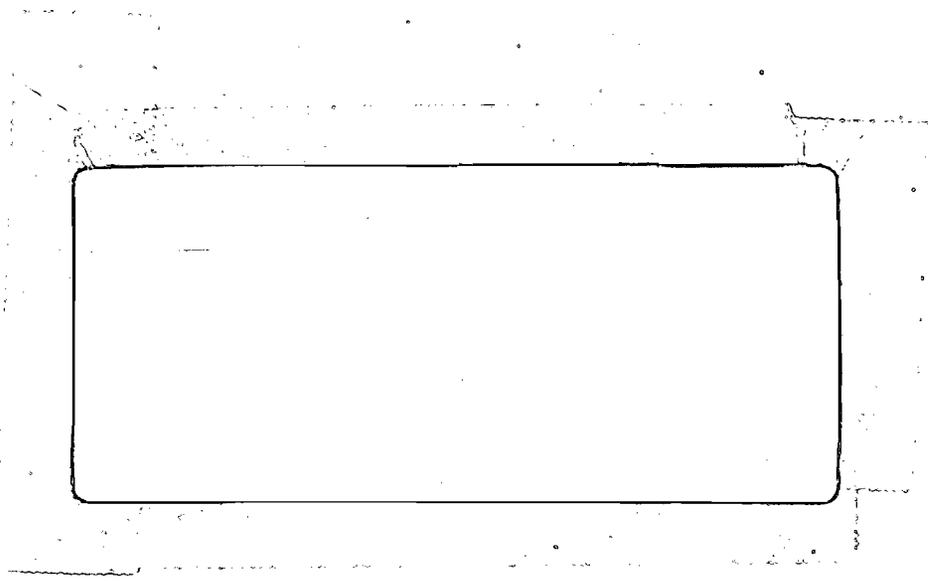


Golder Associates

AIR PERMIT APPLICATION
TO INCREASE FUEL OIL FIRING RATE
BOILER NO. 7
U.S. SUGAR CORPORATION
CLEWISTON, FLORIDA

Prepared For:
United States Sugar Corporation
111 Ponce DeLeon Ave.
Clewiston, Florida 33440

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

October 2002
0237584

DISTRIBUTION:
4 Copies – FDEP, Ft. Myers
2 Copies – U.S. Sugar
2 Copies – Golder Associates Inc.

AIR PERMIT APPLICATION

Department of Environmental Protection

RECEIVED
OCT 11 2002
BUREAU OF AIR REGULATION

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **United States Sugar Corporation**	
2. Site Name: **U.S. Sugar Clewiston Mill**	
3. Facility Identification Number: **0510003** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **W.C. Owens Ave. and S.R. 832** City: **Clewiston** County: **Hendry** Zip Code: **33440**	
5. Relocatable Facility? [ ] Yes [**X**] No	6. Existing Permitted Facility? [**X**] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **William A. Raiola, Vice President, Sugar Processing Operations**
2. Application Contact Mailing Address: Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce DeLeon Ave.** City: **Clewiston** State: **FL** Zip Code: **33440**
3. Application Contact Telephone Numbers: Telephone: (**863**) **983 - 8121** Fax: (**863**) **902 - 2729**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	10/11/02
2. Permit Number:	0510003 - 018 -AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

[ ] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number:_____

[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit number to be revised: _____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected:_____

[ ] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised:_____

Reason for revision:_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[X] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   William A. Raiola, Vice President, Sugar Processing Operations
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **United States Sugar Corporation**
   Street Address: **111 Ponce DeLeon Ave.**
   City: **Clewiston** State: **FL** Zip Code: **33440**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(863) 983 - 8121** Fax: **(863) 902 - 2729**
4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.*

   Signature Date 10/7/02

* Attach letter of authorization if not currently on file.

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** Fax: **(352) 336 - 6603**

*** Board of Professional Engineers Certificate of Authorization #00001670**

4. Professional Engineer Statement:

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

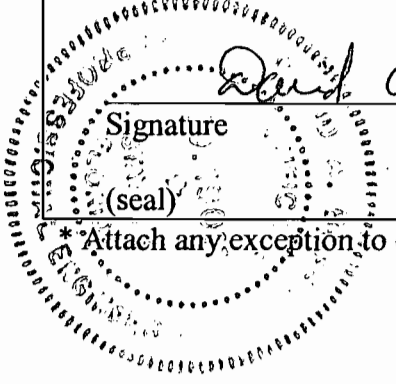
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], 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.

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



David A. Buff — Signature

10/10/02 — Date

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
014	Boiler No. 7	AC1B	

Application Processing Fee

Check one: [ ] Attached - Amount: $: _____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

   United States Sugar Corp. is proposing to increase the maximum hourly heat input due to fuel oil combustion from 250 MMBtu/hr to 312 MMBtu/hr for Boiler No. 7. This increase will enable Boiler No. 7 to provide more steam to the refinery when bagasse is not available (i.e. due to bagasse conveyor breakdown, rainy conditions, etc.). See Attachment A for more details.

2. Projected or Actual Date of Commencement of Construction: **November 1, 2002**

3. Projected Date of Completion of Construction: **Jan 31, 2004**

Application Comment

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 / 6** 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 (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: **William A. Raiola, Vice President, Sugar Processing Operations**
2. Facility Contact Mailing Address: Organization/Firm: **United States Sugar Corporation** Street Address: **111 Ponce DeLeon Ave.** City: **Clewiston** State: **FL** Zip Code: **33440**
3. Facility Contact Telephone Numbers: Telephone: (**863**) **983 - 8121** Fax: (**863**) **902 - 2729**

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source? [ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?
5. [ ] Synthetic Minor Source of HAPs?
6. [X] One or More Emissions Units Subject to NSPS?
7. [ ] One or More Emission Units Subject to NESHAP?
8. [ ] Title V Source by EPA Designation?
9. Facility Regulatory Classifications Comment (limit to 200 characters): **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.**

List of Applicable Regulations

Attachment UC-FI-A - Title V core list, effective date 3/02/02	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	A				Particulate Matter – Total
SO_2	A				Sulfur Dioxide
NO_X	A				Nitrogen Oxides
CO	A				Carbon Monoxide
PM_{10}	A				Particulate Matter – PM_{10}
SAM	A				Sulfuric Acid Mist
HAPs	A				Total Hazardous Air Pollutants
VOC	A				Volatile Organic Compounds
H001	A				Acetaldehyde
H017	A				Benzene
H095	A				Formaldehyde
H144	A				Phenol
H151	A				Polycyclic Organic Matter
H163	A				Styrene
H169	A				Toluene
H132	A				Naphthalene
H058	A				Dibenzofuran

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location:
   [X] Attached, Document ID: UC-FI-C1 [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan:
   [X] Attached, Document ID: UC-FI-C2 [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s):
   [X] Attached, Document ID: UC-FI-C3 [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification:
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application:
   [X] Attached, Document ID: Attachment A [ ] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [ ] Attached, Document ID: _____ [X] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [X] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID: _____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID: _____ [X] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID: _____ [X] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [ ] Attached, Document ID: _____ [X] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [ ] Attached, Document ID: _____ [X] Not Applicable

ATTACHMENT UC-FI-A

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.

