

Florida Department of Environmental Protection

Memorandum

TO: Joseph Kahn, Division of Air Resource Management
THRU: Trina Vielhauer, Bureau of Air Regulation
FROM: Jeff Koerner, Air Permitting North Program
DATE: July 28, 2006
SUBJECT: Project No. 0510003-036-AC
U. S. Sugar Corporation – Clewiston Sugar Mill
Boilers 1 and 2, Oil Burner Modifications

In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil. The original permit authorized the installation of two low-NO_x (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. Subsequent testing indicated NO_x emissions ranging from 0.14 to 0.17 lb/MMBtu. The original air construction permit was revised to: identify installation of only one Peabody-type multi-stage combustion (MSC) burner on each boiler; specify the maximum burner capacity as 130 MMBtu/hour (963 gallons per hour); identify the maximum NO_x emissions rate of 0.17 lb/MMBtu; reduce the annual distillate oil firing rate for each boiler from 3.5 to 3.0 million gallons per year; and, for operational flexibility, cap the combined fuel firing of Boilers 1 and 2 to 6.0 million gallons per year instead of 3.0 million gallons per year per boiler.

The Department distributed an "Intent to Issue Permit" package on June 16, 2006. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on June 29, 2006. The Department received the proof of publication on July 19, 2006. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. No comments were received.

Day #90 is October 5, 2006. I recommend your approval of the attached Final Permit for this project.

Attachments

① were to install 2 burners but
only did 1. wanted a test to
validate emiss factor. Not PSD.

Was to develop emission
factor. Don't normally burn
just oil (maybe if run out of
bagasse in off-season).

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT**

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. 0510003-036-AC
Boilers 1 and 2
Oil Burner Modifications
Hendry County, Florida

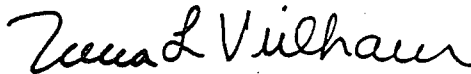
Authorized Representative:

Mr. Neil Smith, V.P. of Sugar Processing Operations

Final Air Permit No. 0510003-036-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 8/2/06 to the persons listed:

Mr. Neil Smith, 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

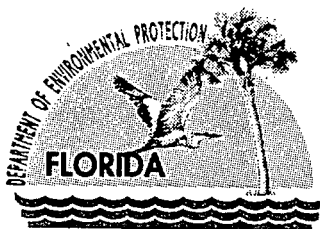
Clerk Stamp

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)

8/2/06
(Date)



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. Neil Smith, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery
Air Permit No. 0510003-036-AC
Facility ID No. 0510003
Boilers 1/2, Oil Burner Modifications
Permit Expires: January 30, 2007

PROJECT AND LOCATION


This permit is a revision of original Permit No. 0510003-027-AC, which authorized replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers operate 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

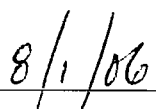
This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the work in accordance with the conditions 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



Joe Kahn, Acting 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 six existing boilers firing bagasse and fuel oil. 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. Source Obligation. [Rule 62-212.400(12), F.A.C.]
 - (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
7. Title V Permit: This permit supersedes original Permit No. 0510003-027-AC. It authorizes construction of the permitted activities 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 at 150° F with an approximate flow rate of 201,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.
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 at 150° F with an approximate flow rate of 201,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.

EQUIPMENT

1. Oil Firing Modifications: For each boiler, the permittee is authorized to replace the existing oil burners with new Peabody-type 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 0.17 lb/MMBtu. Each boiler will have one oil burner with a maximum heat input rate of 130 MMBtu/hour. Based on a higher heating value of 135,000 Btu per gallon, the maximum distillate oil firing rate will be 963 gallons per hour per burner. The modified boilers are estimated to produce approximately 97,400 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(12), F.A.C.]
3. Permitted Capacity on Oil: For each boiler, the maximum heat input rate from distillate oil is 130 MMBtu per hour. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 97,400 lb/hour.}* [Design; Rules 62-120.200(PTE) and 62-212.400(12), F.A.C.]
4. Restrictions on Oil: For each boiler, distillate oil firing shall not exceed 963 gallons per hour. For both boilers combined, distillate oil firing shall not exceed 6,000,000 gallons during any consecutive 12 months. 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(12), 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

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

oil. A separate emissions performance test on oil only is not required. [Rule 62-296.410, F.A.C.]

EMISSIONS PERFORMANCE TESTING

7. 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.]
8. 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

9. 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

10. 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.]

Filename: 0510003-036-AC - Final 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

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.]

FINAL DETERMINATION

PERMITTEE

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

Authorized Representative:

Mr. Neil Smith, V.P. of Sugar Processing Operations

PERMITTING AUTHORITY

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

PROJECT

Project No. 0510003-036-AC (modification of original Permit No. 0510003-027-AC)
U. S. Sugar Corporation – Clewiston Sugar Mill
Boilers 1 and 2, Oil Burner Modifications

The United States Sugar Corporation operates 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. This permitting action revises original Permit No. 0510003-027-AC for the following: identify installation of only one Peabody-type multi-stage combustion (MSC) burner on each boiler; specify the maximum burner capacity as 130 MMBtu/hour (963 gallons per hour); identify the maximum NOx emissions rate of 0.17 lb/MMBtu; reduce the annual distillate oil firing rate for each boiler from 3.5 to 3.0 million gallons per year; and for operational flexibility, cap the combined fuel firing of Boilers 1 and 2 to 6.0 million gallons per year instead of 3.0 million gallons per year per boiler.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on June 16, 2006. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on June 29, 2006. The Department received the proof of publication on July 19, 2006. 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.

BEST AVAILABLE COPY
P.E. CERTIFICATION STATEMENT

PERMITTEE

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

Air Permit No. 0510003-036-AC
Clewiston Sugar Mill and Refinery
Boilers 1 and 2
Oil Burner Modifications, Revision

PROJECT DESCRIPTION

In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil. The original permit authorized the installation of two low-NOx (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. Subsequent testing indicated NOx emissions ranging from 0.14 to 0.17 lb/MMBtu.

Because the original project was permitted just below the PSD significant emission rate of 40 tons/year for NOx, Specific Condition 7 of Permit No. 0510003-027-AC requires, "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." Accordingly, the applicant requests that the original air construction permit be revised for the following:

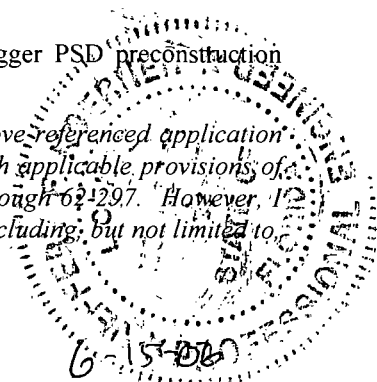
- Identify installation of only one Peabody-type multi-stage combustion (MSC) burner on each boiler;
- Specify the maximum burner capacity as 130 MMBtu/hour (963 gallons per hour);
- Identify the maximum NOx emissions rate of 0.17 lb/MMBtu;
- Reduce the annual distillate oil firing rate for each boiler from 3.5 to 3.0 million gallons per year; and
- For operational flexibility, cap the combined fuel firing of Boilers 1 and 2 to 6.0 million gallons per year instead of 3.0 million gallons per year per boiler.

The requests are acceptable and ensure that the revised project (as constructed) does not trigger PSD preconstruction review.

I HEREBY CERTIFY that the air pollution control engineering features described in the above-referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).



Jeffery F. Koerner, P.E.
Registration Number: 49441



(Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p><input checked="" type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p><input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.</p> <p><input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.</p>	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee <i>Rochel Felton</i></p> <p>B. Received by (Printed Name) <i>Rochel Felton</i></p> <p>C. Date of Delivery <i>6/20/06</i></p>
<p>1. Article Addressed to:</p> <p>Mr. Neil Smith, V.P. of Sugar Processing Operations Clewiston Sugar Mill and Refinery United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, Florida 33440</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input checked="" type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p><i>7000 670 0013 311-1489</i></p>

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

7000 0670 0013 3110 1489

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
1 Mr. Neil Smith, V.P. of Sugar Processing Operations Se Clewiston Sugar Mill and Refinery United States Sugar Corporation St 111 Ponce DeLeon Avenue Clewiston, Florida 33440 Ci		
PS Form 3800, May 2000 See Reverse for Instructions		

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<input type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. <input type="checkbox"/> Print your name and address on the reverse so that we can return the card to you. <input type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee B. Received by (Printed Name) <i>[Signature]</i> C. Date of Delivery <i>8-4-6</i>
1. Article Addressed to: Mr. Neil Smith, V.P. of Sugar Processing Operations Clewiston Sugar Mill and Refinery United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, Florida 33440	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No 3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. 4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
2. Article Number (Transfer from service label) 7000 1670 0013 3110 1007	

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)										
7000 1670 0013 3110 1007	<table border="1"> <tr> <td>Postage</td> <td>\$</td> <td rowspan="4" style="vertical-align: middle;">Postmark Here</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> </table> <p>Mr. Neil Smith, V.P. of Sugar Processing Operations Clewiston Sugar Mill and Refinery United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, Florida 33440</p>	Postage	\$	Postmark Here	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)	
Postage	\$	Postmark Here								
Certified Fee										
Return Receipt Fee (Endorsement Required)										
Restricted Delivery Fee (Endorsement Required)										
PS Form 3800, May 2000 See Reverse for Instructions										



RECEIVED
111 Ponce de Leon Ave.
Clewiston, Florida 33440
Telephone 863/902-8121
Fax 863/902-2729
JUL 24 2006

SUGAR MANUFACTURING DEPARTMENT

BUREAU OF AIR REGULATION

July 17, 2006

Ron Blackburn, P.E.
Florida Dept. of Environmental Protection
P. O. Box 2549
Ft. Myers, Fl. 33902-2549

RE: Air Construction Permit No. 0510003-036-AC
Clewiston Sugar Mill and Refinery
Boiler No. 1 & 2 Burner Modifications, Revisions

Dear Mr. Blackburn:

We are enclosing Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Permit" was duly published in the legal section of the June 29, 2006 issue of "The Clewiston News" newspaper in Hendry County.

If you have any questions or need further information, please let me know.

Sincerely,

UNITED STATES SUGAR CORPORATION

A handwritten signature in black ink, appearing to read "Neil F. Smith", is written over the typed name.

Neil F. Smith
Vice President & General Manager –
Sugar Manufacturing

NS:tkw
Enclosure

cc: Peter Briggs

JUL 19 2006
D.E.P. - South District

The Clewiston News

Published Weekly

RECEIVED

Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida
County of Hendry

JUL 24 2006

IN BEHALF OF AIR REGULATION

Before the undersigned authority, personally appeared Jose Zaragoza, who on oath says he is Editor of Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida,

that the attached copy of advertisement being a notice
in the matter Public Notice of intent to issue air permit
in the _____ court, was published in said newspaper in the issue of June 29, 2006

Affiant further says that the said Clewiston News is a newspaper published at Clewiston, in said Hendry County, continuously published in said Hendry County, Florida, each week, and has been entered as periodicals matter at the post office in Clewiston, in said Hendry County, Florida, for a period of one year preceding the first publication says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Jose Zaragoza

Sworn to and subscribed before me this 30 day of June, 2006

Notary Public

Applicant: The applicant for this project is the United States Sugar Corporation. The applicant's authorized representative is Mr. Neil Smith, V.P. of Sugar Processing Operations. The applicant's mailing address is the Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

Facility Location: The United States Sugar Corporation operates an existing sugar mill and refinery in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

Project: In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil instead of No. 6 fuel oil. The original permit authorized the installation of two low-NOx (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. In addition, subsequent testing indicated slightly higher (~13%) NOx emissions.

Specific Condition 7 of Permit No. 0510003-027-AC requires, "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." Accordingly, the applicant requests that the original air construction permit be revised for the following: identify installation of only one burner per boiler; specify the maximum burner capacity as 130 MMBtu/hour; identify the design NOx emissions rate of 0.17 lb/MMBtu; and reduce annual distillate oil firing from 7.0 to 6.0 million gallons per year (from both boilers combined).

