to ensure proper operation of the unit.

Your request for a determination pointed out two issues regarding the alternative monitoring plan proposed for Boiler No. 7, and based upon one of these issues, Region 4 believes that the Method 9 data collection procedures in the alternative method must be modified slightly. The Emory University alternative requires that a six-minute opacity test be performed during each daylight shift and that an additional twelve minutes of opacity data be collected if the average opacity for the initial set of readings exceeds 10 percent. In your letter you pointed out that Florida regulations specify a minimum observation period of twelve minutes for data collected to verify compliance with opacity limits. Based upon this requirement, Region 4 recommends that the proposed opacity alternative for Boiler No. 7 be modified by requiring that twelve minutes of visible emissions data be collected during each daylight shift and dropping the provision for collecting additional data when a six-minute average opacity exceeds ten percent.

A second issue raised in your letter involves the difference between the primary fuels burned in the Emory University boiler and in U.S. Sugar Boiler No. 7. Specifically, the primary fuel for the Emory University boiler is natural gas, for which there is no opacity limit, and the primary fuel Boiler No. 7 is bagasse, for which there is an applicable opacity standard in the Florida regulations. Region 4 believes, however, that since installation of an opacity monitor on Boiler No. 7 is not required under the Florida regulations or in the construction permit for the boiler, the difference between the primary fuels at Emory University and at U.S. Sugar does not constitute a basis for rejecting the Boiler No. 7 opacity monitoring alternative.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of my staff at 404/347-3555, extension 4158.

Sincerely yours,



Jewell A. Harper
Chief

Air Enforcement Branch
Air, Pesticides and Toxics
Management Division

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Harper
sent
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BS
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Sealy

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Alternative Opacity Monitoring Method for NSPS Db Boilers Infrequently Fired With #2 Oil - Response to Emory University Monitoring Plan

FROM: John B. Rasnic, Director *John B. Rasnic*
Stationary Source Compliance Division
Office of Air Quality Planning and Standards (EN-341W)

TO: Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxics Management Division
Region IV (4APTMD)

The purpose of this memorandum is to respond to your memorandum of January 22, 1992, regarding an alternative opacity monitoring method for two boilers operated by Emory University in Atlanta, Georgia. These two boilers are subject to the requirements of the New Source Performance Standard (NSPS), Subpart Db. I regret the delay in our response. However, resolution of this issue required coordination with several offices.

The boilers in question have the ability to burn both oil and natural gas. When oil is being burned the boilers would be subject to the opacity standards in 40 CFR §60.43b(f). Emory has historically burned oil only during periods of natural gas curtailment and is subject to a permit condition limiting the annual capacity for oil to no more than 10 percent. Emory has requested approval of an alternative opacity monitoring method pursuant to 40 CFR §60.13(1)(2). This provision allows facility owners or operators to propose alternative opacity monitoring methods for facilities that are operated infrequently.

We believe that a ten percent annual capacity factor could reasonably be considered an "infrequent operation." The boilers may be oil-fired at a peak capacity during 36 days per year, ten percent per day, or in any other combination with natural gas as long as the annual ten percent capacity factor is not exceeded. In addition, since these boilers fire #2 distillate oil there is a limited likelihood that they will exceed the opacity limitations due to the relative cleanliness of this type of fuel. Therefore, an infrequently operated boiler burning #2 distillate oil would be allowed to use an alternative opacity monitoring method.

Upon reviewing the alternative monitoring method proposed by Emory University, we determined that the Emory University's proposal is insufficient and that for infrequently operated boilers fired with #3 oil a monitoring program similar to the following is acceptable:

- A Method 9-trained and certified visible emission observer performs a 6-minute opacity test once a daylight shift during the period of the highest oil firing rate.
- A Method 9-trained and certified visible emission observer performs a 6-minute opacity test when the boiler achieves the operational load after a cold boiler startup with #2 oil.
- If the opacity readings exceed ten percent, the observer continues the readings for another 12 minutes to obtain two additional data sets for a total of 3 data sets.
- The observer logs in the reading results along with the date and time and submits the data to the regulatory agency once per calendar quarter if distillate oil was fired during that quarter. The boiler permit should have provisions for reporting information on the quantity of distillate oil to verify that the 10 percent capacity limit is not exceeded. A requirement to quarterly report a total number of gallons of #2 oil burned is sufficient.
- A boiler owner/operator must follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained. These procedures involve a replacement of all worn-out components or of the entire burner, assuring a clean burner nozzle and a proper air-to-fuel ratio to prevent smoking. For instance, if the maintenance schedule calls for a daily nozzle tip cleaning and replacement if the tip is corroded, the owner/operator must clean (and replace, if needed) the tip every day. The boiler permit should specify the manufacturer's maintenance schedule conditions and require to report compliance with these conditions.

The permitting authority should reserve the right to revoke the alternative monitoring methods permit conditions if the boiler's emissions exceed the permissible limitations.

Please notice that this determination applies only to infrequently operated boilers fired with #2 distillate oil and becomes the EPA policy for industrial boilers fired with #2 oil and regulated under NSPS Subpart Db. A request for any alternative monitoring methods for infrequently operated boilers fired with heavier oils will require a separate determination. If you have any questions, please call Zofia Kosim of my staff at (703) 308-8733.

cc: David McNeal (4APTMD)
Rick Copland (MD-19)
Linda Lay (EN-341W)
Zofia Kosim (EN-341W)
Scott Throwe (EN-341W)
Kirk Foster (MD-17)



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

March 22, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Boiler No. 7

Mr. Murray T. Brinson
Vice President, Sugar Processing
U.S. Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Re: Permit No. AC 26-238006/PSD-FL-208
Request to Amend Construction Permit

The Department is in receipt of your letter dated February 15, 1995, requesting to amend the above referenced permit. The Bureau has evaluated your request and agrees to amend the permit as follows:

EXPIRATION DATE:

FROM:

September 1, 1996

TO:

March 31, 1998

SPECIFIC CONDITION No. 10

FROM:

10. All stationary fuel-oil burning equipment at the plant shall be equipped with integrating fuel oil flow meters or continuous recorders to measure the amount of fuel oil consumed by the equipment. Fuel oil meter readings on all fuel oil consuming equipment shall be read and logged at least once every three hours, unless fuel oil consumption for the equipment is recorded continuously, and these records shall be kept for at least five years for Department inspection. Each meter shall be calibrated annually by a method approved by the Department.

Mr. Murray T. Brinson
March 22, 1995
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In such circumstances, the tests shall be conducted as close to each other as is feasible. In accordance with 40 CFR 60.48b the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions. The monitoring device shall meet the applicable requirements under Chapter 62-297, F.A.C., and 40 CFR 60, Appendix B.

SPECIFIC CONDITION No. 18

FROM:

18. Pursuant to Rule 62.296.310(3) F.A.C., reasonable precautions shall be used to minimize unconfined emissions of particulate matter when reclaiming dry bagasse for the boiler. Reasonable precautions may include, but shall not be limited to the following:

- (1) Paving and maintenance of road, parking areas and yards.
- (2) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- (3) Application of asphalt, water, oil, chemicals or dust suppressants to unpaved road, yards, open stock piles and similar sources.
- (4) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the source to prevent reentrainment, and from building or work areas to prevent particulate from becoming airborne.
- (5) Landscaping or planting of vegetation.
- (6) Use of hoods, capture and/or vent particulate matter.
- (7) Confining abrasive blasting where possible.
- (8) Enclosure or covering of conveyor systems.
- (9) Wind breaks shall be installed around the dry bagasse load-out area.
- (10) Floors in the enclosed area shall be cleaned periodically.
- (11) Loading areas for bagasse shall be cleaned or wetted as needed to minimize fugitive dust.
- (12) Trucks transporting bagasse shall be covered.