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

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

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

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

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

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

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

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

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.
62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter

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

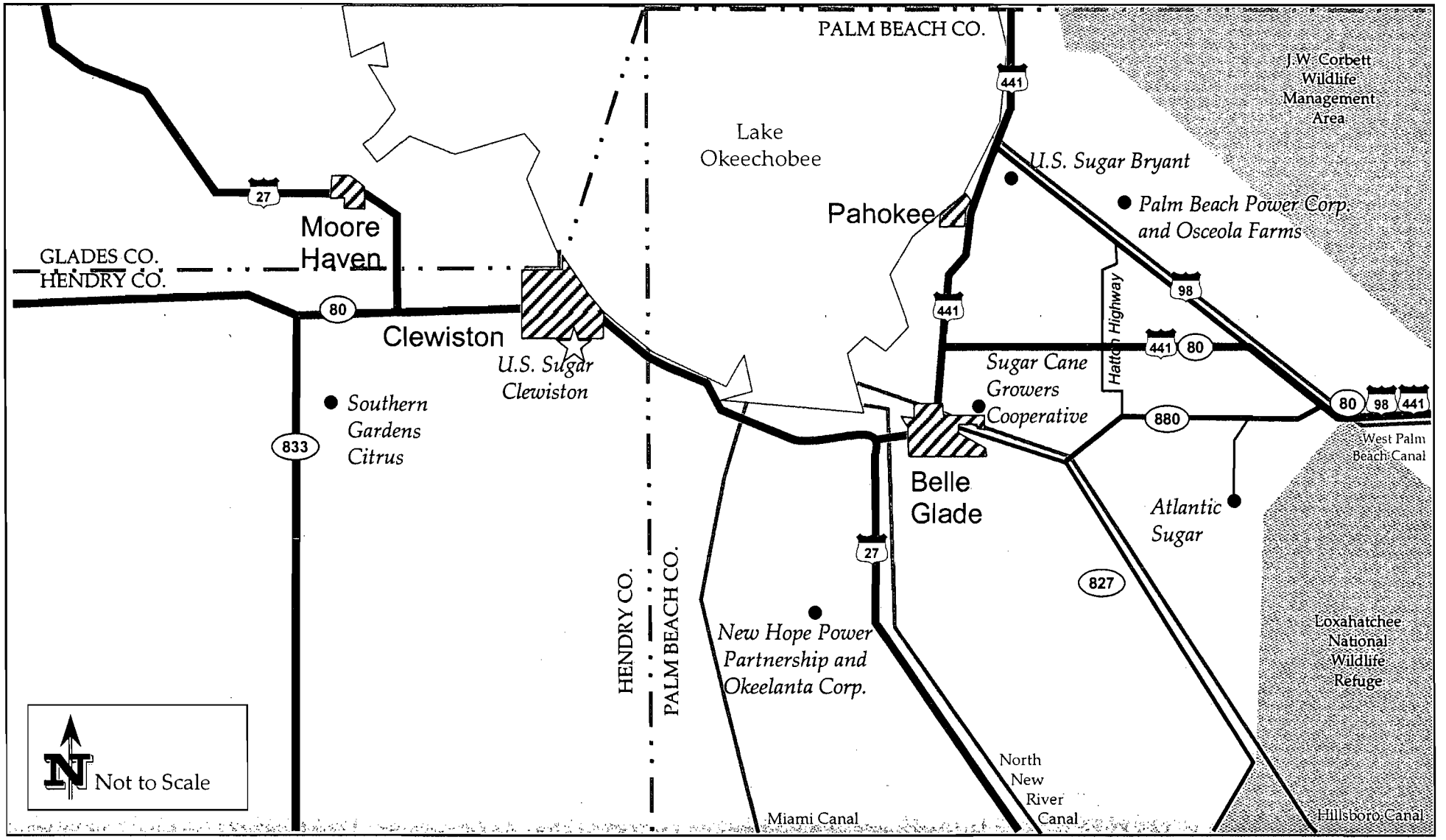
62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, 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 UC-FI-C1

AREA MAP SHOWING FACILITY LOCATION



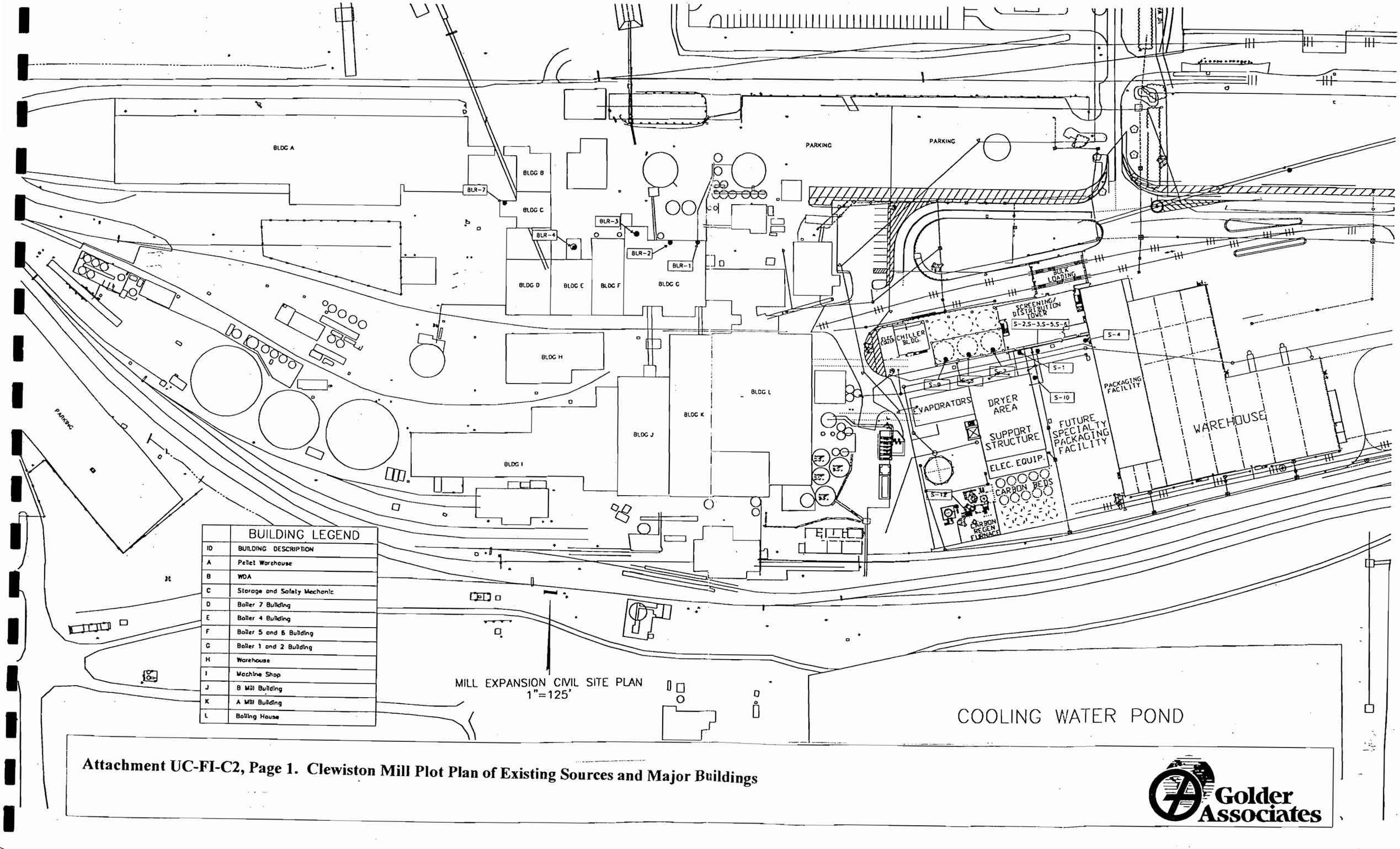
Attachment UC-FI-C1
Location of U.S. Sugar Corporation, Clewiston Mill