The revised project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. Bagasse is the primary fuel for these boilers and is fired when available. Oil is fired as a startup fuel, a supplemental fuel during mill interruptions, and as a backup fuel during the refinery season should bagasse be unavailable. Distillate oil is a much cleaner firing fuel than No. 6 fuel and actual emissions are expected to decrease.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32359-2400. The Bureau of Air Regulation's phone number is 850/488-0114 and fax number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the technical evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 102.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-3381. The South District's telephone number is 239-332-6975.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-201, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all email or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. For additional information, contact the Permitting Authority at the above address or phone number. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a Revised Draft Permit and require, if appropriate, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. 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 attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each 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 state; (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 the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.201, F.A.C.

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL USA 32653
Telephone (352) 336-5600
Fax (352) 336-6603
www.golder.com

RECEIVED

MAY 19 2006



BUREAU OF AIR REGULATION

May 17, 2006

063-7563

Florida Department of Environmental Protection
Department of Air Resources Management
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399-2400

Attention: Mr. Jeff Koerner, P. E., Air Permitting South

RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – CLEWISTON MILL
BOILER NOS. 1 and 2 FUEL OIL BURNING MODIFICATIONS

Dear Mr. Koerner:

Please find enclosed three copies of an air construction permit application for modification of the fuel oil burning capacities and specifications for Boiler Nos. 1 and 2 at the Clewiston Mill. Based on the initial capacity and performance tests, we have revised the PSD applicability analysis, and reduced annual fuel oil consumption further in order to not result in an increase in actual emissions of any pollutant above the PSD significant emission rates. I have forwarded one copy of the application to Ron Blackburn of the Florida Department of Environmental Protection's (FDEP) Ft. Myers office.

Please call or e-mail me if you have any questions concerning this application.

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

DB/all

Enclosure

cc: Don Griffin
Ron Blackburn, FDEP

Y:\Projects\2006\0637563 USSC Boilers 1 & 2\4.1\1.051706CvrLtr.doc



RECEIVED

MAY 19 2006

BUREAU OF AIR REGULATION

**AIR PERMIT APPLICATION
TO REVISE
BOILER NOS. 1 AND 2
MODIFIED OIL-FIRING SYSTEM
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**

**May 2006
0637563**

**DISTRIBUTION:
3 Copies – FDEP, Tallahassee
1 Copy – FDEP, Ft. Myers
2 Copies – U.S. Sugar
2 Copies – Golder Associates Inc.**

APPLICATION FOR AIR PERMIT – LONG FORM



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also 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
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

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

Air Construction Permit & 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: U.S. Sugar Clewiston Mill	
3. Facility Identification Number: 0510003	
4. Facility Location...: Street Address or Other Locator: W.C. Owens Ave. and S.R. 832 City: Clewiston County: Hendry Zip Code: 33440	
5. Relocatable Facility? <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, Senior 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: Florida Zip Code: 33440	
3. Application Contact Telephone Numbers... Telephone: (863) 983-8121 ext. Fax: (863) 902-2729	
4. Application Contact Email Address: braiola@ussugar.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 5/19/06	3. PSD Number (if applicable):
2. Project Number(s): 0510003-036-AE	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 construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

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

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

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

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

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

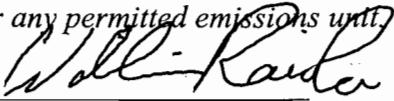
Application Comment

Air Construction Permit application to modify the fuel oil burners on Boiler Nos. 1 and 2.

FACILITY INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : William A. Raiola, Senior Vice President, Sugar Processing Operations
2. Owner/Authorized Representative Mailing Address... Organization/Firm: United States Sugar Corporation Street Address: 111 Ponce de Leon Avenue City: Clewiston State: Florida Zip Code: 33440
3. Owner/Authorized Representative Telephone Numbers... Telephone: (863) 983-8121 ext. Fax: (863)902-2729
4. Owner/Authorized Representative Email Address: braiola@ussugar.com
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 <u>05/16/06</u>

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: David A. Buff Registration Number: 19011
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6241 NW 23rd Street, Suite 500 City: Gainesville State: FL Zip Code: 32653
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. 545 Fax: (352) 336-6603
4. Professional Engineer 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> Signature: <u>David A. Buff</u> Date: <u>5/17/06</u> (seal)

* Attach any exception to certification statement.

Board of Professional Engineers Certificate of Authorization #00001670

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:	

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	No
Sulfur Dioxide - SO	A	No
Nitrogen Oxides - NO	A	No
Carbon Monoxide - CO	A	No
Particulate Matter - PM ₁₀	A	No
Sulfuric Acid Mist - SAM	A	No
Total Hazardous Air Pollutants - HAPs	A	No
Volatile Organic Compounds - VOC	A	No
Acetaldehyde - H001	A	No
Benzene - H017	A	No
Formaldehyde - H095	A	No
Phenol - H144	A	No
Polycyclic Organic Matter - H151	A	No
Styrene - H163	A	No
Toluene - H169	A	No
Naphthalene - H132	A	No
Dibenzofuran - H058	A	No

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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: 05/2005
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: 05/2005
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <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 checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input checked="" type="checkbox"/> Attached, Document ID: Attachment A
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: Attachment A
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" 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.):
 Attached, Document ID: _____ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
 Attached, Document ID: _____ Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
 Attached, Document ID: _____
 Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
 Attached, Document ID: _____
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
 Attached, Document ID: _____
 Equipment/Activities On site but Not Required to be Individually Listed
 Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
 Attached, Document ID: _____ Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:
 Attached, Document ID: _____ Not Applicable

Additional Requirements Comment

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? <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% by weight.

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% 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

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.		

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: 0.963	5. Maximum Annual Rate: 6,000	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 130 MMBtu/hr and 6,000,000 gallons of No. 2 fuel oil per year. Also includes facility generated on-spec used oil and up to 500 cubic yards per season of petroleum contaminated soils.		

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
PM10	001		NS
SO2	001		EL
NOx			NS
CO			NS
VOC			NS
SAM			NS
PB	001		NS
HAPs (Total Hazardous Air Pollutants)			NS
H001 (Acetaldehyde)			NS
H006 (Acrolein)			NS
H017 (Benzene)			NS
H021 (Beryllium)	001		NS
H052 (p-cresol)			NS
H058 (Dibenzofurans)			NS
H095 (Formaldehyde)			NS
H106 (Hydrogen Chloride)			NS
H114 (Mercury)	001		NS
H132 (Naphthalene)			NS
H144 (Phenol)			NS
H151 (POMs)			NS
H163 (Styrene)			NS
H169 (Toluene)			NS

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

Page [1] of [6]
Particulate Matter - Total

**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.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. 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 ton/2000 lb = 542.0 TPY			
11. Potential Fugitive and Actual Emissions Comment: Maximum emissions representative of bagasse firing.			

**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: 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: 13.0 lb/hour 41.7 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 6,000,000 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: PM10		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 115.1 lb/hour 504.1 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: 93% of PM Reference: Test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: 123.8 lb/hr x 0.93 = 115.1 lb/hr 542.0 TPY x 0.93 = 504.1 TPY			
11. Potential Fugitive and Actual Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

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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 ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 29.7 lb/hour 130.1 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 and 0.05% of S Oil Reference: Industry Test Data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 495 MMBtu/hr x 0.06 lb/MMBtu = 29.7 lb/hr Fuel Oil: 130 MMBtu/hr x 0.053 lb/MMBtu = 6.9 lb/hr Annual: 29.7 lb/hr x 8,760 hr/yr x ton/2,000 lb= 130.1 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU1-F1.10 for potential emissions due to fuel oil firing. 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.			

**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% sulfur oil	4. Equivalent Allowable Emissions: 6.9 lb/hour 22.2 tons/year
5. Method of Compliance: Fuel oil analysis.	
6. Allowable Emissions Comment (Description of Operating Method): Requested limit. Emissions representative of fuel oil firing. Annual emissions based on 6,000,000 gallons per any consecutive 12 months. See Attachment UC-EU1-F1.10 for calculations.	

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

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

Page [4] of [6]
Nitrogen Oxides

**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: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 99.0 lb/hour 433.6 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: 0.20 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 0.20 lb/MMBtu x 495 MMBtu/hr = 99.0 lb/hr 99.0 lb/hr x 8,760 hr/yr x ton/2,000 lb = 433.6 TPY Fuel oil: 0.17 lb/MMBtu x 130 MMBtu/hr = 22.1 lb/hr 834,000 MMBtu/yr x 0.17 lb/MMBtu x ton/2,000 lb = 70.9 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU1-F1.10 for potential emissions due to fuel oil firing.			

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 3,217.5 lb/hour 14,092.7 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: 6.5 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 6.5 lb/MMBtu x 495 MMBtu/hr = 3,217.5 lb/hr 3,217.5 lb/hr x 8,760 hr/yr / 2,000 lb/ton = 14,092.7 TPY Fuel oil: 0.037 lb/MMBtu x 130 MMBtu/hr = 4.8 lb/hr 834,000 MMBtu/yr x 0.037 lb/MMBtu x ton/2,000 lb = 15.4 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU1-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No.1

Page [5] of [6]
Carbon Monoxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 742.5 lb/hour 3,252.2 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: 1.50 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 1.50 lb/MMBtu x 495 MMBtu/hr = 742.5 lb/hr 742.5 lb/hr x 8,760 hr/yr / 2,000 lb/ton = 3,252.2 TPY Fuel oil: 0.0015 lb/MMBtu x 130 MMBtu/hr = 0.2 lb/hr 834,000 MMBtu/yr x 0.0015 lb/MMBtu x ton/2,000 lb = 0.62 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU1-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1]
Boiler No. 1

Page [6] of [6]
Volatile Organic Compounds

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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 No. 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: 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 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 date 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: Monitors wet scrubber spray nozzle pressure. Permit No. 0510003-017-AV.	

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:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors steam temperature. Permit No. 0510003-017-AV.	

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: Monitors steam pressure. Permit No. 0510003-017-AV.	

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:	
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 [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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>05/2005</u>
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>UC-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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>05/2005</u>
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 type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" 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 type="checkbox"/> 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(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" 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 checked="" type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input 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 type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [1]

Boiler No. 1

Additional Requirements Comment

ATTACHMENT UC-EU1-F1.10

**POTENTIAL EMISSIONS
DUE TO FUEL OIL FIRING**

ATTACHMENT UC-EU1-F1.10
 FUTURE POTENTIAL EMISSIONS DUE TO FUEL OIL FIRING BOILER NO. 1
 U. S. Sugar Corporation Clewiston

Regulated Pollutant	No. 2 Fuel Oil Combustion					
	Emission Factor (lb/MMBtu)	Ref.	Activity Factor		Hourly Emissions (lb/hr)	Annual Emissions (TPY)
			Hourly ^a MMBtu/hr	Annual ^b MMBtu/yr		
Particulate Matter (PM)	0.015	1	130	834,000	1.9	6.2
Particulate Matter (PM ₁₀)	0.007	2	130	834,000	1.0	3.1
Sulfur dioxide (SO ₂)	0.053	3	130	834,000	6.9	22.2
Nitrogen oxides (NO _x)	0.17	4	130	834,000	22.1	70.9
Carbon monoxide (CO)	0.037	1	130	834,000	4.8	15.4
Volatile Organic Compounds (VOC)	1.5E-03	1	130	834,000	0.2	0.62
Sulfuric acid mist (SAM)	0.0026	1	130	834,000	0.3	1.1
Lead (Pb)	9.0E-06	5	130	834,000	1.2E-03	3.8E-05
Beryllium (Be)	3.0E-06	5	130	834,000	3.9E-04	1.3E-05
Mercury (Hg)	3.0E-06	5	130	834,000	3.9E-04	1.3E-03

References:

- Factors for No. 2 fuel oil combustion: AP-42 Tables 1.3-1 and 1.3-3 (9/98). For sulfuric acid mist, factor shown is for SO₃. Convert to H₂SO₄ by multiplying by 98/80. Factors were converted to lb/MMBtu by dividing by 135,000 Btu/gal (min).
 PM = 2 lb/1000 gal
 CO = 5 lb/1000 gal
 SO₃ = 5.7S lb/1000 gal, where S = 0.05 VOC = 0.2 lb/1000 gal
- Factors for distillate fuel oil, PM₁₀ is 50% of PM based on AP-42, Table 1.3-6 (9/98).
- Based on stoichiometric calculation: 7.2 lbs/gal; 135,000 Btu/gal (min); 0.05% sulfur.
- Based on stack testing conducted on Boiler No. 1 and 2 on Feb. 10-11, 2006.
- Factors for No. 2 fuel oil combustion, AP-42 Table 1.3-10 (9/98).