TO:

18. Pursuant to Rule 62.296.310(3) F.A.C., reasonable precautions shall be used to minimize unconfined emissions of particulate matter when reclaiming dry bagasse for the boiler. Reasonable precautions may include, but shall not be limited to the following:

Mr. Murray T. Brinson
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not exceed 4,600,000 gallons. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%.

This condition is amended to avoid duplication. The requirement about CEM for opacity is already addressed in Specific Condition No. 17.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DEP File No. AC 26-238006
PSD-FL-208
Hendry County


Mr. Murray T. Brinson
Vice President, Sugar Processing
U. S. Sugar Corporation
P. O. Box 1207
Clewiston, Florida 33440

Enclosed is Permit Number AC 26-238006 (PSD-FL-208) for the construction of a 738 MMBtu/hr heat input (350,000 lbs/hr steam) boiler designed to burn bagasse and No. 2 fuel oil. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%. Boiler No. 7 will be constructed/installed at the U.S. Sugar Corporation's existing sugar mill that is located near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida, issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2/2/95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.


(Clerk) 2/2/95
(Date)

Copies furnished to:
Jewell Harper, EPA
John Bunyak, NPS
David Knowles, SFD
Robert VanVoorhees, Esquire
David Buff, KBN

FINAL DETERMINATION

United States Sugar Corporation's application for a permit to construct a 738 MMBTU/hr at their facility in Clewiston, Hendry County, Florida has been reviewed by the Bureau of Air Regulation in Tallahassee. The Technical Evaluation and Preliminary Determination for the permit to construct a 738 MMBTU/hr heat input Boiler (No. 7) in Clewiston, Florida, was distributed on October 24, 1994. The Notice of the Intent was published in the Clewiston News on November 2, 1994. Copies of the evaluation were available for inspection at the Department's offices in Fort Myers and Tallahassee.

Comments regarding the Technical Evaluation and Preliminary Determination and Specific Conditions of the proposed permit were submitted by Mr. Stan Kukier from the U.S. Environmental Protection Agency, and Mr. Murray T. Brinson, Vice President of U.S. Sugar Corporation, in their letters of November 30, January 6, 1995 and November 3, 1994, respectively. The Bureau has considered Mr. Kukier and Mr. Brinson comments and has agreed to the changes proposed for the material covered by the paragraphs "Background Information", "Project Description" and "Control Technology Review".

The revisions of the specific conditions of the permit are finalized as follows:

DEP PERMIT NUMBER AC 26-238006, PSD-FL-208 For a 738 MMBtu/hr Boiler No. 7.

EPA COMMENT - SPECIFIC CONDITION NO. 1

Based on EPA's comments regarding PSD applicability, the Department concurs with the revised net emission calculations presented by EPA. The draft permit, Table 2 of the Technical Evaluation and BACT documents will be revised to include the net emissions changes and new emissions standard for particulate matter. U. S. Sugar Corporation prepared PM impact analyses, which included air dispersion modeling, as part of the Clewiston Boiler No. 7 construction permit application. Tables 4, 5, and 6 in the technical evaluation and preliminary determination for this project have been updated to include the modeling results of these analyses. Additionally, the PM₁₀ background concentrations in Table 6 are based on data collected from Florida Sugar Cane League (FSCL) PM₁₀ monitors during the period 1988-1991. As shown in these three tables all PM₁₀ impacts are predicted to be less than the applicable standards and increments.

Specific Condition No. 1 will be revised as follows:

FROM:

EMISSION LIMITATIONS

1. Based on a maximum heat input to the boiler of 738 MMBtu/hr for bagasse and 250 MMBtu/hr for fuel oil, stack emissions shall not exceed the following limits:

ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Bagasse</u>			<u>No. 2 Fuel Oil</u>		
	lb/MMBtu	lbs/hr	tons/yr	lb/MMBtu	lbs/hr	tons/yr
Particulate Matter (PM)	0.04	30	129	0.04	10	12.88
PM ₁₀	0.035	26	112	0.04	10	12.88
Sulfur Dioxide	0.17	125	550	0.05	12.5	16.10
Nitrogen Oxides	0.25	185	809	0.2	50.0	64.40
Carbon Monoxide	0.70	516	2,262	0.066	16.5	21.25
Volatile Organic Compounds	0.212	157	685	0.004	1.0	1.29
Sulfuric Acid Mist	0.017	13	55	0.005	1.25	1.60

TO:

EMISSION LIMITATIONS

1. Based on a maximum heat input to the boiler of 738 MMBtu/hr for bagasse and 250 MMBtu/hr for fuel oil, stack emissions shall not exceed the following limits:

ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Bagasse</u>			<u>No. 2 Fuel Oil</u>		
	lb/MMBtu	lbs/hr	tons/yr	lb/MMBtu	lbs/hr	tons/yr
Particulate Matter (PM)	0.03	22	97	0.03	7.5	9.7
PM ₁₀	0.03	22	97	0.03	7.5	9.7
Sulfur Dioxide	0.17	125	550	0.05	12.5	16.10
Nitrogen Oxides	0.25	185	809	0.2	50.0	64.40
Carbon Monoxide	0.70	516	2,262	0.066	16.5	21.25
Volatile Organic Compounds	0.212	157	685	0.004	1.0	1.29
Sulfuric Acid Mist	0.017	13	55	0.005	1.25	1.60

A. U.S. SUGAR COMMENTS

A. **EXPIRATION DATE** - U.S. Sugar Corporation has requested an expiration date of March 31, 1998 rather than September 1, 1996. They have anticipated that Boiler No. 7 will be operated only during the sugar cane processing crop season, which falls between October 1 and March 31. U.S. Sugar Corporation does not anticipate

that actual construction work on the boiler will be completed very much in advance of December 31, 1996. Initial startup and debugging work will proceed for the remainder of the 1996-97 crop season and may be completed by March 31, 1997. This means that operation to achieve full capacity will not begin until the start of the 1997-98 crop season in October 1997. Full commissioning of the boiler, including compliance testing will proceed during the 1997-98 crop season and be completed by March 31, 1998. Under no circumstances will this boiler be fully constructed, commissioned and tested by September 1, 1996.

DEP RESPONSE:

Provide that this emission unit will be timely tested as specified in Specific Condition No. 14; the expiration date of this permit will be changed as follows:

FROM: September 1, 1996.

TO: March 31, 1998.

B. SPECIFIC CONDITION NO. 11:

U.S. SUGAR COMMENT - The second sentence should be deleted from Specific Condition 11. The limitation placed on the use of the boiler in that sentence exceeds the restriction set forth in the regulations cited as authority for the limitation. The regulations in 40 CFR Part 60, Subpart Da do not prohibit the sale of electricity generated by an industrial boiler to any utility power distribution system at the levels specified in the second sentence. 40 CFR 60.41a simply states that any boiler constructed for the purpose of providing more than one-third of its potential electric output capacity and more than 25 MW to any utility power distribution system is subject to the New Source Performance Standards for electric utility boilers. The question is one of intended use at the time of permitting. U.S. Sugar Corporation has no intention to use the boiler to supply electricity to any utility power distribution systems at levels that exceed these criteria. Moreover, to exceed the criteria, it would be necessary for U.S. Sugar to be planning to supply more than 25 MW, or more than 70% of the potential electric output capacity of the boiler since the criterion is two-fold and conjunctive.