Source: Golder Associates Inc., 2002.

Golder Associates

ATTACHMENT UC-FI-C2

FACILITY PLOT PLANS

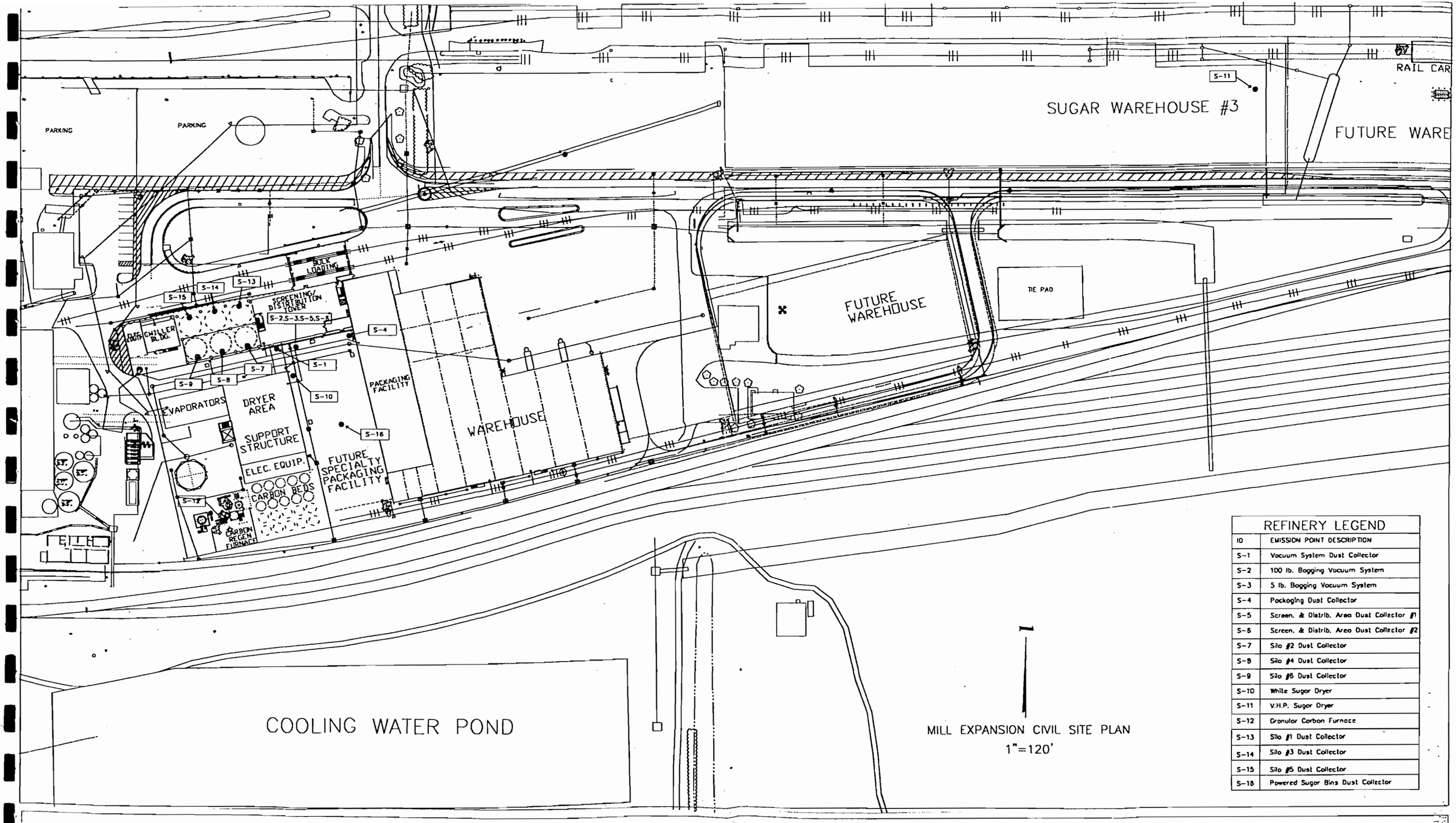


	BUILDING LEGEND
ID	BUILDING DESCRIPTION
A	Pellet Warehouse
B	WDA
C	Storage and Safety Mechanic
D	Boiler 7 Building
E	Boiler 4 Building
F	Boiler 5 and 6 Building
G	Boiler 1 and 2 Building
H	Warehouse
I	Machine Shop
J	B Mill Building
K	A Mill Building
L	Boiling House

MILL EXPANSION CIVIL SITE PLAN
1"=125'

Attachment UC-FI-C2, Page 1. Clewiston Mill Plot Plan of Existing Sources and Major Buildings

Golder Associates



MILL EXPANSION CIVIL SITE PLAN
1"=120'