Footnotes:

- ^a Based on maximum heat input due to No. 2 fuel oil combustion, from manufacturer specifications.
^b Based on No. 2 fuel oil usage of 6,000,000 gallons per year and heating value of 139,000 Btu/gal (max).

ATTACHMENT UC-EU1-I2

FUEL ANALYSIS

ATTACHMENT UC-EU1-I2

BOILER NOS. 1 AND 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	48.10%	87.3% ^d
Hydrogen	5.90%	12.6% ^d
Nitrogen	0.35%	0.22% ^d
Oxygen	40.90%	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 UC-EU1-I7

**OTHER INFORMATION
REQUIRED BY RULE OR STATUTE**

ATTACHMENT UC-EU1-17**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.

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?
 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% by weight.**

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
Joy Turbulair Impingement Scrubber, Size 125, Type D

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

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:	
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.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): External combustion boilers; Industrial; Bagasse; 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: 0.963	5. Maximum Annual Rate: 6,000	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 130 MMBtu/hr and 6,000,000 gallons of No. 2 fuel oil per year. Also includes facility generated on-spec used oil and up to 500 cubic yards per season of petroleum contaminated soils.		

EMISSIONS UNIT INFORMATIONSection [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
PM10	001		NS
SO2	001		EL
NOx			NS
CO			NS
VOC			NS
SAM			NS
PB	001		NS
HAPs (Total Hazardous Air Pollutants)			NS
H001 (Acetaldehyde)			NS
H006 (Acrolein)			NS
H017 (Benzene)			NS
H021 (Beryllium)	001		NS
H052 (p-cresol)			NS
H058 (Dibenzofurans)			NS
H095 (Formaldehyde)			NS
H106 (Hydrogen Chloride)			NS
H114 (Mercury)	001		NS
H132 (Naphthalene)			NS
H144 (Phenol)			NS
H151 (POMs)			NS
H163 (Styrene)			NS
H169 (Toluene)			NS

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2]
Boiler No. 2

Page [1] of [6]
Particulate Matter - Total

**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.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. 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 ton/2,000 lb = 490 TPY			
11. Potential Fugitive and Actual Emissions Comment: Maximum emissions representative of bagasse firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2]
Boiler No. 2

Page [1] of [6]
Particulate Matter - 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 13.0 lb/hour 41.7 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. 0510003-017-AV. Emissions representative of fuel oil firing. Annual emissions based on 6,000,000 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 [2]
Boiler No. 2

Page [2] of [6]
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: 104.0 lb/hour 455.7 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: 93% of PM Reference: Test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: 111.8 lb/hr x 0.93 = 104.0 lb/hr 490 TPY x 0.93 = 455.7 TPY			
11. Potential Fugitive and Actual Emissions Comment: Maximum emissions representative of bagasse firing.			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 26.82 lb/hour 117.5 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 and 0.05% of S oil. Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 447 MMBtu/hr x 0.06 lb/MMBtu = 26.82 lb/hr Fuel Oil: 130 MMBtu/hr x 0.053 lb/MMBtu = 6.9 lb/hr Annual: 26.82 lb/hr x 8,760 hr/yr x ton/2,000 lb = 117.5 TPY			
11. Potential Fugitive and Actual Emissions Comment: Fuel oil based on 0.05% sulfur oil. See Attachment UC-EU2-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2]
Boiler No. 2

Page [3] of [6]
Sulfur Dioxide

**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% sulfur oil	4. Equivalent Allowable Emissions: 6.9 lb/hour 22.2 tons/year
5. Method of Compliance: Fuel oil analysis	
6. Allowable Emissions Comment (Description of Operating Method): Requested limit. Emissions representative of fuel oil firing. Annual emissions based on 6,000,000 gallons per any consecutive 12 months. See Attachment UC-EU2-F1.10 for calculations.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 89.4 lb/hour 391.6 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: 0.20 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 0.20 lb/MMBtu x 447 MMBtu/hr = 89.4 lb/hr 89.4 lb/hr x 8,760 hr/yr x ton/2,000 lb = 391.6 TPY Fuel oil: 0.17 lb/MMBtu x 130 MMBtu/hr = 22.1 lb/hr 834,000 MMBtu/yr x 0.17 lb/MMBtu x ton/2,000 lb = 70.9 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU2-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

POLLUTANT DETAIL INFORMATION

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Nitrogen Oxides

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2,905.5 lb/hour 12,726.1 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: 6.5 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 6.5 lb/MMBtu x 447 MMBtu/hr = 2,905.5 lb/hr 2,905.5 lb/hr x 8,760 hr/yr / 2,000 lb/ton = 12,726.1 TPY Fuel oil: 0.037 lb/MMBtu x 130 MMBtu/hr = 4.8 lb/hr 834,000 MMBtu/yr x 0.037 lb/MMBtu x ton/2,000 lb = 15.4 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU2-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2]
Boiler No. 2

Page [5] of [6]
Carbon Monoxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 670.5 lb/hour 2,936.8 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: 1.50 lb/MMBtu Reference: Industry test data		7. Emissions Method Code: 1	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Bagasse: 1.50 lb/MMBtu x 447 MMBtu/hr = 670.5 lb/hr 670.5 lb/hr x 8,760 hr/yr / 2,000 lb/ton = 2,936.8 TPY Fuel oil: 0.0015 lb/MMBtu x 130 MMBtu/hr = 0.2 lb/hr 834,000 MMBtu/yr x 0.015 lb/MMBtu x ton/2,000 lb = 0.62 TPY			
11. Potential Fugitive and Actual Emissions Comment: See Attachment UC-EU2-F1.10 for potential emissions due to fuel oil firing.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2]
Boiler No. 2

Page [6] of [6]
Volatile Organic Compounds

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

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: 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 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. 2. No serial # or installation date 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: Monitors wet scrubber spray nozzle pressure. Permit No. 0510003-017-AV.	

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:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Monitors steam temperature. Permit No. 0510003-017-AV.	

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: Monitors steam pressure. Permit No. 0510003-017-AV.	

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:	
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 [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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 05/2005
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: UC-EU2-12 <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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 05/2005
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" 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 type="checkbox"/> 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 checked="" type="checkbox"/> Attached, Document ID: UC-EU2-17 <input 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(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" 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 checked="" type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input 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 type="checkbox"/> Not Applicable

EMISSIONS UNIT INFORMATION

Section [2]

Boiler No. 2

Additional Requirements Comment

[Empty comment box]

ATTACHMENT UC-EU2-F1.10

**POTENTIAL EMISSIONS
DUE TO FUEL OIL FIRING**

ATTACHMENT UC-EU2-F1.10
 FUTURE POTENTIAL EMISSIONS DUE TO FUEL OIL FIRING, BOILER NO. 2,
 U. S. Sugar Corporation Clewiston

Regulated Pollutant	No. 2 Fuel Oil Combustion					
	Emission Factor (lb/MMBtu)	Ref.	Activity Factor		Hourly Emissions (lb/hr)	Annual Emissions (TPY)
			Hourly ^a MMBtu/hr	Annual ^b MMBtu/yr		
Particulate Matter (PM)	0.015	1	130	834,000	1.9	6.2
Particulate Matter (PM ₁₀)	0.007	2	130	834,000	1.0	3.1
Sulfur dioxide (SO ₂)	0.053	3	130	834,000	6.9	22.2
Nitrogen oxides (NO _x)	0.17	4	130	834,000	22.1	70.9
Carbon monoxide (CO)	0.037	1	130	834,000	4.8	15.4
Volatile Organic Compounds (VOC)	1.5E-03	1	130	834,000	0.2	0.62
Sulfuric acid mist (SAM)	0.0026	1	130	834,000	0.3	1.1
Lead (Pb)	9.0E-06	5	130	834,000	1.2E-03	3.8E-05
Beryllium (Be)	3.0E-06	5	130	834,000	3.9E-04	1.3E-05
Mercury (Hg)	3.0E-06	5	130	834,000	3.9E-04	1.3E-03

References:

- Factors for No. 2 fuel oil combustion: AP-42 Tables 1.3-1 and 1.3-3 (9/98). For sulfuric acid mist, factor shown is for SO₃. Convert to H₂SO₄ by multiplying by 98/80. Factors were converted to lb/MMBtu by dividing by 135,000 Btu/gal (min).
 PM = 2 lb/1000 gal
 CO = 5 lb/1000 gal
 SO₃ = 5.7S lb/1000 gal, where S = 0.05 VOC = 0.2 lb/1000 gal
- Factors for distillate fuel oil, PM₁₀ is 50% of PM based on AP-42, Table 1.3-6 (9/98).
- Based on stoichiometric calculation: 7.2 lbs/gal; 135,000 Btu/gal (min); 0.05% sulfur.
- Based on stack testing conducted on Boiler No. 1 and 2 on Feb. 10-11, 2006.
- Factors for No. 2 fuel oil combustion, AP-42 Table 1.3-10 (9/98).

Footnotes:

^a Based on maximum heat input due to No. 2 fuel oil combustion, from manufacturer specifications.

^b Based on No. 2 fuel oil usage of 6,000,000 gallons per year and heating value of 139,000 Btu/gal (max).

ATTACHMENT UC-EU2-17

**OTHER INFORMATION
REQUIRED BY RULE OR STATUTE**

ATTACHMENT UC-EU2-I7**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.

ATTACHMENT A

**SUPPLEMENTAL INFORMATION FOR
CONSTRUCTION PERMIT APPLICATION**

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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 Permit No. 0510003-017-AV. U.S. Sugar harvests sugarcane and transports it to the Clewiston Mill, where the cane is processed into raw sugar in the mill. U.S. Sugar processes most of the raw sugar into refined white sugar in an onsite sugar refinery, while the remaining raw sugar is shipped to customers.

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

Boiler Nos. 1 and 2 were previously permitted to burn bagasse and No. 6 fuel oil. The maximum heat input due to bagasse is 495 million British thermal units per hour (MMBtu/hr) for Boiler No. 1 and 447 MMBtu/hr for Boiler No. 2. The maximum heat input to each boiler from fuel oil only was limited to 248 MMBtu/hr and 1,500 gallons per hour (gal/hr).

In August 2004, U.S. Sugar proposed to replace the existing No. 6 fuel oil burners on Boiler Nos. 1 and 2 with new No. 2 fuel oil burners. The new burner system for each boiler was to have two burners and be rated for a maximum heat input of 208 MMBtu/hr. The burner design emission rate for nitrogen oxides (NO_x) was 0.15 pounds per million British thermal units (lb/MMBtu).

In February 2005, the Florida Department of Environmental Protection (FDEP) issued an air construction permit (Permit No. 0510003-027-AC) which allowed installation of the burners. The permit required that U.S. Sugar burn distillate fuel oil with a maximum sulfur content of 0.05 percent, instead of the previously permitted No. 6 fuel oil with a maximum sulfur content of 2.5 percent. The permitted steam rate from bagasse firing, bagasse firing rates and bagasse heat input rates did 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 Nos.1 and 2 was to more reliably supply the sugar mill and refinery with adequate steam in the event that bagasse becomes unavailable during the crop season. Typically, if Boiler Nos. 1 and 2 are operating during the crop season or the off-season, other boilers are also operating due to the steam demands of the sugar mill and/or the refinery. In this case, if the bagasse supply is interrupted, all of the operating boilers would be affected, but the more reliable fuel oil firing capability of Boiler Nos. 1 and 2 would be more able to provide adequate steam production to support the mill and/or the refinery. Also, during a temporary interruption in the supply of bagasse, it is not possible to quickly startup one of the other mill boilers to provide additional steam, because of the period of time required for startup. Maintaining steam production under conditions when bagasse supply is interrupted is critical to the reliable and efficient operation of the sugar mill and refinery.

To implement this increase, U.S. Sugar made certain physical modifications to the fuel oil burner system, including replacing the existing burners. However, U.S. Sugar installed only one fuel oil burner in each boiler, rated for a heat input of 130 MMBtu/hr. Also, U.S. Sugar conducted performance tests on each boiler for NO_x emissions when burning fuel oil only at the maximum rate, in order to validate the actual installed burner capacity and the NO_x emissions. Therefore, this revised permit application is being submitted in order to update the information presented in the original application.