DEP RESPONSE:

The intent of Specific Condition No. 11 is to provide the Department with reasonable assurance that a 250 million Btu/hour fossil fuel boiler (Boiler No. 7) will not be an affected facility under 40 CFR 60.41a. The revised specific condition will satisfy the Department's concern on this issue. U.S. Sugar Corporation, as confirmed in their November 3, 1994, letter, has no intent to use Boiler No. 7 to supply electricity to any utility power distribution system at levels specified in the applicable

definition for electrical utility steam generating unit, 40 CFR 60.41a. This specific condition is revised as follows:

FROM:

11. The fuel oil system for Boiler No. 7 shall be designed, constructed, and operated so that it cannot exceed the fuel feed rate equivalent to or greater than 250 MMBtu/hr heat input (high heating value of the fuel oil, 1-hour average). Not more than 1/3 of the potential electric output capacity and not more than 25 MW electricity output shall be supplied to any utility power distribution system for sale. The permittee shall maintain records of the hourly fuel oil feed rate to the boiler, the percentage of electrical power output distributed to any utility power distribution system, and the amount of electrical power (MW) distributed to any utility power distribution system (40 CFR 60, Subpart Da).

TO:

11. The fuel oil system for Boiler No. 7 shall be designed, constructed, and operated so that it cannot exceed the fossil fuel feed rate equivalent to or greater than 250 MMBtu/hr heat input (high heating value of the fuel oil, 1-hour average). The permittee shall maintain records of the hourly fuel oil feed rate to the boiler, the percentage of electrical power output distributed to any utility power distribution system, and the amount of electrical power (MW) distributed to any utility power distribution system (40 CFR 60, Subpart Da).

C. SPECIFIC CONDITION NO. 14:

U.S. SUGAR COMMENT - Specific Condition No. 14 should be revised to provide that stack tests be performed "no later than 180 operating days after initial (I) startup." It is necessary to state this requirement in terms of operating days because U.S. Sugar operates its boilers on a seasonal basis only during the sugar cane crop harvesting season. Initially, Boiler No. 7 will also be operated on a seasonal basis. Thus, it is quite possible that the boiler will be started up during the latter portion of the 1996-97 crop season, but will not achieve maximum capacity until sometime during the 1997-98 crop season. To allow for this contingency, the 180-day requirement should be stated in terms of operating days.

RESPONSE:

This specific condition will be modified to include EPA's guidance regarding this issue. The intent of the Federal Regulations, 40 CFR 52.12(c)(1), Source Surveillance and 40 CFR 60.8 Performance Tests, is for the emission unit to be tested "within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start up of such facility.." Although, the word

"calendar" is not included in the above federal regulation, it is EPA's and DEP's intent to consider calendar days for purpose of achieving timely compliance. However, for this facility according to EPA's memo of September 29, 1977, from E. Reich to J. Wilbur, if the emission unit has not been performance tested in the 180 day period following start up due to subsequent long term shutdown, the permittee is required to notify the Department upon restartup (by telephone; to be followed by confirmation in writing) and to perform a compliance test as soon as practicable thereafter but no later than 30 days after restartup.

Specific Condition No. 14 will be revised as follows:

FROM:

14. Performance Stack Tests. Within 60 calendar days after achieving the maximum capacity at which this unit will be operated, but no later than 180 days after initial (I) startup and annually (A) thereafter, the permittee shall conduct performance tests for: sulfur dioxide (I and upon permit renewal), sulfuric acid mist (I), particulate matter (I,A), nitrogen oxides (I,A), volatile organic compounds (I,A), and carbon monoxide (I,A) while burning bagasse. The performance tests shall be conducted in accordance with the provisions of 40 CFR 60.45b and 60.46b. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then Boiler No. 7 may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once Boiler No. 7 is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. Results of the tests shall be submitted to the Department's South Florida District office within 45 days after testing. The Department's South Florida District office shall be notified 30 days prior to any compliance test to allow witnessing.

The EPA Reference Methods shall be performed in accordance with 40 CFR Part 60 (Standards of Performance for New Stationary Sources), Appendix A, or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), Appendix B. No other test method may be used until authorization has been obtained in writing from the Department. An alternate sampling procedure can be requested in accordance with Chapter 62-297, F.A.C. A test protocol shall be submitted for approval to the Department's Bureau of Air Regulation at least 90 days prior to testing.

TO:

14. Performance Stack Tests. Within 60 calendar days after achieving the maximum capacity at which this unit will be operated, but no later than 180 days after initial (I) startup and annually

(A) thereafter, the permittee shall conduct performance tests for: sulfur dioxide (I and upon permit renewal), sulfuric acid mist (I), particulate matter (I,A), nitrogen oxides (I,A), volatile organic compounds (I,A), and carbon monoxide (I,A) while burning bagasse. The performance tests shall be conducted in accordance with the provisions of 40 CFR 60.45b and 60.46b. If Boiler No. 7 is unable to conduct the initial performance test due to long term shutdown, the permittee is required to notify the Department within the specified time frames above upon restartup (by telephone: to be followed by confirmation in writing) and also to conduct a performance test as soon as practicable thereafter but not later than 30 days after restartup. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then Boiler No. 7 may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once Boiler No. 7 is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. Results of the tests shall be submitted to the Department's South Florida District office within 45 days after testing. The Department's South Florida District office shall be notified 30 days prior to any compliance test to allow witnessing.

The EPA Reference Methods shall be performed in accordance with 40 CFR Part 60 (Standards of Performance for New Stationary Sources), Appendix A, or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), Appendix B. No other test method may be used until authorization has been obtained in writing from the Department. An alternate sampling procedure can be requested in accordance with Chapter 62-297, F.A.C. A test protocol shall be submitted for approval to the Department's Bureau of Air Regulation at least 90 days prior to testing.

D. SPECIFIC CONDITION NO. 18:

U.S. SUGAR COMMENT - Specific Condition No. 18 should be revised to read as follows:

"Visible emission from the bagasse handling systems shall not exceed 10 percent opacity over any 6 minute period as measured by EPA Reference Method 9, provided, however, that this visible emissions limit shall not apply during periods of high winds (wind speed of 18 miles per hour or greater) if reasonable precautions (covered conveyors, windbreaks, and the height of drop points are minimized) to control fugitive emissions have been taken. The company shall maintain a meteorological instrument to record the wind speed at the plant which shall be located at its Research Center, about one mile "south" of the Clewiston Mill.

DEP RESPONSE:

The Department feels that reasonable precautions as it will be listed in the new condition No. 18 will be sufficient to address the bagasse handling operation. No numerical visible emissions standard will be set.

This condition will be revised as follows:

FROM:

18. Visible emissions from the bagasse handling systems shall not exceed 10% opacity over any 6-minute period as measured by EPA Reference Method 9. Reasonable precautions shall be used to minimize fugitive emissions when reclaiming dry bagasse for the boiler. The permittee shall maintain a meteorological instrument to record the wind speed at the plant, which shall be located at its Research Center located about one mile "south" of the Clewiston mill.

TO:

Pursuant to Rule 62.296.310(3) F.A.C., reasonable precautions shall be used to minimize unconfined emissions of particulate matter when reclaiming dry bagasse for the boiler. Reasonable precautions may include, but shall not be limited to the following:

- 1) Paving and maintenance of road, parking areas and yards.
- 2) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- 3) Application of asphalt, water, oil, chemicals or dust suppressants to unpaved road, yards, open stock piles and similar sources.
- 4) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the source to prevent reentrainment, and from building or work areas to prevent particulate from becoming airborne.
- 5) Landscaping or planting of vegetation.
- 6) Use of hoods, capture and/or vent particulate matter.
- 7) Confining abrasive blasting where possible.
- 8) Enclosure or covering of conveyor systems.
- 9) Wind breaks shall be installed around the dry bagasse load-out area.
- 10) Floors in the enclosed area shall be cleaned periodically.
- 11) Loading areas for bagasse shall be cleaned or wetted as needed to minimize fugitive dust.
- 12) Trucks transporting bagasse shall be covered.

DEP COMMENTS -

Specific Conditions No. 9 and 12 will be revised for clarification purposes.

SPECIFIC CONDITION No. 9:

This condition will be revised as follows:

FROM:

9. During any calendar year, the maximum quantity of No. 2 fuel oil (maximum 0.05% S content, by weight) burned in Boiler No. 7 shall not exceed 4,600,000 gallons. The consumption of fuel oil shall not exceed 10% of the maximum potential heat input to the boiler in any calendar year.