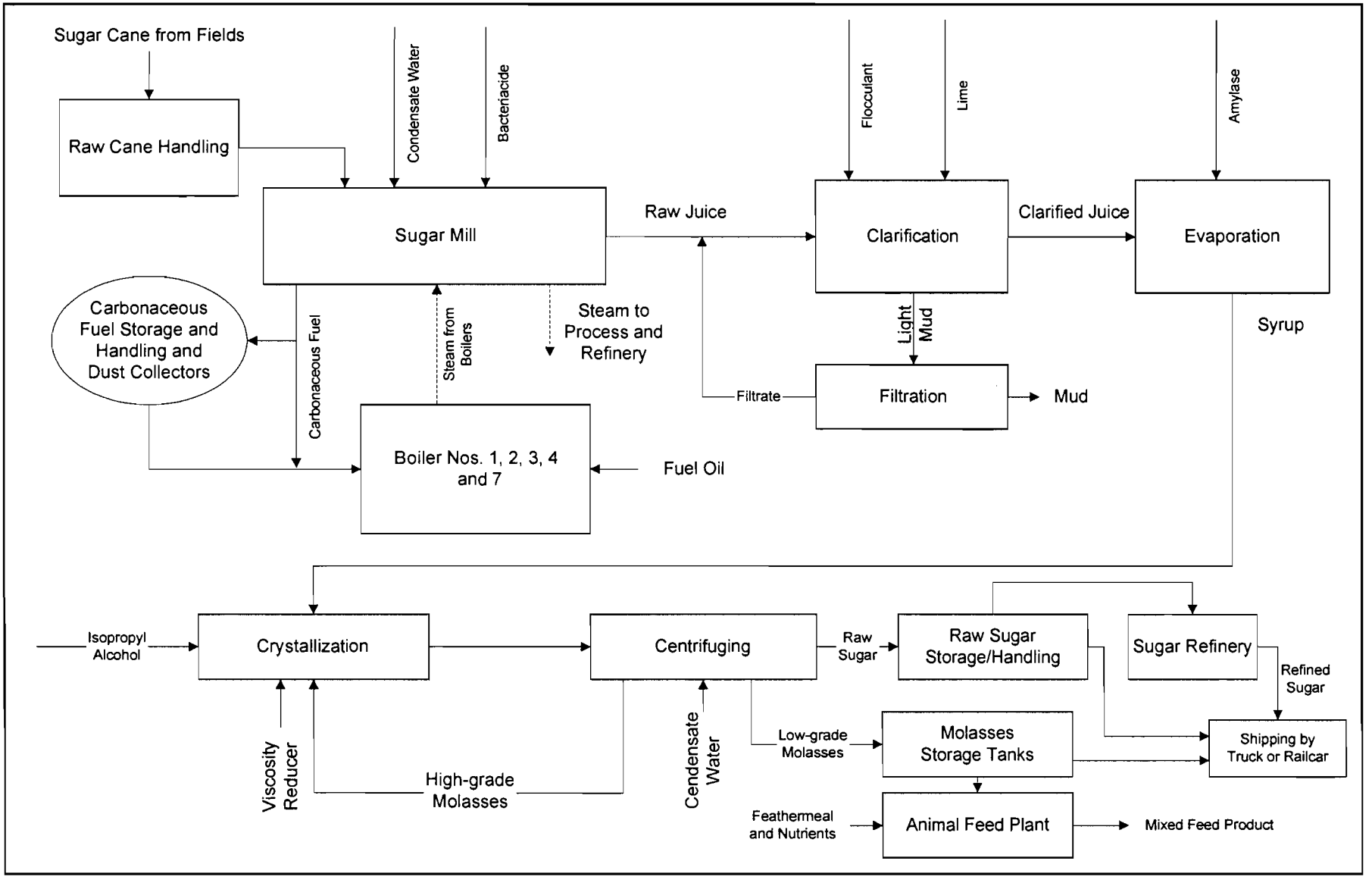
REFINERY LEGEND	
ID	EMISSION POINT DESCRIPTION
S-1	Vacuum System Dust Collector
S-2	100 lb. Bagging Vacuum System
S-3	5 lb. Bagging Vacuum System
S-4	Packaging Dust Collector
S-5	Screen. & Distrib. Area Dust Collector #1
S-6	Screen. & Distrib. Area Dust Collector #2
S-7	Silo #2 Dust Collector
S-8	Silo #4 Dust Collector
S-9	Silo #6 Dust Collector
S-10	White Sugar Dryer
S-11	V.H.P. Sugar Dryer
S-12	Granular Carbon Furnace
S-13	Silo #1 Dust Collector
S-14	Silo #3 Dust Collector
S-15	Silo #5 Dust Collector
S-16	Powered Sugar Bins Dust Collector

Attachment UC-FI-C2, Page 2. Location of Sugar Refinery Sources and Major Buildings

Golder Associates

ATTACHMENT UC-FI-C3

PROCESS FLOW DIAGRAM



Attachment UC-FI-C3
Process Flow Diagram
U.S. Sugar Corporation
Clewiston Mill, Florida

Process Flow Legend
Solid/Liquid ——→
Steam - - - - →

Clewiston Sugar Mill Facility

Filename: 0237584\4\4.4\4.4.1\UC-FI-C3.VSD

Date: 10/08/02

Golder Associates

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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

[X] 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. Regulated or Unregulated Emissions Unit? (Check one)

[X] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Boiler No. 7

4. Emissions Unit Identification Number: [ ] No ID
ID: **014** [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**20**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Vibrating grate boiler fired by carbonaceous fuel and low sulfur No. 2 fuel oil.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

   Electrostatic Precipitator

   Wet Sand Separator

2. Control Device or Method Code(s): **010, 099**

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Heat Input Rate:		812	mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr		tons/day
3.	Maximum Process or Throughput Rate:			
4.	Maximum Production Rate:		385,000	lb/hr steam
5.	Requested Maximum Operating Schedule:			
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on 1-hour maximum steam rate (above) for carbonaceous fuel firing. Maximum 24-hour average firing for carbonaceous fuel is 738 MMBtu/hr. Proposed maximum for No. 2 fuel oil is 312 MMBtu/hr.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

40 CFR 60.40b(a): 40 CFR 63, Subpart Db Applicability
40 CFR 60.40b(j): 40 CFR 63, Subpart Db Applicability
40 CFR 60.42b(a): Standard for Sulfur Dioxide
40 CFR 60.42b(j)(2): Standard for Sulfur Dioxide
40 CFR 60.43b(e): Standard for Particulate Matter and Opacity
40 CFR 60.43b(f): Standard for Particulate Matter and Opacity
40 CFR 60.43b(g): Standard for Particulate Matter and Opacity
40 CFR 60.44b(c): Standard for Nitrogen Oxides
40 CFR 60.45b(j): Compliance and Performance Test Methods for Sulfur Dioxide
40 CFR 60.46b(a): Compliance and Performance Test Methods for PM
40 CFR 60.46b(d)7: Compliance and Performance Test Methods for PM
40 CFR 60.49b(a): Reporting and Recordkeeping Requirements
40 CFR 60.49b(d): Reporting and Recordkeeping Requirements
40 CFR 60.49b(f): Reporting and Recordkeeping Requirements
40 CFR 60.49b(h)(1): Reporting and Recordkeeping Requirements
40 CFR 60.49b(h)(3): Reporting and Recordkeeping Requirements
62.212.400, F.A.C.: Prevention of Significant Deterioration
62.296.405(2), F.A.C: Steam Generating Units Greater than 250 MMBtu/hr
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