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

Boiler Nos. 1 and 2 are each spreader stoker, vibrating grate-type boilers, both originally constructed at the Clewiston Mill in 1968. Particulate matter (PM) emissions from each boiler are controlled by Joy Turbulaire spray impingement-type scrubbers. Boiler Nos. 1 and 2 are currently permitted to burn bagasse and No. 2 fuel oil. The maximum heat input for bagasse firing is 496 MMBtu/hr for Boiler No. 1 and 447 MMBtu/hr for Boiler No. 2. Based on Permit No. 0510003-027-AC, the maximum sulfur content of the fuel oil is limited to 0.05 percent. The maximum heat input to each boiler from fuel oil only is limited to 208 MMBtu/hr, and the maximum fuel oil burning rate is limited to 1,541 gal/hr and 3,500,000 gallons per year (gal/yr).

In 2005, U.S. Sugar replaced the existing No. 6 fuel oil burners on Boiler Nos. 1 and 2 with new No. 2 fuel oil burners, as allowed under permit no. 0510003-027-AC. However, U.S. Sugar installed only one (1) No. 2 fuel oil burner, each rated at 130 MMBtu/hr, in each boiler. U.S. Sugar is required to burn distillate fuel oil with a maximum of 0.05 percent sulfur in the burners. Maximum annual fuel oil burning is now proposed to be limited to 6,000,000 gal/yr, total for both boilers combined.

The new burners will allow each boiler to produce up to approximately 97,400 lb/hr steam when firing fuel oil only, as calculated below:

$$130 \text{ MMBtu/hr} \times 80\text{-percent efficiency} \div 1,068 \text{ Btu/lb steam} = 97,378 \text{ lb/hr steam}$$

This calculation is based on an estimated 80-percent thermal efficiency when burning fuel oil only. The manufacturers design specifications for the new burners is provided in Attachment B.

In January 2006, U.S. Sugar conducted initial performance tests on the new burners in each boiler, in order to validate the capacity on fuel oil and the NO_x emission rate. The results of these tests are shown in Attachment C (a full test report has been submitted to the FDEP). As shown in Attachment C, the burners were able to achieve 121 MMBtu/hr (Boiler No. 1) and 126 MMBtu/hr (Boiler No. 2) when burning fuel oil only. These rates are more than 90 percent of the design heat input of 130 MMBtu/hr.

The performance test results are demonstrated that actual NO_x emissions from the Boiler No. 1 burner were 0.17 lb/MMBtu, and from the Boiler No. 2 burner was 0.14 lb/MMBtu. The actual emissions from Boiler No. 1 are above the design emission rate of 0.15 lb/MMBtu.

Based on the change in design firing rates for the fuel oil burners, and the higher than expected NO_x emission rate, the project emissions have been updated, and are presented in Section 2.2.

2.2 Project Emissions

The estimated future potential hourly and annual emissions for the modified fuel oil firing in Boiler Nos. 1 and 2 are presented in Attachments UC-EU1-F1.10 and UC-EU2-F1.10. Emissions due to bagasse firing will not change; and, therefore, emissions due to bagasse firing are not addressed in these attachments.

The emission factors used for particulate matter (both PM and PM₁₀), carbon monoxide (CO), volatile organic compounds (VOCs), sulfuric acid mist (SAM), lead, mercury, and beryllium are from the Environmental Protection Agency's (EPA's) Publication AP-42, Section 3, which presents factors for No. 2 fuel oil combustion. The activity factors are based on the proposed maximum fuel oil heat input of 130 MMBtu/hr and the proposed annual limit of 6,000,000 gal/yr of fuel oil for both boilers combined. To provide more flexibility in operations, U.S. Sugar is requesting an overall cap on Boilers No. 1 and 2 annual fuel oil usage, rather than individual annual limits.

Emissions of sulfur dioxide (SO₂) are based on a stoichiometric calculation, using the maximum future sulfur content of 0.05 percent, and the density for very low sulfur No. 2 fuel oil of 7.2 lb/gal. Emissions of NO_x are based on the higher of the two initial performance tests results, i.e., 0.17 lb/MMBtu, in order to be conservative.

The past actual emissions from Boiler Nos. 1 and 2 due to fuel oil firing are presented in Table 1, and are the same as presented in the original application. Detailed calculations are shown in Attachment D. The past actual emissions are based on the average emissions from 2002 and 2003. The emissions are from U.S. Sugar's Annual Operating Reports (AORs) submitted to the FDEP for each respective year. Lead, beryllium, mercury, and SAM have not been required to be reported in the AORs, so these emissions were calculated using AP-42 factors for No. 2 fuel oil combustion and the activity factors for each respective year.

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.

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 Clean 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 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 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 Nos. 1 and 2's past actual emissions due to fuel oil firing from the future potential emissions resulting from fuel oil firing. Emissions due to bagasse firing are not included since these emissions will not be affected by the proposed project.

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. In addition, U.S. Sugar believes PSD review is not applicable for the following reasons:

- The maximum steam rate for the boiler will not be affected;
- Steam rates, heat input rates and firing rates for bagasse will not be affected;
- U.S. Sugar intends to burn bagasse when it is available; and

- Emission factors for No. 2 fuel oil in terms of lb/MMBtu are lower than for No. 6 fuel oil or for bagasse burning, so emissions will not increase while Boiler Nos. 1 and 2 are firing very low sulfur No. 2 fuel oil.

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. NSPS Subpart Db is applicable to each steam-generating unit for which construction, modification, or reconstruction is commenced after June 9, 1984, and that has a maximum design heat input rate of 100 MMBtu/hr or greater. Subpart Db regulates SO₂, NO_x, and PM emissions from steam generating units.

Two provisions under the general NSPS regulations (40 CFR Subpart 60, Subpart A) could potentially subject Boiler Nos. 1 and 2 to the Subpart Db NSPS. These are discussed in the following sections.

3.2.1 Modification

Boiler Nos. 1 and 2 are both “existing facilities” under the NSPS definitions, and are not currently subject to Subpart Db. Boiler Nos. 1 and 2 were originally constructed at the Clewiston Mill in 1968, and the existing oil burners were installed at that time. To become subject to NSPS, the proposed changes to Boiler Nos. 1 and 2 would need to meet the definition of “modification” as defined by 40 CFR 60.2. Modification is defined as:

“Any physical change in, or change in method of operation of, an existing facility which increase the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.”

The emission increase is based on hourly emissions. To determine if the proposed changes to Boiler Nos. 1 and 2 qualify as a “modification”, the current hourly SO₂, NO_x, and PM emissions were compared to the future potential emissions. These are the pollutants regulated under 40 CFR 60, Subpart Db. This comparison is presented in Table 3. The current hourly emissions are based on the previously permitted No. 6 fuel oil firing rate of 248 MMBtu/hr and 1,500 gal/hr. Emission factors are based on the same factors used to calculate past actual emissions for the AOR. The future hourly potential emissions are based on Attachments UC-EU1-F1.10 and UC-EU2-F1.10.

As shown in Table 3, the proposed changes will not result in an hourly increase of SO₂, NO_x, or PM emissions. Therefore, the proposed changes to Boiler Nos. 1 and 2 will not meet the definition of “modification” under the NSPS, and Subpart Db requirements will not apply.

3.2.2 Reconstruction

A modification to an affected source is potentially subject to the NSPS if the modification meets the definition of “reconstruction”. Reconstruction, as defined in 40 CFR 60.15, is triggered if the cost of the new components of the project exceeds 50 percent of the fixed capital cost of a comparable new boiler.

The fixed capital cost of installing the new fuel oil burner systems in Boiler Nos. 1 and 2 is approximately \$400,000 per boiler. The estimated cost of a completely new boiler, comparable in size and function to Boiler Nos. 1 and 2, is approximately \$7 million (excluding air pollution control equipment, which is not part of the “affected source” under NSPS Subpart Db). Therefore, the planned project cost represents less than 6 percent of the cost of a new boiler. Therefore, reconstruction is not triggered under NSPS.

TABLE 1
PAST ACTUAL EMISSIONS DUE TO FUEL OIL BURNING, BOILER NOS. 1 and 2
U.S. Sugar Corporation, Clewiston Mill

Regulated Pollutant	Boiler No. 1		Boiler No. 2		Boiler No. 1 + Boiler No. 2 2-Yr Average (TPY)
	Actual Emissions ^a (TPY)		Actual Emissions ^a (TPY)		
	2002	2003	2002	2003	
Particulate Matter (PM)	6.18	5.06	5.63	4.09	10.48
Particulate Matter (PM ₁₀)	5.25	4.30	4.79	3.48	8.91
Sulfur Dioxide (SO ₂)	46.41	38.64	42.28	31.27	79.30
Nitrogen Oxides (NO _x)	18.90	15.67	17.22	12.68	32.24
Carbon Monoxide (CO)	2.01	1.67	1.83	1.35	3.43
Volatile Organic Compound (VOC)	0.11	0.09	0.10	0.08	0.19
Sulfur Acid Mist (SAM)	2.05	1.70	1.86	1.38	3.50
Lead - Total	6.07E-04	5.04E-04	5.53E-04	4.08E-04	1.04E-03
Beryllium (Be)	1.12E-05	9.27E-06	1.02E-05	7.50E-06	1.91E-05
Mercury (Hg)	4.54E-05	3.77E-05	4.14E-05	3.05E-05	7.75E-05

Footnotes:

^a Based on Annual Operating Report submitted to FDEP for 2002 and 2003, except for:

SAM, Be and Hg not reported on the AOR; emissions based on AP-42 factors, see Attachment B.

TABLE 2
NET CHANGE IN EMISSIONS DUE TO BURNING 6,000,000 GAL/YR OF FUEL OIL IN BOILER NOS. 1 and 2,
U.S. Sugar Corporation Clewiston

Regulated Pollutant	Boiler Nos. 1 & 2			PSD Significant Emission Rate (TPY)	PSD Review Applies?
	Boiler Nos. 1 & 2 Past Actual Emissions ^a (TPY)	Future Potential Emissions ^b (TPY)	Net Change in Emissions (TPY)		
Particulate Matter (PM)	10.48	6.2	-4.3	25	NO
Particulate Matter (PM ₁₀)	8.91	3.1	-5.8	15	NO
Sulfur Dioxide (SO ₂)	79.30	22.2	-57.1	40	NO
Nitrogen Oxides (NO _x)	32.24	70.9	38.7	40	NO
Carbon Monoxide (CO)	3.43	15.4	12.0	100	NO
Volatile Organic Compound (VOC)	0.19	0.6	0.4	40	NO
Sulfur Acid Mist (SAM)	3.50	1.1	-2.42	0.6	NO
Lead (Pb)	1.04E-03	3.8E-05	-1.0E-03	7	NO
Beryllium (Be)	1.91E-05	1.3E-05	-6.6E-06	4.0E-04	NO
Mercury (Hg)	7.75E-05	1.3E-03	1.2E-03	0.1	NO

Footnotes:

^a Based on emissions due to fuel oil firing in Boiler Nos. 1 and 2 for calendar years 2002 and 2003. See Table 1.

^b Based on proposed fuel oil firing rates. See Attachments UC-EU1-F1.10 and UC-EU2-F1.10 for calculations.

TABLE 3
CURRENT VERSUS FUTURE MAXIMUM HOURLY EMISSIONS
DUE TO FUEL OIL FIRING IN BOILER NOS. 1 AND 2
U.S. Sugar Corporation Clewiston

Regulated Pollutant	Maximum Hourly Emissions		Increase in Maximum Hourly Emissions? (Yes/No)
	Current ^a (lb/hr)	Future ^b (lb/hr)	
Particulate Matter (PM)	22.8	1.9	No
Sulfur Dioxide (SO ₂)	172.5	6.9	No
Nitrogen Oxides (NO _x)	70.5	22.1	No

Footnotes:

^a Based on 1,500 gal/hr, and emission factors shown in Attachment B.

^b Based on Attachments UC-EU1-F1.10 and UC-EU2-F1.10.

ATTACHMENT B

VENDOR INFORMATION ON INSTALLED BURNERS

SunBelt

ENERGY SYSTEMS, INC.