TO:

9. During any calendar year, the maximum quantity of No. 2 fuel oil (maximum 0.05% S content, by weight) burned in Boiler No. 7 shall not exceed 4,600,000 gallons. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%.

The permittee shall install, calibrate, maintain and operate a continuous monitoring device for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The monitoring device shall meet the applicable requirements of Section 62-297.500, F.A.C., and 40 CFR 60 Subpart Db.

DEP COMMENTS - SPECIFIC CONDITION NO. 12:

FROM:

12. Boilers No. 5 and No. 6 may be retained as standby boilers at the Clewiston Mill. Boilers No. 5 and No. 6 may be operated during initial start-up, debugging, and testing of Boiler No. 7. After Boiler No. 7 becomes operational, Boilers No. 5 and No. 6 may be operated only when one or more boilers of equal or greater permitted heat input at the Clewiston Mill are shut down. During operation, Boilers No. 5 and No. 6 must comply with all requirements in their current operating permits. The operation permits for Boilers No. 5 and No. 6 shall be amended to reflect this condition.

TO:

12. Boilers No. 5 and No. 6 may be retained as standby boilers at the Clewiston Mill. Boilers No. 5 and No. 6 may be operated during initial start-up, debugging, and testing of Boiler No. 7. After Boiler No. 7 becomes operational, Boilers No. 5 and No. 6 may be operated only when one or more boilers of equal or greater permitted heat input, and with equal to or greater allowable emissions, at the Clewiston Mill are shut down. During operation,

Boilers No. 5 and No. 6 must comply with all requirements in their current operating permits. The operation permits for Boilers No. 5 and No. 6 shall be amended to reflect this condition. The permittee shall maintain records of actual operation of all boilers at the Clewiston Mill for at least a five (5) year period.

The final action of the Department is to issue construction permits AC26-238006 and PSD-FL-208 with the changes noted above.

U.S. Sugar Clewiston Boiler No. 7
AC50-238006 (PSD-FL-208)

Table 1. Allowable Emissions

Pollutant	Bagasse			No. 2 Fuel Oil		
	lb/MMBtu	lb/hr	ton/yr	lb/MMBtu	lb/hr	ton/yr
Particulate (PM)	0.03	22	97	0.03	7.5	9.7
Particulate (PM ₁₀)	0.03	22	97	0.03	7.5	9.7
Sulfur Dioxide ¹	0.17	125	550	0.05	12.5	16.10
Nitrogen Oxides ²	0.25	185	809	0.2	50.0	64.40
Carbon Monoxide	0.70	516	2,262	0.066	16.5	21.25
Volatile Organic Compounds	0.212	157	685	0.004	1.0	1.29
Sulfuric Acid Mist	0.017	13	55	0.005	1.25	1.60
Lead				56E-06		
Mercury				6.4E-06		
Beryllium				8.4E-06		
Fluorides				12.6E-06		

¹ Compliance based on use of very-low sulfur fuel oil (0.05% sulfur) and on 24-hour rolling average per 40 CFR 60, Subpart Db

² Compliance based on use of low nitrogen fuel oil and on 24-hour rolling average per 40 CFR 60, Subpart Db

Table 2. Revised PSD Source Applicability for U.S. Sugar Clewiston Boiler No.7

Regulated Pollutant	Contemporaneous Decreases (TPY)			Increase Due to Boiler No.7 (TPY)	Net Change (TPY)	Significant Emission Rate (TPY)	PSD Applies ?
	Boiler 5	Boiler 6	Total				
Particulate (TSP)	27.2	33.1	60.3	97 ^a	36.7	25	Yes
Particulate(PM10)	24.5	29.8	54.3	97 ^b	42.7	15	Yes
Sulfur dioxide	11.1	12.3	23.5	549.5	526.05	40	Yes
Nitrogen oxides	26.4	29.6	56.1	808.1 ^c	752.05	40	Yes
Carbon monoxide	1,180.1	1,323.7	2,503.8	2,262.7 ^d	-241.1	100	No
Volatile Org. Compds.	44.0	49.4	93.4	685.3	591.85	40	Yes
Lead	-	-	-	0.018	0.018	0.6	No
Mercury	-	-	-	0.0021	0.0021	0.1	No
Beryllium	-	-	-	0.0027	0.0027	0.0004	Yes
Fluorides	-	-	-	0.0041	0.0041	3	No
Sulfuric acid mist ^b	1.1	1.2	2.35	55.0 ^e	52.6	7	Yes
Total reduced sulfur	-	-	-	-	-	10	No
Asbestos	-	-	-	-	-	0.007	No
Vinyl Chloride	-	-	-	-	-	0	No

^a Based on PM emission limit of 0.03 lb/MMBtu.

^b Based on PM10 emission limit of 0.03lb/MMBtu.

^c Based on NOx emission limit of 0.25lb/MMBtu.

^d Based on CO emission rate of 0.70 lb/MMBtu.

^e Based on 10 % of SO₂ emissions.

U.S. Sugar Clewiston Boiler No. 7
AC50-238006 (PSD-FL-208)

Table 4. PSD Class II Increment Analysis

Pollutant	Averaging Time	Max. Predicted Impact (ug/m ³)	Allowable Increment (ug/m ³)
SO ₂	Annual	3.96	20
	24-hour	36.7	91
	3-hour	203	512
PM ₁₀	Annual	1.67	17
	24-hour	22.2	30
NO ₂	Annual	2.24	25

Table 5. PSD Class I Increment Analysis

Pollutant	Averaging Time	Max. Predicted Impact (ug/m ³)	Allowable Increment (ug/m ³)
SO ₂	Annual	0.39	2
	24-hour	3.82	5
	3-hour	22.1	25
PM ₁₀	Annual	0.034	4
	24-hour	3.44	8
NO ₂	Annual	0.17	2.5

Table 6. Ambient Air Quality Impact

Pollutant	Averaging Time	Modeled Sources Impact (ug/m ³)	Background Conc. (ug/m ³)	Total Impact (ug/m ³)	Florida AAQS (ug/m ³)
SO ₂	Annual	26	8	34	60
	24-hour	173	21	194	260
	3-hour	440	53	493	1,300
PM ₁₀	Annual	12	26	38	50
	24-hour	69	53	123	150
NO ₂	Annual	11	26	37	100



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

PERMITTEE:
U.S. Sugar Corporation
P. O. Box 1207
Clewiston, Florida 33440

Permit Number: AC26-238006
PSD-FL-208
Expiration Date: September 1, 1996
County: Hendry
Latitude/Longitude: 26°44'05"N
80°56'20"W
Project: Boiler No. 7

*Revised
8/22/95*

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.); Chapters 62-210 through 62-297 and 62-4, Florida Administrative Code (F.A.C.); and, 40 CFR 52.21. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and specifically described as follows:

Construction of a 738 MMBtu/hr heat input (350,000 lbs/hr steam) boiler designed to burn bagasse and No. 2 fuel oil. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%. Boiler No. 7 will be constructed/installed at the U.S. Sugar Corporation's existing sugar mill that is located near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida. The UTM coordinates of this site are 17-506.1 km East and 2956.9 km North.

The emissions unit shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received September 17, 1993.
2. Department's letter dated October 15, 1993.
3. U.S. Sugar Corporation's letter dated December 22, 1993.
4. U.S. Sugar Corporation's letter dated February 22, 1994.
5. Department's letter dated February 28, 1994.
6. Department's letter dated March 18, 1994.
7. U.S. Sugar Corporation's (ICF Kaiser) letter dated May 10, 1994.
8. U.S. Sugar Corporation's (Bryan Cave's) letter dated June 7, 1994.
9. U.S. Sugar Corporation's letter dated June 29, 1994.
10. United States Department of Interior's letter dated June 28, 1994.
11. Bryan Cave's letter dated July 13, 1994.
12. Bryan Cave's letter dated July 28, 1994.
13. Bryan Cave's letter dated September 9, 1994.
14. KBN's letter dated September 23, 1994.