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

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 (limit to 100 characters per point):		
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: **8.5** feet
8. Exit Temperature: **335** °F	9. Actual Volumetric Flow Rate: **355,000** 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 Comment (limit to 200 characters): **Stack parameters based on January 2001 stack testing. Flow rate ratioed to maximum 24-hour steam rate of 350,000 lb/hr.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **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: **897,800**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **7.2**
10. Segment Comment (limit to 200 characters): **Maximum hourly rate based on 812 MMBtu/hr (1-hr max) and maximum annual rate based on 738 MMBtu/hr (24-hr max).**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External combustion boilers; Industrial; Distillate Oil; Grades 1 and 2**		
2. Source Classification Code (SCC): **1-02-005-01**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **2.311**	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 (limit to 200 characters): **Rates based on proposed 312 MMBtu/hr and a maximum of 4,500,000 gallons of fuel oil per year.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

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
PB	099	010	NS
H021	099	010	NS
H114			NS
H017			NS
H095			NS
HAPS			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **24.4** lb/hour **97** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.03 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.03 lb/MMBtu = 24.4 lb/hr** **Annual limit from Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **24.4** lb/hour **97** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **9.4** lb/hour **9.1** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **24.4** lb/hour **97** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.03 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.03 lb/MMBtu = 24.4 lb/hr** **Annual limit from Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **24.4** lb/hour **97** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **9.4** lb/hour **9.1** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **138.0** lb/hour **550** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.17 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions (limit to 600 characters):

812 MMBtu/hr x 0.17 lb/MMBtu = 138.0 lb/hr
Annual limit from Permit No. 0510003-014-AV for bagasse firing.

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Potential emissions representative of bagasse firing.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.17 lb/MMBtu**	4. Equivalent Allowable Emissions: **138.0** lb/hour **550** tons/year

5. Method of Compliance (limit to 60 characters):

EPA Method 6

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.05 lb/MMBtu**	4. Equivalent Allowable Emissions: **15.6** lb/hour **15.2** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 6**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **203** lb/hour **809** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.25 lb/MMBtu** Reference: **Permit No. 0510003-14-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.25 lb/MMBtu = 203.0 lb/hr** **Annual limit from Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.25 lb/MMBtu**	4. Equivalent Allowable Emissions: **203** lb/hour **809** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 7 or 7E**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **62.4** lb/hour **60.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 7 or 7E**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **568.4** lb/hour **2,262** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.70 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.70 lb/MMBtu = 568.4 lb/hr** **Annual limit from in Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.70 lb/MMBtu**	4. Equivalent Allowable Emissions: **568.4** lb/hour **2,262** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.066 lb/MMBtu**	4. Equivalent Allowable Emissions: **20.6** lb/hour **20.0** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **172.1** lb/hour **685** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.212 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.212 lb/MMBtu = 172.1 lb/hr** **Annual limit from Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.212 lb/MMBtu**	4. Equivalent Allowable Emissions: **172.1** lb/hour **685** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25 or 25A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.004 lb/MMBtu**	4. Equivalent Allowable Emissions: **1.2** lb/hour **1.2** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25 or 25A**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **13.8** lb/hour **55** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.017 lb/MMBtu** Reference: **Permit No. 0510003-014-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **812 MMBtu/hr x 0.017 lb/MMBtu = 13.8 lb/hr** **Annual limit from Permit No. 0510003-014-AV for bagasse firing.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential emissions representative of bagasse firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.017 lb/MMBtu**	4. Equivalent Allowable Emissions: **13.8** lb/hour **55** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 8 when required**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.005 lb/MMBtu**	4. Equivalent Allowable Emissions: **1.6** lb/hour **1.5** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 8 when required**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Emissions representative of No. 2 fuel oil firing only. Annual emissions based on proposed limit of 4,500,000 gal/yr. See Attachment UC-EU1-G8 for calculations.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **3.9×10^{-4}** lb/hour **1.6×10^{-3}** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **4.8×10^{-5} lb/MMBtu** Reference: **AP-42, Table 1.6-4 (3/02)**	7. Emissions Method Code: **3**
8. Calculation of Emissions (limit to 600 characters): **4.8×10^{-5} lb/MMBtu x 812 MMBtu/hr x (1-0.99) = 3.9×10^{-4} lb/hr** **4.8×10^{-5} lb/MMBtu x 6,464,880 MMBtu/yr x (1-0.99) ÷ 2,000 lb/ton = 1.6×10^{-3} ton/yr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Emission factor based on wood firing, representative of bagasse firing only. See Attachment UC-EU1-G8 for potential emissions due to fuel oil firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **H021**	2. Total Percent Efficiency of Control: **99%**
3. Potential Emissions: **8.9×10^{-6}** lb/hour **3.6×10^{-5}** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **1.1×10^{-6} lb/MMBtu** Reference: **AP-42, Table 1.6-4 (3/02)**	7. Emissions Method Code: **3**
8. Calculation of Emissions (limit to 600 characters): **1.1×10^{-6} lb/MMBtu x 812 MMBtu/hr x (1-0.99) = 8.9×10^{-6} lb/hr** **1.1×10^{-6} lb/MMBtu x 6,464,880 MMBtu/yr x (1-0.99) ÷ 2,000 lb/ton = 3.6×10^{-5} ton/yr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Emissions representative of bagasse firing only. See Attachment UC-EU1-G8 for potential emissions due to fuel oil firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **H114**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **6.5×10^{-3}** lb/hour **2.57×10^{-2}** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **7.95×10^{-6} lb/MMBtu** Reference: **Based on industry stack testing (Cooper, 1999)**	7. Emissions Method Code: **5**
8. Calculation of Emissions (limit to 600 characters): **7.95×10^{-6} lb/MMBtu x 812 MMBtu/hr = 6.5×10^{-3} lb/hr** **7.95×10^{-6} lb/MMBtu x 6,464,880 MMBtu/yr ÷ 2,000 lb/ton = 2.57×10^{-2} ton/yr**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Emissions representative of bagasse firing only. See Attachment UC-EU1-G8 for potential emissions due to fuel oil firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested 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 (limit to 200 characters): **Rule 62-212.400(5), F.A.C.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor **1** of **4**