Wednesday, March 09, 2005

Mr. Bret Nesbitt
US Sugar Corp.
PO Drawer 1207
Clewiston, FL 33440-1207

FILE COPY

Reference: U.S. Sugar
Boiler Nos. 1 & 2 Retrofit (Revision 2)

Bret,

~~Per your~~ request we are pleased to submit our proposal for the supply of two (2) Peabody type MSC low NOx burners for U.S. Sugar Boilers No. 1 & 2 (1 burner per boiler). Based on a review of the existing throat opening and furnace geometry, we can fire up 130 MMBTU/HR with a single burner in one of the existing openings. This equates to 63% of the total heat input of 208 MMBTU/HR previously specified on oil. The new burner air side pressure drop will be 12"WC based on ambient air firing. We have reviewed the existing FD fan curve and have determined that the existing fan can accommodate the new combustion air flow and burner pressure drop. This fan review has incorporated an assumed 6" WC pressure loss upstream of the burner (ductwork, baffling, etc.). We acknowledge that the existing fan also supplies combustion air for the bagasse firing and oil will (occasionally) be co-fired with bagasse. As we are not aware of the combustion air requirements for the bagasse, we cannot confirm if the above heat input is achievable for all combinations of bagasse / oil co-firing.

INTRODUCTION

Our scope of supply for each boiler is detailed herein and is summarized as follows:

- **One** HPC Model MSC low NOx burner with non-insulated front plate suitable for firing steam atomized No. 2 fuel oil with provisions to add natural gas firing in the future.
- **One** opposed blade damper w/ external bearings complete w/ pneumatic actuator and positioner
- **One** non-insulated windbox
- **One** NFPA Class 3 propane ignition ignitor assembly
- PLC based Single-Burner Burner Management System
- **One** set, Burner tools (Oil unit holder and wrench set and throat sweep)
- **One** NFPA 85 oil, atomizing steam, and propane valve system including
 - **One** Burner valve rack
 - All rack electrical connections will be terminated in rack mounted NEMA-4 termination cabinet.
- **One** Local start / stop cabinet with pushbuttons and indicating lights.

The burner will be designed for a heat release of 130 MM BTU/hr when firing steam-atomized No. 2 oil and will be suitable for the addition of future gas firing. Our offer is based on the equipment for both boilers being identical.

Each burner will be supplied with a steam-atomized center-fired oil gun, gas-electric FP ignitor with flame proving rod and one Peabody FV-03 dual fuel flame scanner. Included is a NEMA-4 enclosure to provide local start / stop and to house the flame scanner control cards. One single-burner windbox is included for each boiler. The ductwork to supply ambient combustion air to the windbox will be fitted with the above mentioned damper.

Electrical integration of this equipment into a Burner Management System will be by others.

Site Conditions:

Elevation	100 FASL
Plant Location	Clewiston, FL
Ambient Temperature	80°F
Insurance/Code Requirements	NFPA
Area Classification	Non-hazardous
Electrical Power Available	1/60/120
Plant Air Available	80 PSIG (assumed)

Boiler Data:

No. of boilers	2
Boiler Manufacturer	Riley
Steam Capacity	150,000 PPH (bagasse) 130,000 PPH (oil)
Burners per Boiler	1
Air Temperature to Burners	100°F (max)
Furnace Pressure	Negative
Inside Furnace Dimensions	
Width:	16.5 ft.
Height:	26 ft
Depth:	18.9 ft

Burner Data:

Burner Model	MSC 600
Nominal Throat Diameter	23 -5/8"
Register Draft Loss @ MCR	12" W.C. @ 100°F
Estimated Flame Length	17.5 Ft.
Estimated Flame Diameter	6.0 Ft.

Burner Design Specification:

Heat Input per Burner	130 MM BTU/hr
No. Burners per Boiler	1
Burner Excess Air @ MCR	15%
Combustion Air Flow per Burner	112,411 PPH
Combustion Air Temperature	100°F
Oil Pressure at Burner	120 psig
Steam Pressure at Burner	20 psi greater than oil pressure
Gas Pressure at Ignitor	1-2 psig
Burner Turndown:	8-1

Fuel Data:

Type	No. 2 Fuel Oil
Higher Heating Value	19,200 BTU/lb.
Pressure Available	150 psig (assumed)
Viscosity at Burner	35 SSU
Fuel bound Nitrogen	0.015% wt

Guaranteed Emissions:

	<u>No. 2 Oil</u>
NOx	0.15 lb / MM BTU
Particulate:	0.10 lb / MMBTU
Opacity:	<30%

NOx is based on oil with maximum 0.02% fuel bound nitrogen being fired with 100°F combustion air.

Emissions stated above are applicable for boiler loading from 25% to 100% of oil MCR. Based on the above information we are pleased to propose the following scope of supply:

Base Scope of Supply – Per Boiler:

- 1- Peabody type MSC low NOx burner assembly as described in the attached literature, comprised of the following:
 - 1- Peabody type MSC low NOx burner assembly with non-insulated frontplate. The frontplate will contain two openings each with carrier sleeve, one for the ignitor and one for the steam-atomized oil gun. The front-plate will also contain one peephole with sightglass and one scanner mount with adjustable ball swivel assembly & air purge.
 - 1- Flexible steam atomized oil unit, inside mix, low NOx design complete with flexible metallic oil and steam hoses, burner couplings for easy removal of oil unit, and manual valves for each of the oil, steam and purge services.
 - 1- Peabody Type FP gas-electric ignitor complete with flame proving rod, gas hose, ignition harness and transformer in a NEMA-4 enclosure. Ignitor flame proving relay will be mounted in boiler local start / stop cabinet

NOTE: The burner materials of construction include the following:

- Primary air swirler: 310 Stainless Steel
- Primary air casing 310 Stainless Steel
- Burner inlet air cone: 304 Stainless Steel
- Oil unit support sleeve: 304 Stainless Steel

- 1- Set, burner tools consisting of one burner holder and wrench set to facilitate oil replacement, and one refractory throat form to prepare the proper contour of the plastic refractory throat.
- 4- Peabody Instruction Manuals
- 1- Heavy duty rectangular single burner windbox fabricated of 1/4" steel plate with open back for welding to the boiler front plate. The windbox will be provided with an opening in one side for connection to an air duct and forced draft fan. Fan provided by owner. For ease of maintenance and installation, we include a bolted access door with handles for entry into the windbox. Additionally, we provide the air inlet connection with a perforated steel plate to assure proper air dispersion across the windbox inlet. **Preliminary windbox dimensions are 6' high x 6.5' wide x 5' deep.**
- 1- Set Peabody FV-03 flame scanners consisting of:
 - 1- FV-03 dual fuel flame scanner
 - 1- Microprocessor control card (mounted in local start / stop cabinet)
 - 1- Mounting rack (mounted in local start / stop cabinet)
 - 1- 50 ft. flame scanner cable
 - 1- KP-01 hand-held programmer

1- NEMA -4 Local Start / Stop Panel including:

- 1 - **Scanner** mounting rack and **one** microprocessor card
- 1 - Ignitor flame proving relay
- 2 - Burner start pushbuttons
- 2 - Burner stop pushbuttons
- 2 - Burner Ready Lights
- 2 - Burner Firing Lights
- 2 - Flame Strength Meters

1- Individual ignitor valve train rack with NEMA 4 junction box, pre-piped and pre-wired to the extent possible consisting of the following components:

For Ignitor Gas

- 1- Wye type strainer
- 1- Pressure regulator
- 2- Solenoid shut-off valves
- 1- Solenoid vent valve (outlet plugged for propane service)
- 2- Manual bleed & leak test valves
- 1- Pressure gage with isolation valve
- 1- Manual shut-off ball valve

For No. 2 Oil

- 1- Manual shut-off ball valve
- 1- Wye type strainer
- 1- Pressure gauge w/isolation valve
- 1- Manual flow meter bypass valve(s)
- 1- Low oil pressure switch
- 1- High oil pressure switch
- 1- Manual bleed & leak test valve
- 1- Fisher pneumatic flow/ combustion control valve
- 1- Worcester pneumatic shut-off valve
- 1- Scotch Tri-fecta fuel oil / steam control valve
- 1- Manual shut-off to constant differential pressure regulator
- 1- Differential pressure switch
- 1- Check valve
- 1- Manual shut-off /isolation valve(s)

For Atomizing Steam

- 1- Steam trap
- 1- Wye type strainer
- 1- Fisher atomizing steam flow control valve
- 1- Manual shut-off ball valve
- 1- Check valve
- 1- Automatic shut-off valve, pneumatically operated
- 1- Purge automatic shut-off valve, pneumatically operated
- 1- Purge line check valve
- 1- Cooling steam automatic shut-off valve, pneumatically operated
- 1- Cooling steam orifice plate
- 1- Cooling steam check valve
- 1- Pressure gauge w/siphon loop & isolation valve

- 1- Single Burner BMS consisting of the following mounted and wired to a terminal strip:
 - 1- Allen Bradley *Control Logix*
 - 1- Allen Bradley power supply
 - 1- Set, Allen Bradley I/O Modules
 - 1- Set, pushbuttons and status lights
 - 1- Utility outlet
 - 1- Alarm horn
 - 1- Set, circuit breakers, grounding bars and terminals

- 1- Two (2) sets Ignitor modification kits (for use on Unit 7) to include flame relays, NEMA 4 panel, ionization probe, and related retrofit hardware for flame rectified flame proving. Replacement flame relays (2) will also be provided for the refurbishment of Unit 4's flame rectifying flame proven system.

- 2- Two (2) Fisher pneumatic differential pressure steam regulators and pressure transmitter for use on Units 4 and 7.

- 3- The parts for Units 4 and 7 are to be installed by the owner (USSC). Supervision and start-up for these items to be performed by SunBelt Energy Systems Inc.

Firm Price – Both Boilers:

Valve Racks per ANSI B31.1

Our firm price for the above burners, windboxes, ANSI B31.1 construction valve racks, flame scanner equipment, ducting, installation, and start-up (see Commissioning) for **both boilers** is:

\$670,820.00 Net

SIX HUNDRED SEVENTY THOUSAND EIGHT HUNDRED TWENTY U.S. DOLLARS

Terms of Payment:

Progress Payments per USSC / SunBelt Energy previous agreement(s)

5% with order

10% upon drawing submittal

~~60%~~ on shipping equipment

25% on project completion and successful start-up

All invoices are due and payable 30 days after date of issue.

Validity:

This proposal is valid for 30 days from the date of issue.

Schedule

Based on current workload, shipment availability of the above equipment from receipt of order and all necessary data to allow us to proceed is estimated as follows:

	<u>Weeks</u>
Drawings preparation and submittal for approval	3
Customer review and approval	1
Equipment manufacture	11
Equipment inspection, testing and crating	1
TOTAL Estimated Delivery	16

Exclusions:

- All sales taxes and duties.
- Permits and Approvals.
- Supply of site utilities to contact termination points.
- Combustion air fan
- Field wiring.
- Certification testing for emissions.
- Motor starters.
- Spare parts .

Terms and Conditions:

The acceptance of our quotation includes acceptance of the attached SunBelt Energy Systems Inc. Standard Terms and Conditions of Sale and of the special conditions (if any) stated in this proposal.

Notwithstanding the inclusion of any modified terms and conditions contained in any purchase order or contract issued against this proposal, SunBelt Energy Systems, Inc. nor its suppliers or subcontractors will not be liable for any special, incidental or consequential loss or damage. In addition, SunBelt Energy Systems Inc. liability on any claim of any kind shall in no case exceed the contract price.

This proposal and any subsequent order are subject to scope, design and delivery schedules as presented. Any change in such scope, design and/or delivery may require quoted price revision(s).

Acceptance of any order placed against this proposal will be subject to verification of all technical data acceptable commercial terms and the approval of an officer of SunBelt Energy Systems Inc.. In addition, any contract incorporating the provision of performance bonds will be subject to legal review prior to our acceptance.

Guarantees/Warranty:

Except as detailed below the equipment offered in this proposal is guaranteed for a period of 12 months from start-up or 18 months from shipment, whichever occurs first. This guarantee is subject to the conditions of SunBelt Energy Systems Inc. and its supplier, Hamworthy Peabody, Standard Terms and Conditions of Sale.

Commissioning:

This proposal includes commissioning / start-up for each boiler not to exceed three (3) days on-site per boiler. (Total six days on-site) Any additional days required as a result of others will be billed at SunBelt Energy Systems Inc. standard commissioning rate of \$550.00 per man day. Travel and living expenses will be billed at cost plus 10%. Services are charged on a portal to portal basis. Rates are based on eight hour working days.