15. U.S. Sugar Corporation's letter dated September 28, 1994.
16. EPA's letter dated October 27, 1994.
17. U.S. Sugar Corporation's letter dated November 9, 1994.
18. U.S. Sugar Corporation's letter dated November 3, 1994.
19. EPA's letter dated November 30, 1994.
20. Bryan Cave's letter dated December 15, 1994.
21. KBN's letter dated December 8, 1994.
22. EPA's letter dated January 6, 1994.

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GENERAL CONDITIONS:

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 any 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 of 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 acknowledgement 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.

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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 any 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.

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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:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

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 for 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and,
 - the results of such analyses.

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March 31, 1998

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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.

SPECIFIC CONDITIONS:

EMISSION LIMITATIONS

1. Based on a maximum heat input to the boiler of 738 MMBtu/hr for bagasse and 250 MMBtu/hr for fuel oil, stack emissions shall not exceed the following limits:

ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Bagasse</u>			<u>No. 2 Fuel Oil</u>		
	lb/MMBtu	lbs/hr	tons/yr	lb/MMBtu	lbs/hr	tons/yr
Particulate Matter (PM)	0.03	22	97	0.03	7.5	9.7
PM ₁₀	0.03	22	97	0.03	7.5	9.7
Sulfur Dioxide	0.17	125	550	0.05	12.5	16.10
Nitrogen Oxides	0.25	185	809	0.2	50.0	64.40
Carbon Monoxide	0.70	516	2,262	0.066	16.5	21.25
Volatile Organic Compounds	0.212	157	685	0.004	1.0	1.29
Sulfuric Acid Mist	0.017	13	55	0.005	1.25	1.60

CONSTRUCTION AND OPERATIONAL REQUIREMENTS

2. Construction of Boiler No. 7 shall conform to the plans described in the application.

3. The boiler shall be of the spreader-stroker vibrating-grate type.

4. The boiler's stack shall have a minimum height of 225 feet. After Boiler No. 7 becomes operational, Boilers Nos. 1, 2, and 3 stacks shall have a minimum height of 150 feet. The stack sampling facilities for each stack shall comply with Rule 62-297.345, F.A.C.

5. The boiler shall be equipped with instruments to measure fuel oil flowrate, steam production, steam pressure, and steam temperature.

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6. The boiler shall be equipped with an electrostatic precipitator (ESP) designed for at least 98 percent removal of particulate matter.

The permittee shall submit to the Department copies of technical data pertaining to the selected ESP and to the boiler design within thirty (30) days after it becomes available. These data should include, but not be limited to, guaranteed efficiency, emission rate and major design parameters.

Nitrogen oxides emissions will be controlled by overfire air and good combustion practices; and, will be minimized using low-nitrogen fuel oil (max. 0.015% N content, by weight). Carbon monoxide and volatile organic emissions will be controlled by good combustion practices. Sulfur dioxide and sulfuric acid mist emissions, when firing fuel oil, will be controlled by using very low-sulfur No. 2 fuel oil (max. 0.05% S content, by weight).

7. Boiler No. 7 shall be operated in accordance with the capabilities and specifications described in the application. Steam production, heat input, and bagasse consumption shall not exceed the following:

Steam Pressure psig	Steam Temp. F°	Averaging Time	Steam Production lbs/hr	Heat Input MMBtu/hr	Bagasse Feedrate lbs/hr-wet
600	750	1-hr max. Max. 24-hr avg.	385,000 350,000	812 738	203,060 184,600

8. Heat input from No. 2 fuel oil (0.05% S content, by weight) shall not exceed 250 MMBtu/hr (which is approximately equivalent to 1,785 gallons per hour of oil and 175,000 pounds per hour of steam). The boiler shall be operated so that not more than two burners with two oil guns each (total of four oil guns) can be used with a total maximum capacity not to exceed the permitted fuel oil input rate.

9. During any calendar year, the maximum quantity of No. 2 fuel oil (maximum 0.05% S content, by weight) burned in Boiler No. 7 shall not exceed 4,600,000 gallons. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%.

The permittee shall install, calibrate, maintain and operate a continuous monitoring device for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The monitoring device shall meet the applicable requirements of Section 62-297.500, F.A.C., and 40 CFR 60, Subpart Db.

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12/1/95
10. All stationary fuel-oil burning equipment at the plant shall be equipped with integrating fuel oil flow meters or continuous recorders to measure the amount of fuel oil consumed by the equipment. Fuel oil meter readings on all fuel oil consuming equipment shall be read and logged at least once every three hours, unless fuel oil consumption for the equipment is recorded continuously, and these records shall be kept for at least five years for Department inspection. Each meter shall be calibrated annually by a method approved by the Department.

11. The fuel oil system for Boiler No. 7 shall be designed, constructed, and operated so that it cannot exceed the fossil fuel feed rate equivalent to or greater than 250 MMBtu/hr heat input (high heating value of the fuel oil, 1-hour average). The permittee shall maintain records of the hourly fuel oil feed rate to the boiler, the percentage of electrical power output distributed to any utility power distribution system, and the amount of electrical power (MW) distributed to any utility power distribution system (40 CFR 60, Subpart Da).

12. Boilers No. 5 and No. 6 may be retained as standby boilers at the Clewiston Mill. Boilers No. 5 and No. 6 may be operated during initial start-up, debugging, and testing of Boiler No. 7. After Boiler No. 7 becomes operational, Boilers No. 5 and No. 6 may be operated only when one or more boilers of equal or greater permitted heat input, and with equal to or greater allowable emissions at the Clewiston Mill are shut down. During operation, Boilers No. 5 and No. 6 must comply with all requirements in their current operating permits. The operation permits for Boilers No. 5 and No. 6 shall be amended to reflect this condition. The permittee shall maintain records of actual operation of all boilers at the Clewiston Mill for at least a five (5) year period.

13. Prior to operation of the emissions unit, the permittee shall submit to the Department an operation and maintenance plan that will allow the permittee to monitor the emissions control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

COMPLIANCE REQUIREMENTS

14. Performance Stack Tests. Within 60 calendar days after achieving the maximum capacity at which this unit will be operated, but no later than 180 days after initial (I) startup and annually (A) thereafter, the permittee shall conduct performance tests for: sulfur dioxide (I and upon permit renewal), sulfuric acid mist (I), particulate matter (I,A), nitrogen oxides (I,A), volatile organic compounds (I,A), and carbon monoxide (I,A) while burning bagasse. The performance tests shall be conducted in accordance with the provisions of 40 CFR 60.45b and 60.46b. If Boiler No. 7 is unable

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to conduct the initial performance test due to long term shutdown, the permittee is required to notify the Department within the specified time frames above upon restartup (by telephone: to be followed by confirmation in writing) and also to conduct a performance test as soon as practicable thereafter but not later than 30 days after restartup. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then Boiler No. 7 may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once Boiler No. 7 is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. Results of the tests shall be submitted to the Department's South Florida District office within 45 days after testing. The Department's South Florida District office shall be notified 30 days prior to any compliance test to allow witnessing.

The EPA Reference Methods shall be performed in accordance with 40 CFR Part 60 (Standards of Performance for New Stationary Sources), Appendix A, or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), Appendix B. No other test method may be used until authorization has been obtained in writing from the Department. An alternate sampling procedure can be requested in accordance with Chapter 62-297, F.A.C. A test protocol shall be submitted for approval to the Department's Bureau of Air Regulation at least 90 days prior to testing.