1. Parameter Code: **FLOW**	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [X] 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 (limit to 200 characters): **Current permit condition requires Boiler No. 7 be equipped with an oil flow measurement instrument.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: **FLOW**	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [X] 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 (limit to 200 characters): **Current permit condition requires Boiler No. 7 be equipped with a steam production measurement instrument.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: **Steam Pressure Monitor**	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [X] 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 (limit to 200 characters): **Current permit condition requires Boiler No. 7 be equipped with a steam pressure measurement instrument.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: **TEMP**	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [X] 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 (limit to 200 characters): **Current permit condition requires Boiler No. 7 be equipped with a steam temperature measurement instrument.**	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: UC-EU1-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: UC-EU1-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: UC-EU1-J3 [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: Attachment A [ ] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT UC-EU1-G8

EMISSIONS CALCULATIONS

Attachment UC-EU1-G8. Future Maximum Emissions due to Fuel Oil, Boiler No. 7, US Sugar Corporation Clewiston

Regulated Pollutant	No. 2 Fuel Oil Combustion					
	Emission Factor (lb/MMBtu)	Ref.	Activity Factor[a] MMBtu/hr	Activity Factor[a] MMBtu/yr [b]	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)	0.03	1	312	607,500	9.4	9.1
Particulate Matter (PM_{10})	0.03	1	312	607,500	9.4	9.1
Sulfur dioxide (SO_2)	0.05	1	312	607,500	15.6	15.2
Nitrogen oxides (NO_x)	0.2	1	312	607,500	62.4	60.8
Carbon monoxide (CO)	0.066	1	312	607,500	20.6	20.0
Volatile Organic Compound (VOC)	0.004	1	312	607,500	1.2	1.2
Lead (Pb)	9.0E-06	2	312	607,500	2.8E-05	2.7E-05
Sulfuric acid mist (SAM)	0.005	1	312	607,500	1.6	1.5
Beryllium (Be)	3.0E-06	2	312	607,500	9.4E-06	9.1E-06
Mercury (Hg)	3.0E-06	2	312	607,500	9.4E-04	9.1E-04

[a] Based on proposed maximum heat input due to fuel oil combustion.

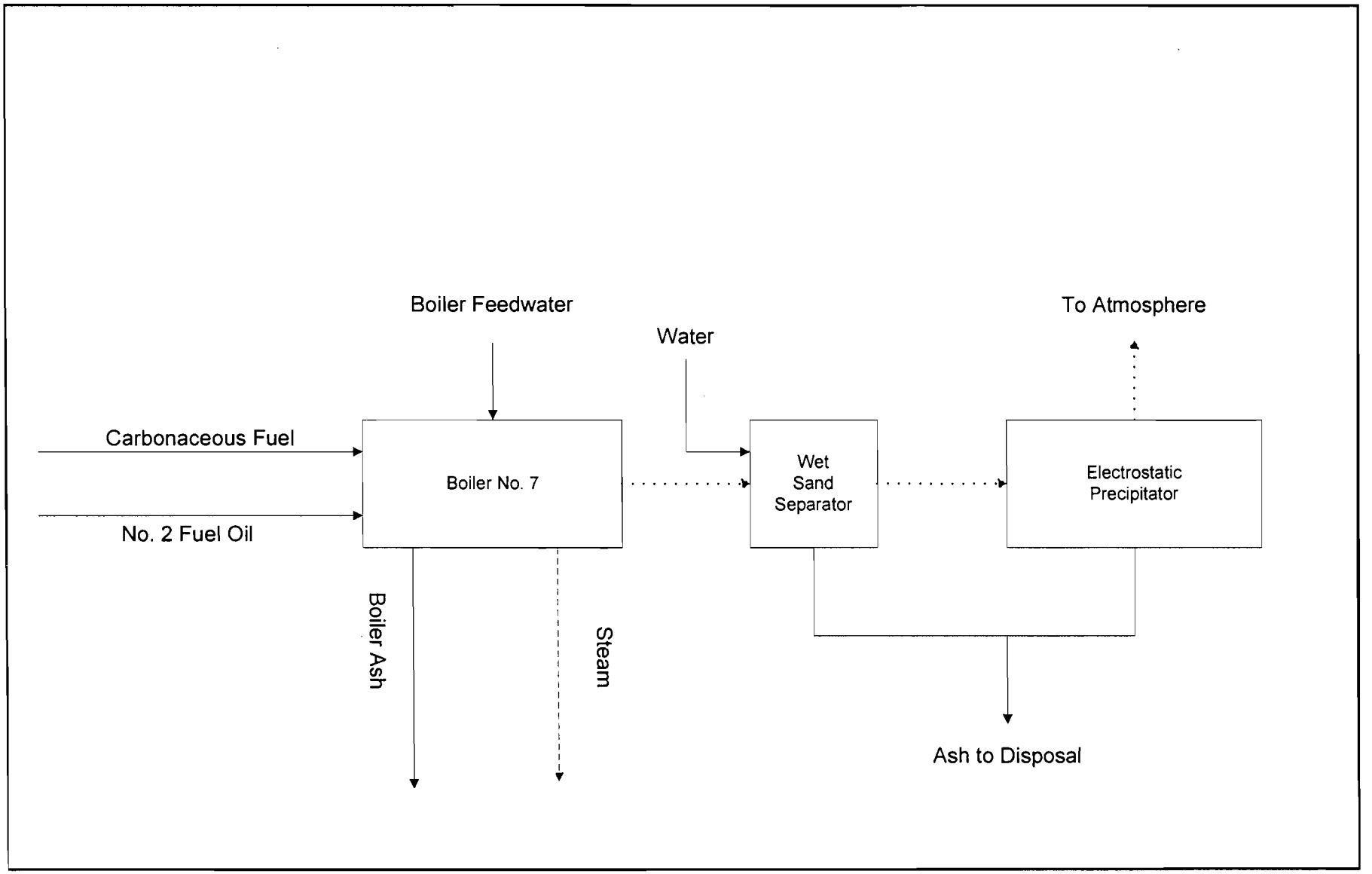
[b] Based on proposed maximum allowable fuel usage of 4,500,000 gallons per year and 135,000 Btu/gal.

References:

1. Based on Permit No. 0510003-14-AV.
2. Factors for No. 2 fuel oil combustion, AP-42 Table 1.3-10, "Emission Factors for Trace Elements from Distillate Fuel Oil Combustion Sources" (9/98). Assumes a 99% removal efficiency for lead and beryllium due to ESP control.