Comments:

1. SunBelt Energy Systems reserves the right to inspect the boiler/furnace during the proposal and/or contract stages to verify furnace conditions.
2. Our quotation is based on the premise that all existing boiler design criteria (i.e. steam flow, temperature, pressure, etc.) reflects the actual operating conditions prior to burner change and upon request Purchaser can document such operating conditions.
3. All performance guarantees are contingent upon initial check-out and start-up by qualified SunBelt Energy Systems Inc. service personnel.
4. Performance guarantees/predictions are based on furnace conditions that do not adversely affect the testing for such guarantees. These conditions include, but are not limited to, tight boiler wall construction so as to not allow short circuiting of flue gas; tube surfaces free of scaling and loose particles and refractory surfaces free of loose particles. Emissions testing protocol is to be submitted to and reviewed by the burner supplier, Hamworthy Peabody Combustion, prior to any formal testing.
5. All equipment is for installation in a non-hazardous area.
6. This offer is based on the equipment for both boilers being identical.
7. Saturated steam required for oil atomization to be supplied from the steam drum with a suitable PRV supplied and fitted by the owner (USSC).
8. Due to the limited space between Boilers 1 & 2 flexible oil units are included to facilitate installation and removal of the oil units.
9. Main steam isolation and header throttling valves are to be relocated by the owner (USSC) to accommodate the straight runs of combustion air ducting required per the utilization of ambient air from the existing force draft fan(s).
10. The required service plant air (for pneumatically operated valves), the combustion fuel sources (both #2 fuel oil and propane) and the atomizing steam, are to be made available by the owner (USSC) within close proximity of the burner deck to facilitate tie-in.

We thank you for the opportunity to service the US Sugar account. If you have any questions and/or comments, please call.

Sincerely,

Fred Odom
SunBelt Energy Systems, Inc.

ATTACHMENT C

INITIAL PERFORMANCE TEST RESULTS

PERFORMANCE TEST REPORT
FOR
OXIDES OF NITROGEN EMISSIONS

BOILERS 1 AND 2
IMPINGEMENT WET SCRUBBER OUTLETS
TRAVELING GRATE
CLEWISTON, FLORIDA

FDEP PERMIT NUMBER 0510003-027-AC
(OIL BURNER MODIFICATION)

DISTILLATE OIL FIRING

FEBRUARY 10 AND 21, 2006

PREPARED FOR:

U.S. SUGAR CORPORATION
SOUTH W.C. OWEN AVENUE
CLEWISTON, FLORIDA 33440

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

238-06-01

**Table 1. Emission Summary for Distillate Oil Firing
Boilers 1 and 2
United States Sugar Corporation - Clewiston Mill
Clewiston, Florida
February 10 and 21, 2006**

Run Number	Time	Flow Rate dscfm	NOx Emissions		Sulfur %	Steam			Firing Rate gal/hr	Heat Input Oil* MMBTU/hr	
			ppm	lbs/MMBTU		lbs/hr	Temperature F	Pressure psig			Steam Rate lbs/hr
<u>Boiler 1 - 2/10/2006</u>											
1	1036-1136	132002	21.78	0.170	20.59	0.03	640.20	606.20	64167	896.7	121.1
<u>Boiler 2 - 2/21/2006</u>											
1	1116-1216	156427	15.68	0.139	17.57	0.03	590.60	582.40	85846	936.0	126.4

* Heat Input calculated from fuel consumption and HHV of 135,000 btu/gal, density 6.83 lb/gal

$$\text{MMBTU/hr} = \frac{(\text{gal/hr}) \times (135,000 \text{ btu/gal})}{10E6}$$

$$\text{lbs/hr} = \text{ppm} \times (2.595 \times 10E-9) \times \text{MWNOx} \times (\text{FlowRate, dscfm}) \times (60 \text{ min/hr})$$

$$\text{MWNOx} = 46 \text{ lb/lb-mole}$$

$$\text{lbs/MMBTU} = \text{lbs/hr} / \text{Heat Input (MMBTU/hr)}$$

Design Emission Rate:

NOx = 0.15 lbs/MMBTU

S = 0.05 % by weight

Permitted Heat Input = 130 MMBTU/hr

ATTACHMENT D

**2002 AND 2003 EMISSIONS INFORMATION
FROM ANNUAL OPERATING REPORTS**

**TABLE D-1
2002 EMISSIONS OF CRITERIA POLLUTANTS FOR U.S. SUGAR CORPORATION CLEWISTON BOILER NO. 1**

Regulated Pollutant	Emission Factors								Total Annual Emissions (TPY)
	Carbonaceous Fuel				No. 6 Fuel Oil				
	Emission Factor (lb/ton)	Reference	Annual Fuel Usage (TPY)	Annual Emissions (TPY)	Emission Factor (lb/1,000 gal)	Reference	Annual Fuel Usage (Gallons/yr)	Annual Emissions (TPY)	
<u>Criteria and Precursor Air Pollutants</u>									
Particulate Matter (PM)	1.296	1	188,782	122.33	15.36	4 (b)	804,298	6.18	128.51
Particulate Matter (PM ₁₀)	1.205	(a)	188,782	113.77	13.06	(a)	804,298	5.25	119.02
Sulfur Dioxide (SO ₂)	0.073	1	188,782	6.89	115.40	5 (b)	804,298	46.41	53.30
Nitrogen Oxides (NO _x)	0.677	1	188,782	63.90	47	5	804,298	18.90	82.80
Carbon Monoxide (CO)	49.262	1	188,782	4,649.89	5	5	804,298	2.01	4,651.90
Volatile Organic Compounds (VOC)	1.668	2	188,782	157.44	0.28	6	804,298	0.11	157.56
Sulfuric Acid Mist (SAM)	0.0032	8	188,782	0.30	5.09	8	804,298	2.05	2.35
Lead - Total (PB)	4.45E-04	3	188,782	0.04	1.51E-03	7	804,298	6.07E-04	0.04
Beryllium (Be)	--	--	--	--	2.78E-05	7	804,298	1.12E-05	1.12E-05
Mercury (Hg)	--	--	--	--	1.13E-04	7	804,298	4.54E-05	4.54E-05

Note:

(a) Assuming 93% of PM is PM₁₀ for bagasse, and 85% of PM is PM₁₀ for No. 6 fuel oil.

(b) Average sulfur content of the fuel mix is 1.47%.

Unless otherwise specified, heating values for each fuel are as follows: 3,600 Btu/lb for wet bagasse and 153,645 Btu/gal for No. 6 fuel oil.

- | | | | |
|--|-----------------|-----------------|-------------|
| 1. Based on compliance test data, conducted by Air Consulting and Engineering: | PM | 0.180 lb/MMBtu | 11/20/2002 |
| | SO ₂ | 0.0101 lb/MMBtu | 12/8/2000 |
| | NO _x | 0.094 lb/MMBtu | 1/3/1995 |
| | CO | 6.842 lb/MMBtu | 1994 - 1995 |

2. Based on test data for similar bagasse boiler. (Bryant Boilers 1, 2, and 3 average = 0.232 lb/MMBtu.)

3. Based on EPA's AP-42 Table 1.6-5, "Emission Factors for Trace Elements from Wood Waste Combustion with PM controls" (2/99).

4. Based on emission limit of 0.1 lb/MMBtu for PM while firing No. 6 fuel oil.

5. Based on AP-42 Table 1.3-1, "Criteria Pollutant Emission Factors for Fuel Oil Combustion" (9/98), No. 6 fuel oil, normal firing. Assume 50% SO₂ removal from scrubber.

6. Based on AP-42 Table 1.3-3, "Emission Factors for Total Organic Compounds (TOC), Methane, and Nonmethane TOC (NMTOC) from Uncontrolled Fuel Oil Combustion" (9/98).

7. Based on AP-42 Table 1.3-11, "Emission Factors for Metals from Uncontrolled No. 6 Fuel Oil Combustion" (9/98).

8. From AP-42 Table 1.3-1: SO₃ represents 3.6% of SO₂; then convert to H₂SO₄ (x 98/80).

**TABLE D-2
2002 EMISSIONS OF CRITERIA POLLUTANTS FOR U.S. SUGAR CORPORATION CLEWISTON BOILER NO. 2**

Regulated Pollutant	Emission Factors								Total Annual Emissions (TPY)
	Carbonaceous Fuel				No. 6 Fuel Oil				
	Emission Factor (lb/ton)	Reference	Annual Fuel Usage (TPY)	Annual Emissions (TPY)	Emission Factor (lb/1,000 gal)	Reference	Annual Fuel Usage (Gallons/yr)	Annual Emissions (TPY)	
<u>Criteria and Precursor Air Pollutants</u>									
Particulate Matter (PM)	1.296	1	225,369	146.04	15.36	5 (b)	732,805	5.63	151.67
Particulate Matter (PM ₁₀)	1.205	(a)	225,369	135.82	13.06	(a)	732,805	4.79	140.60
Sulfur Dioxide (SO ₂)	0.073	2	225,369	8.23	115.40	6 (b)	732,805	42.28	50.51
Nitrogen Oxides (NO _x)	0.727	1	225,369	81.92	47	6	732,805	17.22	99.14
Carbon Monoxide (CO)	70.834	1	225,369	7,981.89	5	6	732,805	1.83	7,983.73
Volatile Organic Compounds (VOC)	1.668	3	225,369	187.96	0.28	7	732,805	0.10	188.06
Sulfuric Acid Mist (SAM)	0.0032	9	225,369	0.36	5.09	9	732,805	1.86	2.23
Lead - Total	4.45E-04	4	225,369	0.05	1.51E-03	8	732,805	5.53E-04	0.05
Beryllium (Be)	--	--	--	--	2.78E-05	8	732,805	1.02E-05	1.02E-05
Mercury (Hg)	--	--	--	--	1.13E-04	8	732,805	4.14E-05	4.14E-05

Note:

(a) Assuming 93% of PM is PM₁₀ for bagasse, and 85% of PM is PM₁₀ for No. 6 fuel oil.

(b) Average sulfur content of the fuel mix is 1.47%.

Unless otherwise specified, heating values for each fuel are as follows: 3,600 Btu/lb for wet bagasse and 153,645 Btu/gal for No. 6 fuel oil.

1. Based on compliance test data, conducted by Air Consulting and Engineering:

PM	0.180 lb/MMBtu	12/17/2002
NO _x	0.101 lb/MMBtu	1/4/1995
CO	9.838 lb/MMBtu	1994 - 1995
2. Based on compliance test data, conducted by Air Consulting and Engineering for Boiler No. 1, 0.0101 lb/MMBtu (12/8/00).
3. Based on test data for similar bagasse boiler. (Bryant Boilers 1, 2, and 3 average = 0.232 lb/MMBtu.)
4. Based on EPA's AP-42 Table 1.6-5, "Emission Factors for Trace Elements from Wood Waste Combustion with PM Controls", (2/99).
5. Based on emission limit of 0.1 lb/MMBtu for PM while firing No. 6 fuel oil.
6. Based on AP-42 Table 1.3-1, "Criteria Pollutant Emission Factors for Fuel Oil Combustion" (9/98), No. 6 fuel oil, normal firing. Assume 50% SO₂ removal from scrubber.
7. Based on AP-42 Table 1.3-3, "Emission Factors for Total Organic Compounds (TOC), Methane, and Nonmethane TOC (NMTOC) from Uncontrolled Fuel Oil Combustion" (9/98).
8. Based on AP-42 Table 1.3-11, "Emission Factors for Metals from Uncontrolled No. 6 Fuel Oil Combustion" (9/98).
9. From AP-42 Table 1.3-1: SO₃ represents 3.6% of SO₂; then convert to H₂SO₄ (x 98/80).