15. Particulate matter (PM/PM₁₀) emissions from Boiler No. 7 shall not exceed 0.03 lb/million Btu heat input for all fuels. Compliance with the PM and PM₁₀ standards shall be determined by EPA Reference Methods 1, 2, 3 or 3A, 4, 5 or 17, respectively, in accordance with 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 7 to be 55%. For information purposes only, the particulate matter emission rates shall also be calculated by utilizing the short-form ASME boiler-efficiency test results (once every five years: required for the initial operation permit and to be on the same schedule as the operation permit).

16. Unconfined Particulate Matter emissions during land clearing and site preparation shall be minimized using wetting operations or other soil treatment techniques appropriate for controlling unconfined particulate matter emissions including, but not limited to, grass seedings and mulching of disturbed areas. Any open burning of land clearing debris on this site shall be performed in compliance with Department regulations.

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17. Visible emissions from Boiler No. 7 shall not exceed 20% opacity, except that 27% opacity is allowed for 6-minutes during any 1-hour period. Compliance with the standard shall be determined using EPA Reference Method 9 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. The particulate matter emissions and visible emissions tests shall be determined concurrently. Under circumstances when this is not feasible, the company shall obtain approval from the Department's South Florida District to conduct the tests at separate times.

In such circumstances, the tests shall be conducted as close to each other as is feasible. In accordance with 40 CFR 60.486 the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions. The monitoring device shall meet the applicable requirements under Chapter 62-297, F.A.C., and 40 CFR 60, Appendix B.

18. Pursuant to Rule 62.296.310(3) F.A.C., reasonable precautions shall be used to minimize unconfined emissions of particulate matter when reclaiming dry bagasse for the boiler. Reasonable precautions may include, but shall not be limited to the following:

- 1) Paving and maintenance of road, parking areas and yards.
- 2) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- 3) Application of asphalt, water, oil, chemicals or dust suppressants to unpaved road, yards, open stock piles and similar sources.
- 4) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the source to prevent reentrainment, and from building or work areas to prevent particulate from becoming airborne.
- 5) Landscaping or planting of vegetation.
- 6) Use of hoods, capture and/or vent particulate matter.
- 7) Confining abrasive blasting where possible.
- 8) Enclosure or covering of conveyor systems.
- 9) Wind breaks shall be installed around the dry bagasse load-out area.
- 10) Floors in the enclosed area shall be cleaned periodically.
- 11) Loading areas for bagasse shall be cleaned or wetted as needed to minimize fugitive dust.
- 12) Trucks transporting bagasse shall be covered.

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19. No. 2 fuel oil burned in this boiler shall contain no more than 0.05% sulfur content, by weight. Compliance with this condition shall be determined from certified analyses of the oil by ASTM Method D-129, D-1552, D-2622 or D-4294, by the fuel supplier or the permittee. Records of the quantity and analysis of fuel oil consumed in Boiler No. 7 and invoices for the fuel oil purchases shall be kept for a minimum of five years for regulatory agency inspection.

Revised
1/14/97
20. Sulfur dioxide emissions from Boiler No. 7, while it is burning 100% bagasse fuel, shall not exceed 0.17 lb/million Btu heat input, as determined by EPA Reference Method 6 and in accordance with 40 CFR 60, Appendix A. Sulfuric acid mist emissions from Boiler No. 7, while it is burning 100% bagasse fuel, shall not exceed 0.017 lb/Million Btu heat input as determined by EPA Reference Method 8 and in accordance with 40 CFR 60, Appendix A.

Revised
1/14/97
21. Nitrogen oxides emissions, expressed as NO₂, shall not exceed 185 lbs/hr as determined by EPA Reference Method 7 and in accordance with 40 CFR 60, Appendix A. The fuel oil shall contain no more than 0.015% nitrogen content, by weight, as determined using ASTM D4629.

22. Carbon monoxide and volatile organic compounds emissions shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that has been approved by the Department. Emissions of carbon monoxide shall not exceed 0.70 lb/million Btu as determined by EPA Method 10 and in accordance with 40 CFR 60, Appendix A. Emissions of nonmethane volatile organic compounds shall not exceed 1.7 lb/ton of wet bagasse or 0.21 lb/MMBtu as determined by EPA Method 25 or 25A in conjunction with EPA Method 18 and in accordance with 40 CFR 60, Appendix A.

23. Thermal efficiency. A test shall be conducted on Boiler No. 7 to determine its actual thermal efficiency in accordance with the ASME short-form procedure each time the operating permit for this boiler is renewed. The test shall be done while the tubes are clean and within 14 days of the compliance test, unless an alternative schedule is approved by the Department. A current report on the thermal efficiency tests must be included with the application to operate this boiler.

REPORTING REQUIREMENTS

24. Fuel usage, fuel analysis data, and sulfur dioxide emissions calculations for fuel oil combustion shall be reported to the

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Department's South District Office on a quarterly basis commencing with the start of full-time operation in accordance with 40 CFR 60, Sections 60.7 and 60.49b.

RULE REQUIREMENTS

25. This emissions unit shall comply with all applicable provisions of Chapter 403, F.S.; Chapter 62-4 and Chapters 62-210 through 297, F.A.C.; 40 CFR 60; and, applicable requirements of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

26. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62.210.300(1), F.A.C.).

27. This source shall be in compliance with all applicable provisions of Rule 62-210.650, F.A.C.: Circumvention; Rule 62-210.700, F.A.C.: Excess Emissions; Rule 62-296.800, F.A.C.: Standards of Performance for New Stationary Sources (NSPS) Subpart Db; Rule 62-297, F.A.C.: Stationary Sources - Emissions Monitoring; and, Rule 62-4.130, F.A.C.: Plant Operation Problems.

28. Pursuant to Rule 62-210.370(2), F.A.C., Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual reports shall be sent to the Department's South Florida District office.

29. The permittee shall install permanent stack sampling facilities in accordance with Rule 62-297.345, F.A.C.

30. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

31. An application for an operation permit must be submitted to the Department's South District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that

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construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (Rules 62-4.220, and 17-4.055, F.A.C.).

Issued this 31st day
of January, 1995

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell
Virginia B. Wetherell, Secretary
Department of Environmental
Protection

Revised Best Available Control Technology (BACT) Determination
 U. S. Sugar Corporation
 Hendry County
 Boiler No. 7
 PSD-FL-208

The applicant proposes to install a new bagasse and fuel oil fired boiler at its Clewiston sugar mill. This new boiler, No. 7, will provide steam to the sugar cane processing operations. Two existing bagasse boilers (Nos. 5 and 6) will be retained on standby. In addition, U.S. Sugar Corporation is proposing to raise the stacks of the existing Boilers Nos. 1, 2 and 3 to 150 feet above grade.

The boiler will combust primarily bagasse to generate an average of 350,000 lbs/hr of steam for the mill. The total heat input of Boiler No. 7 at this steam production rate will be 738 MMBtu/hr. Steam production due to fuel oil firing will be approximately 175,000 lbs/hr. Heat input from the No. 2 fuel oil (max. 0.05% sulfur content, by weight) shall not exceed 250 MMBtu/hr. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10%. Table I lists the pollutants potentially subject to PSD analysis. Table II shows the PSD source applicability. The applicant has proposed the maximum annual tonnage of regulated air pollutants emitted from this boiler based on operation for 8760 hours per year and burning bagasse.