ATTACHMENT UC-EU1-J1

PROCESS FLOW DIAGRAM



Attachment UC-EU1-J1 Process Flow Diagram U.S. Sugar Corporation Clewiston Mill, Florida	**Process Flow Legend** Solid/Liquid ——→ Air ·····→ Steam - - - - - - →	Boiler No. 7 Project Number: 0237584\4\4.4\4.4.1 Filename: UC-EU1-J1.VSD Date: 10/8/02 Golder Associates

ATTACHMENT UC-EU1-J2

FUEL ANALYSIS

ATTACHMENT UC-EU1-J2

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
Ultimate Analysis (dry basis):		
Carbon	48.48%	84.7%
Hydrogen	6.01%	15.3%
Nitrogen	0.33%	0.015% [c]
Oxygen	43.65%	0.38%
Sulfur	0.01% - 0.40%	0.05% [c]
Ash/Inorganic	0.2% - 8.6%	0.06% [d]
Moisture	50% - 55%	0.51% [d]

Represents typical values.

[a] Source: sugar industry fuel analysis averages.

[b] Wet basis for bagasse.

[c] Permit limits, Permit No. 0510003-014-AV.

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

ATTACHMENT UC-EU1-J3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment UC-EU1-J3a
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 (^{o}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 UC-EU1-J3b
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:

Control efficiency (%) = [(inlet loading - outlet loading) / inlet loading] X 100

ATTACHMENT A

SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

1.0 INTRODUCTION

United States Sugar Corporation (U.S. Sugar) owns and operates a sugar mill and refinery located in Clewiston, Hendry County, Florida. The mill and refinery currently operate under Title V operating permit No. 0510003-014-AV. The location of the mill in relation to the surrounding area is shown in Attachment UC-FI-C1. U.S. Sugar harvests sugar cane and transports it to the Clewiston Mill, where the cane is processed into raw sugar in the mill. U.S. Sugar sells some of the raw sugar, but the majority of the raw sugar is refined into white sugar.

U.S. Sugar operates five sugar mill boilers at the Clewiston Mill. The five boilers provide steam to the sugar mill as well as to the sugar refinery. Boiler Nos. 1, 2, 3, and 4 operate primarily during the crop season, which is typically October through June, to provide steam to the sugar mill April. Boiler No. 7 operates year-around to provide steam to the sugar mill during the crop season and steam to the sugar refinery during the off-season. Boiler No. 7 is the primary boiler used to meet the steam demands of the refinery during the off-crop season. Boiler Nos. 1 through 4 can operate as backup units during the off-season when Boiler No. 7 is down for maintenance, repair, or during periods of unusually low steam demand.

Boiler No. 7 is permitted to burn bagasse and low-sulfur fuel oil. U. S. Sugar is proposing to increase the maximum steaming rate due to oil burning in Boiler No. 7 from 175,000 pounds per hour (lb/hr) steam to 225,000 lb/hr steam. The maximum heat input due to oil will increase from 250 million British thermal units per hour (MMBtu/hr) to 321 MMBtu/hr. To implement this increase, U.S. Sugar will need to make certain physical changes to the fuel oil burner system. The permitted steam rate from bagasse firing, bagasse firing rates, and bagasse heat input rates will not change as a result of the changes to the fuel oil system.

The primary reason for increasing the steaming rate on oil for Boiler No. 7 is to more reliably supply the sugar refinery with adequate steam in the event that bagasse becomes unavailable during the off-season. Typically, if Boiler No. 7 is operating during the off-season, the other mill boilers are shut down. In this case, if the bagasse supply is temporarily interrupted, it is not possible to immediately use one of these other mill boilers because of the extended time required to start up a bagasse boiler. Maintaining steam production under conditions when the bagasse supply is interrupted is critical to the reliable and efficient operation of the sugar refinery.

The remainder of this report is divided into two sections. Section 2.0 describes the proposed project in further detail, including air emissions. Section 3.0 provides a review of regulatory requirements applicable to the project.

2.0 PROJECT DESCRIPTION

2.1 PROPOSED PROJECT

U.S. Sugar is proposing to increase the maximum steam generating rate from fuel oil firing for Boiler No. 7. The current maximum steam generation rate from fuel oil firing is 175,000 lb/hr steam. This will be increased to 225,000 lb/hr steam by increasing the heat input from fuel oil from 250 MMBtu/hr to 321 MMBtu/hr. U.S. Sugar is also proposing to reduce the annual fuel oil firing limit from 4,600,000 gallons per year (gal/yr) to 4,500,000 gal/yr.

The increased steam generation from fuel oil will primarily be utilized during the off-crop season. During the off-season, Boiler No. 7 is the primary unit that meets the steam demands of the refinery. Boiler Nos. 1 through 4 are used as backup units when Boiler No. 7 is down for maintenance, repair or during periods of unusually low steam demand. Therefore, Boiler No. 7 is often the only boiler operating during the off-season.

Under such conditions, when bagasse becomes unavailable due to bagasse conveyor breakdown, rainy conditions, etc., steam production may have to be reduced. Boiler No. 7 may be able to continue to operate utilizing fuel oil, but may not be able to meet the steam demands of the refinery at the current permitted fuel oil firing rate. At times like this, typically U.S. Sugar cannot automatically switch to another boiler because the other boilers are shut down. Cold startup of another boiler would take 12 to 24 hours. With the increase in fuel oil firing, Boiler No. 7 can continue to provide sufficient steam to the refinery without significant interruption.

Interruption of steam supply to the refinery results in operating inefficiencies in the refinery. Equipment must be throttled back and refined sugar production is reduced. The refinery must then be operated longer hours to make up for the lost production. This results in increased labor and operating costs for the refinery.

To implement the increased fuel oil burning capability, U.S. Sugar will need to make certain physical changes to Boiler No. 7. Two new No. 2 fuel oil pumps will be installed. Each fuel oil pump will be capable of providing sufficient fuel oil flow and pressure to provide 225,000 lb/hr steam. The existing burners will be modified as well. The burners will be configured as modern burner registers, which are designed with significant reduction in register draft loss (RDL) for the same required combustion air flow. The modified burners coupled with the new fuel pumps will allow the boiler to

produce 225,000 lb/hr steam at 600 pounds per square inch gauge (psig) and 750 degrees Fahrenheit (°F).

Bagasse firing rates or steam production for Boiler No. 7 will not be affected by the increase in fuel oil firing rate. The increased heat input from fuel oil will primarily be used when the bagasse supply is interrupted. U.S. Sugar intends to burn bagasse when it is available because it is much cheaper than No. 2 fuel oil. Typically, No. 2 fuel oil is burned out of necessity.

2.2 PROJECT EMISSIONS

The estimated maximum hourly and annual emissions for the increased fuel oil firing in Boiler No. 7 are presented in Attachment UC-EU1-G8. Emissions due to bagasse firing are not presented in this application since they will not increase as a result of this project.