**TABLE D-3
2003 EMISSIONS OF CRITERIA POLLUTANTS FOR U.S. SUGAR CORPORATION CLEWISTON BOILER NO. 1**

Regulated Pollutant	Emission Factors								Total Annual Emissions (TPY)
	Carbonaceous Fuel				No. 6 Fuel Oil				
	Emission Factor (lb/ton)	Reference	Annual Fuel Usage (TPY)	Annual Emissions (TPY)	Emission Factor (lb/1,000 gal)	Reference	Annual Fuel Usage (Gallons/yr)	Annual Emissions (TPY)	
<u>Criteria and Precursor Air Pollutants</u>									
Particulate Matter (PM)	1.267	1	176,732	111.96	15.17	4 (b)	666,974	5.06	117.02
Particulate Matter (PM ₁₀)	1.178	(a)	176,732	104.12	12.89	(a)	666,974	4.30	108.42
Sulfur Dioxide (SO ₂)	0.073	1	176,732	6.45	115.87	5 (b)	666,974	38.64	45.09
Nitrogen Oxides (NO _x)	0.677	1	176,732	59.82	47	5	666,974	15.67	75.50
Carbon Monoxide (CO)	49.262	1	176,732	4,353.09	5	5	666,974	1.67	4,354.75
Volatile Organic Compounds (VOC)	1.778	2	176,732	157.11	0.28	6	666,974	0.09	157.21
Sulfuric Acid Mist (SAM)	0.0032	8	176,732	0.28	5.11	8	666,974	1.70	1.99
Lead - Total (PB)	2.45E-05	3	176,732	0.002	1.51E-03	7	666,974	5.04E-04	0.003
Beryllium (Be)	--	--	--	--	2.78E-05	7	666,974	9.27E-06	9.27E-06
Mercury (Hg)	--	--	--	--	1.13E-04	7	666,974	3.77E-05	3.77E-05

Note:

(a) Assuming 93% of PM is PM₁₀ for bagasse, and 85% of PM is PM₁₀ for No. 6 fuel oil.

(b) Average sulfur content of the fuel mix is 1.476%.

Unless otherwise specified, heating values for each fuel are as follows: 3,600 Btu/lb for wet bagasse and 151,704 Btu/gal for No. 6 fuel oil.

- Based on compliance test data, conducted by Air Consulting and Engineering:

PM	0.176 lb/MMBtu	11/14/2003
SO ₂	0.0101 lb/MMBtu	12/8/2000
NO _x	0.094 lb/MMBtu	1/3/1995
CO	6.842 lb/MMBtu	1994 - 1995
- Based on test data for similar bagasse boiler. (Bryant Boilers 1, 2, and 3 average = 0.247 lb/MMBtu.)
- Based on average industry test data of 3.4E-06 lb/MMBtu or less.
- Based on emission limit of 0.1 lb/MMBtu for PM while firing No. 6 fuel oil.
- Based on AP-42 Table 1.3-1, "Criteria Pollutant Emission Factors for Fuel Oil Combustion" (9/98), No. 6 fuel oil, normal firing. Assume 50% SO₂ removal from scrubber.
- Based on AP-42 Table 1.3-3, "Emission Factors for Total Organic Compounds (TOC), Methane, and Nonmethane TOC (NMTOC) from Uncontrolled Fuel Oil Combustion" (9/98).
- Based on AP-42 Table 1.3-11, "Emission Factors for Metals from Uncontrolled No. 6 Fuel Oil Combustion" (9/98).
- From AP-42 Table 1.3-1: SO₃ represents 3.6% of SO₂; then convert to H₂SO₄ (x 98/80).

**TABLE D-4
2003 EMISSIONS OF CRITERIA POLLUTANTS FOR U.S. SUGAR CORPORATION CLEWISTON BOILER NO. 2**

Regulated Pollutant	Emission Factors								Total Annual Emissions (TPY)
	Carbonaceous Fuel				No. 6 Fuel Oil				
	Emission Factor (lb/ton)	Reference	Annual Fuel Usage (TPY)	Annual Emissions (TPY)	Emission Factor (lb/1,000 gal)	Reference	Annual Fuel Usage (Gallons/yr)	Annual Emissions (TPY)	
<u>Criteria and Precursor Air Pollutants</u>									
Particulate Matter (PM)	1.433	1	216,540	155.15	15.17	5 (b)	539,742	4.09	159.24
Particulate Matter (PM ₁₀)	1.333	(a)	216,540	144.29	12.89	(a)	539,742	3.48	147.77
Sulfur Dioxide (SO ₂)	0.360	2	216,540	38.98	115.87	6 (b)	539,742	31.27	70.25
Nitrogen Oxides (NO _x)	0.727	1	216,540	78.71	47	6	539,742	12.68	91.40
Carbon Monoxide (CO)	70.834	1	216,540	7,669.20	5	6	539,742	1.35	7,670.55
Volatile Organic Compounds (VOC)	1.778	3	216,540	192.50	0.28	7	539,742	0.08	192.58
Sulfuric Acid Mist (SAM)	0.0159	9	216,540	1.72	5.11	9	539,742	1.38	3.10
Lead - Total	2.45E-05	4	216,540	0.003	1.51E-03	8	539,742	4.08E-04	0.003
Beryllium (Be)	--	--	--	--	2.78E-05	8	539,742	7.50E-06	7.50E-06
Mercury (Hg)	--	--	--	--	1.13E-04	8	539,742	3.05E-05	3.05E-05

Note:

(a) Assuming 93% of PM is PM₁₀ for bagasse, and 85% of PM is PM₁₀ for No. 6 fuel oil.

(b) Average sulfur content of the fuel mix is 1.476%.


Unless otherwise specified, heating values for each fuel are as follows: 3,600 Btu/lb for wet bagasse and 151,704 Btu/gal for No. 6 fuel oil.

- Based on compliance test data, conducted by Air Consulting and Engineering:

PM	0.199 lb/MMBtu	11/18/2003
NO _x	0.101 lb/MMBtu	1/4/1995
CO	9.838 lb/MMBtu	1994 - 1995
- Based on average industry test data of 0.05 lb/MMBtu or less.
- Based on test data for similar bagasse boiler. (Bryant Boilers 1, 2, and 3 average = 0.247 lb/MMBtu.)
- Based on average industry test data of 3.4E-06 lb/MMBtu or less.
- Based on emission limit of 0.1 lb/MMBtu for PM while firing No. 6 fuel oil.
- Based on AP-42 Table 1.3-1, "Criteria Pollutant Emission Factors for Fuel Oil Combustion" (9/98), No. 6 fuel oil, normal firing. Assume 50% SO₂ removal from scrubber.
- Based on AP-42 Table 1.3-3, "Emission Factors for Total Organic Compounds (TOC), Methane, and Nonmethane TOC (NMTOC) from Uncontrolled Fuel Oil Combustion" (9/98).
- Based on AP-42 Table 1.3-11, "Emission Factors for Metals from Uncontrolled No. 6 Fuel Oil Combustion" (9/98).
- From AP-42 Table 1.3-1: SO₃ represents 3.6% of SO₂; then convert to H₂SO₄ (x 98/80).

Memorandum

Florida Department of Environmental Protection

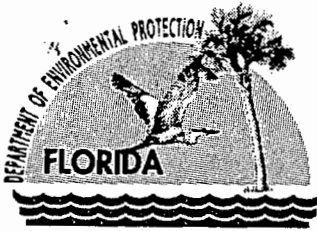
TO: Trina Vielhauer, Chief - Bureau of Air Regulation
FROM: Jeff Koerner, Air Permitting North 
DATE: June 15, 2006
SUBJECT: Project No. 0510003-036-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
Boilers 1 and 2 Oil Burner Modifications, Revision

Attached for your review are the following items:

- Intent to Issue Revised Air Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The P.E. certification briefly summarizes the proposed permit project. The Technical Evaluation and Preliminary Determination provide a detailed description of the project, rationale, and conclusion. Day #74 is August 4, 2006. I recommend your approval of the attached Draft Permit for this project.

Attachments



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

June 15, 2006

Mr. Neil Smith, V.P. of Sugar Processing Operations
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Re: Draft Air Permit No. 0510003-036-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
Boilers 1 and 2 Oil Burner Modifications, Revision

Dear Mr. Smith:

On May 19, 2006, U.S. Sugar submitted an application to modify the oil burner systems for 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. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit".

The "Technical Evaluation and Preliminary Determination" summarizes the Bureau of Air Regulation's technical review of the application and provides the rationale for making the preliminary determination to issue a draft permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jeff Koerner, at 850/921-9536.

Sincerely,

A handwritten signature in black ink, appearing to read "Trina Vielhauer".

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

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

Authorized Representative:

Mr. Neil Smith, V.P. of Sugar Processing Operations

Draft Air Permit No. 0510003-036-AC
Clewiston Sugar Mill and Refinery
Boilers 1 and 2
Oil Burner Modifications, Revision
Hendry County, Florida

Facility Location: U.S. Sugar Corporation operates an existing sugar mill and refinery in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

Project: In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil instead of No. 6 fuel oil. The original permit authorized the installation of two low-NOx (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. In addition, subsequent testing indicated slightly higher (~13%) NOx emissions.

Specific Condition 7 of Permit No. 0510003-027-AC requires, "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." Accordingly, the applicant requests that the original air construction permit be revised for the following: identify installation of only one burner per boiler; specify the maximum burner capacity as 130 MMBtu/hour; identify the design NOx emissions rate of 0.17 lb/MMBtu; and reduce annual distillate oil firing from 7.0 to 6.0 million gallons per year (from both boilers combined).

The revised project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. Bagasse is the primary fuel for these boilers and is fired when available. Oil is fired as a startup fuel, a supplemental fuel during mill interruptions, and as a backup fuel during the refinery season should bagasse be unavailable. Distillate oil is a much cleaner firing fuel than No. 6 fuel and actual emissions are expected to decrease.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114 and fax number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-3381. The South District's telephone number is 239/332-6975.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the address or phone number listed above. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all email or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. For additional information, contact the Permitting Authority at the above address or phone number. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. 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 attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each 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 state; (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 the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

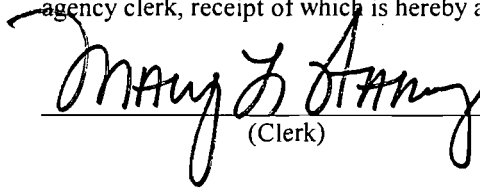
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/16/06 to the persons listed below.

- Mr. Neil Smith, 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

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

6/16/06
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Draft Air Permit No. 0510003-036-AC
United States Sugar Corporation, Clewiston Sugar Mill and Refinery
Hendry County, Florida

Applicant: The applicant for this project is the United States Sugar Corporation. The applicant's authorized representative is Mr. Neil Smith, V.P. of Sugar Processing Operations. The applicant's mailing address is the Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

Facility Location: The United States Sugar Corporation operates an existing sugar mill and refinery in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

Project: In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil instead of No. 6 fuel oil. The original permit authorized the installation of two low-NOx (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. In addition, subsequent testing indicated slightly higher (~13%) NOx emissions.

Specific Condition 7 of Permit No. 0510003-027-AC requires, "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." Accordingly, the applicant requests that the original air construction permit be revised for the following: identify installation of only one burner per boiler; specify the maximum burner capacity as 130 MMBtu/hour; identify the design NOx emissions rate of 0.17 lb/MMBtu; and reduce annual distillate oil firing from 7.0 to 6.0 million gallons per year (from both boilers combined).

The revised project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. Bagasse is the primary fuel for these boilers and is fired when available. Oil is fired as a startup fuel, a supplemental fuel during mill interruptions, and as a backup fuel during the refinery season should bagasse be unavailable. Distillate oil is a much cleaner firing fuel than No. 6 fuel and actual emissions are expected to decrease.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114 and fax number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-3381. The South District's telephone number is 239/332-6975.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all email or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. For additional information, contact the Permitting Authority at the above address or phone number. If written comments result in a significant change to the Draft Permit, the Permitting

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Authority will issue a Revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. 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 attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each 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 state; (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 the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

(Public Notice to be Published in the Newspaper)

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Draft Air Construction Permit No. 0510003-036-AC
Clewiston Boilers 1 and 2 – Oil Burner Modifications, Revision

COUNTY

Hendry County

APPLICANT

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

ARMS Facility ID No. 0510003

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Air Permitting South



June 15, 2006

{Filename: 0510003-036-AC - TEPD}

1. GENERAL PROJECT INFORMATION

Facility Description and Location

The United States Sugar Corporation (USSC) operates an existing sugar mill (SIC No. 2061) and refinery (SIC No. 2062) in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS). The facility is regulated in accordance with the following categories:

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 in accordance with Chapter 213, F.A.C.

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

Project Description

In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil. See the Department's Technical Evaluation and Preliminary Determination for the details of that project. The burner modifications are complete. On May 19, 2006, the Department received a complete application to revise the initial air construction permit in accordance with the actual physical changes made to the oil firing systems for Boilers 1 and 2.