TABLE 1

Boiler No. 7

Pollutant	Potential Emissions		PSD Significant
	(Tons/Yr)		Emission Rate
	Oil	Bagasse	(Tons/Yr)
NO _x	64.40	809	40
SO ₂	16.10	550	40
PM	9.7	97	25
PM ₁₀	9.7	97	15
CO	21.25	2,262	100
VOC	1.29	685	40
H ₂ SO ₄	1.60	55	7
Be	0.003		0.0004
Hg	0.002		0.1
Pb	0.02		0.6

Rule 62-2.410, Florida Administrative Code (F.A.C.), requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

Table 2. Revised PSD Source Applicability for U.S. Sugar Clewiston Boiler No.7

Regulated Pollutant	Contemporaneous Decreases (TPY)			Increase Due to Boiler No.7 (TPY)	Net Change (TPY)	Significant Emission Rate (TPY)	PSD Applies ?
	Boiler 5	Boiler 6	Total				
Particulate (TSP)	27.2	33.1	60.3	97 ^a	36.7	25	Yes
Particulate(PM10)	24.5	29.8	54.3	97 ^b	42.7	15	Yes
Sulfur dioxide	11.1	12.3	23.5	549.5	526.05	40	Yes
Nitrogen oxides	26.4	29.6	56.1	808.1 ^c	752.05	40	Yes
Carbon monoxide	1,180.1	1,323.7	2,503.8	2,262.7 ^d	-241.1	100	No
Volatile Org. Compds.	44.0	49.4	93.4	685.3	591.85	40	Yes
Lead	-	-	-	0.018	0.018	0.6	No
Mercury	-	-	-	0.0021	0.0021	0.1	No
Beryllium	-	-	-	0.0027	0.0027	0.0004	Yes
Fluorides	-	-	-	0.0041	0.0041	3	No
Sulfuric acid mist ^b	1.1	1.2	2.35	55.0 ^e	52.6	7	Yes
Total reduced sulfur	-	-	-	-	-	10	No
Asbestos	-	-	-	-	-	0.007	No
Vinyl Chloride	-	-	-	-	-	0	No

^a Based on PM emission limit of 0.03 lb/MMBtu.

^b Based on PM10 emission limit of 0.03lb/MMBtu.

^c Based on NOx emission limit of 0.25lb/MMBtu.

^d Based on CO emission rate of 0.70 lb/MMBtu.

^e Based on 10 % of SO₂ emissions.

Date of Receipt of a BACT Application:

September 17, 1993

Date Application Complete:

July 12, 1994

Waiver of the 90-day Clock:

October 31, 1994

BACT Determination Requested by the Applicant:

<u>Pollutant</u>	<u>Determination</u>
NO _x	Low-NO _x burners/low nitrogen fuel oil Bagasse: 0.25 lb/MMBtu Fuel oil: 0.2 lb/MMBtu
VOC	Good combustion practices
SO ₂	Firing very low-sulfur No. 2 fuel oil (maximum of 0.05% sulfur content, by weight), not to exceed 10% of the total potential annual heat input. Bagasse: 0.17 lb SO ₂ /MMBtu Oil: 0.05 lb SO ₂ /MMBtu
H ₂ SO ₄ mist	Firing very low-sulfur No. 2 fuel oil (maximum of 0.05% sulfur content, by weight)
PM and PM ₁₀	Electrostatic Precipitator Bagasse: 0.03 lb/MMBtu Oil: 0.03 lb/MMBtu
Be	Electrostatic Precipitator

BACT DETERMINATION PROCEDURE

In accordance with Rule 62-212.410, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted above the significant levels which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of

Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

- (b) All scientific, engineering, and technical material and other information available to the Department
- (c) The emission limiting standards or BACT determination of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission unit in question the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections. The air pollutant emissions from this boiler can be grouped into categories based upon what control equipment and techniques are available to control emissions from these types of emission units. Using this approach, the emissions can be classified as follows:

- o Combustion Products (PM, PM₁₀, and Heavy Metals). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (CO, VOC, and Toxic Organic Compounds). Control is largely achieved by proper combustion techniques.
- o Acid Gases (SO_x, NO_x, HCl, F1, and H₂SO₄). Controlled generally by gaseous control devices.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, fluorides, sulfuric acid mist, etc.), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT ANALYSIS

Combustion Products (PM), (Be):

Particulate matter (PM) emissions from boilers are related to the combustion air, fuel quality and combustion efficiency. Particulate matter emissions from this project are subject to BACT analysis because the net contemporaneous emission increase is over the PSD significance levels. The applicant has proposed as BACT the installation of an electrostatic precipitator (ESP) to control emissions of particulate matter. This is consistent with the Department determination for several new biomass/fossil fuel fired boilers at existing sugar mill facilities.

Beryllium emissions are also subject to PSD review because they are above the significant levels as given in Rule 62-2.400, Table 212.400-2, F.A.C. In general, the BACT/LAER Clearinghouse does not contain specific emission limits for beryllium from boilers. BACT for these heavy metals is typically represented by the level of particulate control and, in this case, through the use of an electrostatic precipitator. As this is the case, the emission factor of 0.03 lb/MMBtu for PM is judged to represent BACT for beryllium.

Products of Incomplete Combustion (VOC):

The emissions of volatile organic compounds (VOC) are above the significant level and, therefore require a BACT analysis. VOC is formed during the incomplete combustion of the fuel. High combustion temperatures, adequate excess air and good fuel/air mixing during combustion will minimize VOC emissions.

The EPA BACT/LAER/RACT Clearinghouse has few BACT determinations for VOC emissions from bagasse combustion in boilers. Historically, BACT emission limits for VOC on bagasse and fuel oil fired boilers have been based on the use of good combustion practices, rather than add-on control system.

In bagasse-fired boilers, the fuel characteristics and the combustion practices result in VOC emissions that are somewhat high, relative to fossil fuel fired boilers. The use of flue gas recirculation (FGR) could theoretically reduce VOC emissions by reburning a portion of the VOCs in the recirculated exhaust. However, the overall effectiveness of FGR is limited and it has never been applied to a bagasse boiler.

Post combustion-VOC controls have not been applied to bagasse fired boilers. Such common techniques as direct-flame incineration, catalyst oxidation, and carbon adsorption techniques were analyzed by the applicant and found not to be technically feasible technologies.

The applicant has proposed good combustion practices and an emission limit of 0.212 lb/MMBtu (bagasse) and 0.004 lb/MMBtu (fuel oil) emissions as BACT for VOC.

Acid Gases (SO₂, H₂SO₄, NO_x):

The emissions of sulfur dioxide, nitrogen oxides, and sulfuric acid mist represent a significant proportion of the total emissions and need to be controlled, if deemed appropriate. Sulfur dioxide emissions from boilers are directly related to the sulfur content of the fuel being combusted.

The applicant has proposed the use of very low-sulfur No. 2 fuel oil with a maximum sulfur content of 0.05%, by weight, to control sulfur dioxide and sulfuric acid mist emissions. Fuel oil use will not exceed 10% of the maximum potential annual heat input.

The applicant has stated that BACT for nitrogen oxides will be met by using low-nitrogen fuel oil (maximum of 0.015% nitrogen content, by weight). When burning bagasse, NO_x emissions shall not exceed 0.25 lb/MMBtu.

Given the applicant's proposed BACT level for nitrogen oxides emissions, as stated above, an evaluation was made of the cost and associated benefit of using each one of the technologies available. The applicant identified the different available control technologies capable of reducing NO_x emissions as: Selective Non Catalytic Reduction (SNCR); Flue Gas Recirculation (FGR); Low-NO_x Burners (LNB); and, low-nitrogen fuel oil. This economic analysis was included in the application (see pages 5-19 through 5-30). The results of this analysis were included in Table 5-6 through Table 5-8.

The incremental cost effectiveness (ICE) values reported are: \$6,021/ton SNCR, \$10,561/ton using FGR, (\$26,725)/ton using LNB and \$9,621/ton using low-nitrogen fuel oil. The applicant has proposed the use of low-nitrogen fuel oil (max. 0.015% N content, by wt.) and very low-sulfur fuel oil (max. 0.05% S content, by wt.) as BACT for this emission unit.

BACT Determination by Department:

Based on the information presented by the applicant, the Department believes that the use of low-nitrogen fuel oil (oil firing shall not exceed 10% of the annual capacity factor), an emission limit of 0.25 lb/MMBtu (bagasse firing), and good combustion practices are justifiable as BACT for NO_x control.