The emission factors used for particulate matter [both PM and particulate matter less than 10 microns (PM_{10})], sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfuric acid mist (SAM) are based on current emission limits for Boiler No. 7 as presented in Permit No. 0510003-014-AV. The emission factors for lead, mercury, and beryllium are from the U.S. Environmental Protection Agency's (EPA's) AP-42, Table 1.3-10, "Emission Factors for Trace Elements from Distillate Fuel Oil Combustion Services" (see Appendix A). A removal efficiency of 99 percent for lead and beryllium is assumed due to control by the wet sand separator and the electrostatic precipitator (ESP). The activity factors are based on the proposed maximum fuel oil heat input of 312 MMBtu/hr and proposed fuel oil usage limit of 4,500,000 gal/yr of fuel oil.

The current actual emissions from Boiler No. 7 due to fuel oil firing are presented in Table 1. The current actual emissions are based on the average emissions from 2000 and 2001. The emissions from 2000 and 2001 are from U.S. Sugar's annual operating reports (AORs) for each respective year. Lead, beryllium, and mercury have not been required to be reported in the AORs, so these emissions were calculated using AP-42 factors for distillate oil combustion and the activity factors for each respective year. As with the future potential emissions, a removal efficiency of 99 percent for lead and beryllium is assumed due to wet sand separator/ESP control.

3.0 AIR QUALITY REVIEW REQUIREMENTS AND APPLICABILITY

The following discussion pertains to the federal and state air regulatory requirements and their applicability to the proposed increase in fuel oil firing rate for Boiler No. 7.

3.1 PSD REVIEW

Under federal and State of Florida Prevention of Significant Deterioration (PSD) review requirements, all major new or modified sources of air pollutants regulated under the Clear Air Act (CAA) must be reviewed and a pre-construction permit issued. Florida's State Implementation Plan, which contains PSD regulations, has been approved by EPA; therefore, PSD approval authority has been granted to the Florida Department of Environmental Protection (FDEP).

A "major facility" is defined as any one of 28 named source categories that have the potential to emit 100 tons per year (TPY) or more or any other stationary facility that has the potential to emit 250 TPY or more of any pollutant regulated under the CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. A "major modification" is defined under PSD regulations as a change at an existing major facility that increases emissions by greater than significant amounts.

The net change in emissions due to the proposed project is presented in Table 2. The net increase due to the project is determined by subtracting Boiler No. 7's current actual emissions due to fuel oil burning from the future potential emissions resulting from fuel oil burning. The future emissions reflect the proposed annual usage cap of 4,500,000 gal/yr of fuel oil.

The net increase due to the project is compared to PSD significant emission rates in Table 2. As shown in Table 2, the increases due to this project do not exceed any PSD significant emission rates, and therefore PSD review is not applicable. PSD review is also not applicable for the following reasons:

- Steam rates, heat input rates and firing rates for bagasse will not be affected by these changes;
- The increased fuel oil firing rate will occur when the bagasse has been interrupted and sufficient steam is not available to meet the demands of the sugar refinery;
- U.S. Sugar intends to burn bagasse when it is available because it is cheaper than fuel oil;

- Emission factors in terms of lb/MMBtu are lower for No. 2 fuel oil compared to bagasse burning, so emissions will not increase due to the increased firing of No. 2 fuel oil; and
- The increased fuel oil firing rate will primarily occur during the off-crop season when the other boilers are shutdown.

3.2 NEW SOURCE PERFORMANCE STANDARDS

The New Source Performance Standards (NSPS) are a set of national emission standards that apply to specific categories of new sources. Boiler No. 7 is already subject to NSPS Subpart Db for Industrial Steam Generating Units. Subpart Db regulates SO_2, NO_x, and PM emissions from steam generating units. Boiler No. 7 is in compliance with the standards established in Subpart Db.

Review of Subpart Db indicates that no further restrictions or requirements would be placed on Boiler No. 7 by increasing the fuel oil firing rate to 225,000 lb/hr steam (312 MMBtu/hr). Boiler No. 7 will comply with the NSPS for SO_2 and PM burning very low sulfur fuel oil (i.e., fuel oil with a sulfur content of 0.5 percent or less). The boiler will continue to be exempt from the NO_x emission standards by maintaining a cap on annual fuel oil usage, not to exceed the 10 percent annual capacity factor (40 CFR 60.44b(d)).

Table 1. Current Actual Emissions Due to Fuel Oil Consumption, Boiler No. 7, U.S. Sugar Corporation Clewiston

Regulated Pollutant	Actual Emissions[a] (TPY)		
	2000	2001	Average
Particulate Matter (PM)	1.49	2.44	1.97
Particulate Matter (PM_{10})	1.27	2.07	1.67
Sulfur Dioxide (SO_2)	5.86	8.66	7.26
Nitrogen Oxides (NO_x)	17.92	29.29	23.60
Carbon Monoxide (CO)	3.73	6.10	4.92
Volatile Organic Compound (VOC)	0.15	0.24	0.20
Lead - Total	9.0E-06	1.5E-05	1.2E-05
Sulfuric Acid Mist (SAM)	0.21	0.35	0.28
Beryllium (Be)	3.0E-06	4.9E-06	4.0E-06
Mercury (Hg)	3.0E-04	4.9E-04	4.0E-04

[a] Based on emissions due to fuel oil from calendar years 2000 and 2001.

Table 2. Net Change in Emissions Due to Increase in Fuel Oil Firing Rate, Boiler No. 7, U.S. Sugar Corporation Clewiston

Regulated Pollutant	Actual Emissions[a] (TPY)	Future Potential Emissions[b] (TPY)	Net Change in Emissions (TPY)	PSD Significant Emission Rate (TPY)	PSD Review Applies?
Particulate Matter (PM)	1.97	9.1	7.1	25	NO
Particulate Matter (PM_{10})	1.67	9.1	7.4	15	NO
Sulfur Dioxide (SO_2)	7.26	15.2	7.9	40	NO
Nitrogen Oxides (NO_x)	23.60	60.8	37.1	40	NO
Carbon Monoxide (CO)	4.92	20.0	15.1	100	NO
Volatile Organic Compound (VOC)	0.20	1.2	1.0	40	NO
Lead - Total	1.2E-05	2.7E-05	1.6E-05	0.6	NO
Sulfuric Acid Mist (SAM)	0.28	1.5	1.2	7	NO
Beryllium (Be)	4.0E-06	9.1E-06	5.1E-06	4.0E-04	NO
Mercury (Hg)	4.0E-04	9.1E-04	5.1E-04	0.1	NO

[a] Based on emissions due to fuel oil from calendar years 2000 and 2001.

[b] Based on proposed fuel oil firing rate. See Attachment UC-EU1-G8 for calculations.