For volatile organic compounds emissions, good combustion practices is determined as BACT for the proposed boiler.

For sulfur dioxide and sulfuric acid mist emissions, BACT is represented by firing very low-sulfur No. 2 fuel oil (max. 0.05% S content, by wt.).

For PM and PM₁₀ emissions, emission reduction is accomplished by the installation of an electrostatic precipitator as a control device. This method of control has been determined as BACT for a similar facility. The BACT particulate matter standard for Boiler No. 7 shall not exceed 0.03 lb/MMBtu.

For the heavy metal beryllium, BACT is being addressed through the particulate limitation of 0.03 lb/MMBTU, which will be achieved by the installation of an electrostatic precipitator as a control device.

The BACT emission limits for the U.S. Sugar Corporation project are thereby established as follows:

BACT EMISSION LIMITS

<u>Pollutant</u>	<u>lb/MMBtu</u>		<u>lbs/hr</u>	
	<u>Bagasse</u>	<u>Oil</u>	<u>Bagasse</u>	<u>Oil</u>
PM	0.03	0.03	22	7.5
NO _x	0.25	0.20	185	50
SO ₂	0.17	0.05	125	12.5
H ₂ SO ₄	0.017	0.005	13	1.25
VOC	0.212	0.004	157	1.0

Details of the Analysis May be Obtained by Contacting:

Mr. Martin Costello, P.E., BACT Coordinator
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

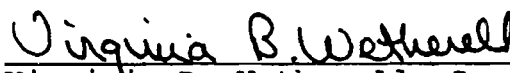


C. H. Fancy, P.E., Chief
Bureau of Air Regulation

Date

1/25, 1995

Approved by:



Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

Date

1-31-95, 1995

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

NOTICE OF FINAL PERMIT

JUN - 5 2003

GAINESVILLE

In the Matter of an
Application for Permit by:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Enclosed is Final Air Permit No. 0510003-022-AC, which authorizes a 3-year boiler maintenance project at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. As noted in the Final Determination (attached), only minor changes to correct typographical errors were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

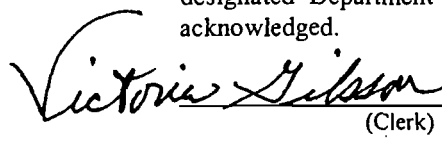
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/3/2003 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 June 3, 2003
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

PROJECT

Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 2, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's South District Office, or the applicant. Informal comments were received from the EPA Region 4 office. The main concern regarded the issue of determining PSD applicability for the project. Region 4 notes that federal PSD rule revisions issued by EPA on December 31, 2002 allow a comparison of past-actual-to-projected-actual emissions to determine PSD applicability. However, Florida has not yet adopted these revisions. Therefore, Region 4 believes that the appropriate PSD evaluation is to compare past actual emissions with future allowable/potential emissions where future potential emissions can be based on enforceable emissions controls and/or emissions limits.

As stated in the technical evaluation, the Department does not believe that the proposed physical changes will result in any increases in the actual emissions. The types of maintenance activities proposed are routinely performed by the sugar industry during each off season. U.S. Sugar maintains that the activities are routine for this mill and the industry in general. Based on the available information, the Department presumes that the proposed activities for each boiler are routine and not a modification by definition. However, due to the difficulties in making these evaluations as mentioned by Region 4, the Department will issue the minor source permit that requires U.S. Sugar to track and report the progress of maintenance activities each year to further assess the nature of the project.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.

Department of Environmental Protection



Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

United States Sugar Corporation
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Authorized Representative:

Mr. William A. Raiola, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-022-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: October 1, 2005

PROJECT AND LOCATION

This permit authorizes a 3-year project to repair and replace components of boilers at the existing Clewiston Sugar Mill and Refinery, which located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, 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.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

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

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through to bagasse fired in the boilers and creates a very abrasive flue gas, which has led to premature tube and component wear. The permit authorizes maintenance, repairs, and replacements to maintain each unit at normal operational levels and reliability. This permit only affects the boilers. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

Title III: The existing facility is identified as a potential major source of hazardous air pollutants (HAP).

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

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

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

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

This section of the permit addresses the following emissions units.

ID	Emission Unit Description
001	Boiler 1 – 255,000 lb/hour steam with a heat input rate of 495.6 MMBtu/hour (24-hour averages)
002	Boiler 2 – 230,000 lb/hour steam with a heat input rate of 447 MMBtu/hour (24-hour averages)
003	Boiler 3 – 130,000 lb/hour steam with a heat input rate of 265 MMBtu/hour (24-hour averages)
009	Boiler 4 – 285,000 lb/hour steam with a heat input rate of 600 MMBtu/hour (24-hour averages)
014	Boiler 7 – 350,000 lb/hour steam with a heat input rate of 738 MMBtu/hour (24-hour averages)

COMPONENT REPAIRS AND REPLACEMENT

- Schedule:** This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]
- Maintenance Activities:** The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:
 - Boiler 1:** tube replacements in the main generating bank, superheater, and air heater.
 - Boiler 2:** tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
 - Boiler 3:** tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
 - Boiler 4:** tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
 - Boiler 7:** stoker repairs; tube replacements in economizer

Replacements shall be made with “functionally equivalent” components that serve the same purpose as the replaced component. The off season maintenance activities are intended to maintain the boilers at current operational levels and reliability for the upcoming cane milling seasons. After further inspection, some activities may not be required to the extent requested and other similar routine repair, replacement, and maintenance activities may be necessary. Routine repairs and replacements that are not mentioned above shall be included in the required summary reports. [Applicant Request; Rule 62-4.070(3), F.A.C.]

EMISSIONS AND PERFORMANCE REQUIREMENTS

{Permitting Note: This permit does not alter any emissions standards, operational restrictions, authorized fuels or any other conditions specified in other applicable air construction and operation permits.}

- Permitted Capacities:** The maintenance activities authorized in this permit shall not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project shall not increase the emission rates of any boiler or the cane milling capacity of the plant. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1, 2, 3, 4, and 7

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]
5. Capacity Report and Emissions Summary: Within 60 days of completing the last required stack test for all of the boilers during that season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information for each boiler: the test dates; the pollutant tested; the tested emissions rate; the allowable emissions rate; the permitted 24-hour average steam production rate; the steam production rate during the test; and the percent of permitted capacity during the test based on the permitted 24-hour steam production rate. *{Permitting Note: This condition refers to the testing that is already required by the Title V air operation permit.}* [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

CONTENTS

Appendix CF. Citation Format

Appendix GC. General Conditions

SECTION 4. APPENDIX CF
CITATION FORMATS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air 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
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to 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

RULE CITATION FORMATS

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 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
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, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions:
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), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
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 Florida Statutes 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 Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
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 (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (NA).
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.

ATTACHMENT USS-EU4-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT USS-EU4-IV3**ALTERNATIVE METHODS OF OPERATION**

Boiler No. 7 is permitted to operate while combusting carbonaceous fuel alone at a heat input rate of 812 MMBtu/hr (maximum 1-hour average) and 738 MMBtu/hr (maximum 24-hour average); No. 2 fuel oil alone at a maximum fuel oil heat input rate of 326 MMBtu/hr; or a combination of carbonaceous fuel and No. 2 fuel oil at a combined maximum heat input of 812 MMBtu/hr (maximum 1-hour average). No. 2 fuel oil may also include facility-generated, on-specification used oil. Carbonaceous fuel may include DAF filter material containing incidental amounts of on-specification used oil. During any calendar year, the maximum quantity of No. 2 fuel oil (maximum 0.05 percent sulfur content by weight) burned in Boiler No. 7 shall not exceed 4,500,000 gallons. The annual capacity factor (ACF) for No. 2 fuel oil is limited to 10 percent. This unit has no limits on hours of operation and may operate for 8,760 hours per year.