Original Project

Only Boilers 1 and 2 are affected by this project. Boiler 1 is a vibrating grate system rated at 255,000 pounds per hour of steam and a maximum heat input rate of 496 MMBtu per hour. The current maximum heat input rate from oil firing is 208 MMBtu per hour. Particulate matter emissions are controlled by a wet impingement scrubber. Boiler 2 is also a vibrating grate system rated at 230,000 pounds per hour of steam and a maximum heat input rate of 447 MMBtu per hour. The current maximum heat input rate from oil firing is 208 MMBtu per hour. Particulate matter emissions are controlled by a wet impingement scrubber.

For the original project, U.S. Sugar planned to replace the two existing No. 6 fuel oil burners on each boiler with two new Peabody-type multi-stage combustion (MSC) burners with each burner rated at 104 MMBtu/hour and 770.5 gallons per hour. It was estimated that the modified boilers would produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. The burners were to be low-NOx burners with a design specification of 0.15 lb/MMBtu. No changes were requested for the firing of bagasse and the scope of the review was limited to a comparison of the current No. 6 oil firing capabilities with the proposed distillate oil firing. The original project was not subject to PSD preconstruction review.

Actual Modification and Requested Revisions

For the actual modification, U.S. Sugar installed only one Peabody-type multi-stage combustion (MSC) burner on each boiler with each burner rated at 130 MMBtu/hour and 963 gallons per hour. It is estimated that the modified boilers will produce approximately 97,400 pounds of steam per hour from the sole firing of distillate oil. A summary of the initial NOx testing is shown in the following table.

Table 1A. NOx Emissions Results

Boiler	Design NOx Emissions	Actual NOx Emissions	Boiler Firing Rate	Percent of Design
1	0.15 lb/MMBtu	0.17 lb/MMBtu	121 MMBtu/hour	~ 94%
2	0.15 lb/MMBtu	0.14 lb/MMBtu	126 MMBtu/hour	~ 97%

The air construction permit required that the burners be designed to meet a low-NOx burner specification of 0.15 lb/MMBtu. The application includes the bid proposal from the burner vendor, SunBelt Energy Systems, Inc., which clearly indicates a maximum heat input rate of 130 MMBtu per hour and a guaranteed NOx emission rate of 0.15 lb/MMBtu. U.S. Sugar is working with the vendor to resolve the slightly higher NOx emission rate for Boiler 1.

Because the original project was permitted just below the PSD significant emission rate for NOx (40 tons/year), Specific Condition 7 of Permit No. 0510003-027-AC required, "If the results of the performance test show potential NOx emissions

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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.” Accordingly, U.S. Sugar requests that the original air construction permit be revised for the following:

- Identify installation of only one Peabody-type multi-stage combustion (MSC) burner on each boiler;
- Specify the maximum burner capacity as 130 MMBtu/hour (963 gallons per hour);
- Identify the maximum NOx emissions rate of 0.17 lb/MMBtu;
- Reduce the annual distillate oil firing rate for each boiler from 3.5 to 3.0 million gallons per year; and
- For operational flexibility, cap the combined fuel firing of Boilers 1 and 2 to 6.0 million gallons per year instead of 3.0 million gallons per year per boiler.

2. APPLICABLE REGULATIONS

The following review was updated from the original project based on the requested changes.

Federal Regulations

The Environmental Protection Agency establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies the National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on specific pollutants. Part 63 identifies National Emissions Standards for Hazardous Air Pollutant (NESHAP) base on the Maximum Achievable Control Technology (MACT) for given source categories. These regulations are adopted by reference in Florida Rule 62-204.800, F.A.C. The applicant identified no federal regulations as applicable to this project.

Applicability of Federal NSPS Standards

The New Source Performance Standards specified in Subpart Db of 40 CFR 60 applies to boilers constructed, modified, or reconstructed after June 19, 1984 with a maximum heat input rate greater than 100 MMBtu per hour. Although Boilers 1 and 2 were constructed prior to 1984, this regulation is potentially applicable for modification or reconstruction projects. It regulates emissions of nitrogen oxides, sulfur dioxide, or particulate matter. The project does not constitute a “modification” as defined by the NSPS requirements because the hourly emissions of nitrogen oxides, sulfur dioxide, or particulate matter will not increase as shown in the following table.

Table 2A. Summary of Maximum Hourly Emissions to Determine NSPS Modification

NSPS Pollutant	Maximum Emissions Rates (lb/hour)		Increase?
	Current (No. 6 Oil)	Future (Distillate Oil)	
Nitrogen Oxides	70.5	22.1	No
Sulfur Dioxide	172.5	6.9	No
Particulate Matter	22.8	1.9	No

In addition, the project does not constitute “reconstruction” as defined by the NSPS requirements because the total capital costs for the project (\$335,410 per boiler) will not exceed 50% of the capital costs for a new boiler (\$7 million per boiler). Therefore, the regulation does not apply.

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

Chapter Description

- | | |
|--------|--|
| 62-4 | Permitting Requirements |
| 62-204 | Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference |

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

<u>Chapter</u>	<u>Description</u>
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations
	Rule 62-212.300. General Preconstruction Review Requirements
	Rule 62-212.400. Prevention of Significant Deterioration (PSD Review Only)
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
	Rule 62-296.410. Carbonaceous Fuel Burning Equipment
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

Applicability of Rule 62-296.406, F.A.C.

This rule applies to new and existing fossil fuel fired steam generators with a maximum heat input rate of less than 250 MMBtu per hour unless exempt from permitting (Rule 62-210.300(3), F.A.C.) or considered insignificant (Rule 62-213.300(2)(a)1 or 62-213.430(6)(b), F.A.C.). The state rule requires BACT determinations for particulate matter and sulfur dioxide, which typically result in a limitation on the fuel sulfur content to a maximum of 0.05% sulfur by weight for oil-fired boilers. The requirements apply unless otherwise specified by rule, or by order or permit issued prior to July 15, 1989.

Based on the application, Boilers 1 and 2 were originally constructed at the Clewiston Mill in 1968. Although installation predated the air construction permit program, subsequent air operation permits restricted the maximum fuel sulfur content for these boilers. The current Title V permit limits the No. 6 fuel oil sulfur content to a maximum of 2.5% sulfur by weight (October – April) and to a maximum of 1.6% sulfur by weight (May – September). This was the result of an air quality modeling analysis provided as part of the application for Permit No. PSD-FL-272A. The requirements of Rule 62-296.406, F.A.C. do not apply because the boilers were previously regulated by permit before July 15, 1989. Note that the proposed use of distillate oil with a maximum fuel sulfur specification of 0.05% by weight would likely constitute BACT.

Applicability of Rule 62-296.410, F.A.C.

Rule 62-296.410, F.A.C. applies to new and existing carbonaceous fuel burning equipment. For existing units in operation before July 1, 1974, the rule includes particulate matter emissions limits of “0.30 lb/MMBtu” of heat input from carbonaceous fuel and “0.10 lb/MMBtu” of heat input from the firing of fossil fuel. The oil-firing limit is specified in case a boiler fires fuel oil with bagasse while conducting a stack test for particulate matter. A combined particulate matter emissions standard is calculated based on the prorated amounts of each fuel. Boilers 1 and 2 remain subject to this rule.

Prevention of Significant Deterioration (PSD) of Air Quality

The Department regulates major air pollution facilities in accordance with Florida’s Prevention of Significant Deterioration (PSD) program, as approved by the EPA in Florida’s State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as “unclassifiable” for a given pollutant. A facility is considered “major” with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant, or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories, or 5 tons per year of lead.

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered “significant” and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be “major” with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several “significant” regulated pollutants.

The existing Clewiston sugar mill and refinery is located in an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. The actual and potential emissions of several pollutants from the facility are greater than the applicability thresholds defined above. Therefore, the sugar mill and refinery is an existing PSD-major facility as defined in Rule 62-212.400, F.A.C. and the project must be reviewed for the

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

applicability of PSD preconstruction review. The following table shows the applicant's estimated maximum annual emissions increases that will result from the revised project.

Table 2A. Applicant's PSD Applicability Summary – Revised Project

Pollutant*	Boilers 1 and 2			Project	
	Past Actual TPY	Future Potential TPY	Increase TPY	PSD SER TPY	PSD?
CO	3.43	15.4	12.0	100	No
NO _x	32.24	70.9	38.7	40	No
PM	10.48	6.2	-4.3	25	No
PM ₁₀	8.91	3.1	-5.8	15	No
SAM	3.5	1.1	-2.3	7	No
SO ₂	79.30	22.2	-57.1	40	No
VOC	0.19	0.6	0.4	40	No

- Past actual emissions are based on fuel oil firing for 2002-2003, the Annual Operating Reports for 2002-2003, and AP-42 emissions factors. Boiler 1 fired 804,298 gallons of oil in 2002 and 666,974 gallons of oil in 2003. Boiler 2 fired 732,805 gallons of oil in 2002 and 539,742 gallons of oil in 2003.
- Future potential emissions are based on: the requested fuel oil firing rate of 6.0 million gallons from both boilers combined (810,000 MMBtu per year); AP-42 emission factors for CO, PM, PM₁₀, and VOC emissions; a heating values of 139 MMBtu/1000 gallons; the vendor guarantee of 0.17 lb/MMBtu for NO_x emissions; and the stoichiometric calculation from fuel sulfur for SO₂ and SAM emissions.

Based on the estimated emissions increases, the requested changes for the modified oil firing systems ensure that the revised project (as constructed) does not trigger PSD preconstruction review. It is noted that the applicant requested a cap on distillate oil firing (6.0 million gallons from both boilers combined) to keep the project just below the PSD significant emissions rate for NO_x. Over the last two years, Boilers 1 and 2 have each fired less than one million gallons per year. Based on the historical actual operation of Boilers 1 and 2, it is expected that the project will result in much lower actual annual emissions than predicted above.

3. DRAFT PERMIT CONDITIONS

The original permit will be revised for the following:

- Identify installation of only one Peabody-type multi-stage combustion (MSC) burner on each boiler;
- Specify the maximum burner capacity as 130 MMBtu/hour (963 gallons per hour);
- Identify the maximum NO_x emissions rate of 0.17 lb/MMBtu; and
- Establish a cap for the combined fuel oil firing from Boilers 1 and 2 of 6.0 million gallons per year instead of 3.5 million gallons per year per boiler.

4. PRELIMINARY DETERMINATION

The revised project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. The Department makes a preliminary determination that the revised project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE:

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

Authorized Representative:

Mr. Neil Smith, V.P. of Sugar Processing Operations

Clewiston Sugar Mill and Refinery Air Permit No. 0510003-036-AC Facility ID No. 0510003 Boilers 1/2, Oil Burner Modifications Permit Expires: January 30, 2007
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PROJECT AND LOCATION

This permit is a revision of original Permit No. 0510003-027-AC, which authorized replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers operate 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

Joe Kahn, Acting 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 six existing boilers firing bagasse and fuel oil. 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. Source Obligation. [Rule 62-212.400(12), F.A.C.]
 - (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
7. Title V Permit: This permit supersedes original Permit No. 0510003-027-AC. It authorizes construction of the permitted activities 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 at 150° F with an approximate flow rate of 201,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.
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 at 150° F with an approximate flow rate of 201,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.

EQUIPMENT

- Oil Firing Modifications:** For each boiler, the permittee is authorized to replace the existing oil burners with new Peabody-type 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 0.17 lb/MMBtu. Each boiler will have one oil burner with a maximum heat input rate of 130 MMBtu/hour. Based on a higher heating value of 135,000 Btu per gallon, the maximum distillate oil firing rate will be 963 gallons per hour per burner. The modified boilers are estimated to produce approximately 97,400 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

- 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(12), F.A.C.]
- Permitted Capacity on Oil:** For each boiler, the maximum heat input rate from distillate oil is 130 MMBtu per hour. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 97,400 lb/hour.}* [Design; Rules 62-120.200(PTE) and 62-212.400(12), F.A.C.]
- Restrictions on Oil:** For each boiler, distillate oil firing shall not exceed 963 gallons per hour. For both boilers combined, distillate oil firing shall not exceed 6,000,000 gallons during any consecutive 12 months. 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(12), F.A.C.]

EMISSIONS STANDARDS

- 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.]
- 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

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boilers 1 and 2

oil. A separate emissions performance test on oil only is not required. [Rule 62-296.410, F.A.C.]

EMISSIONS PERFORMANCE TESTING

7. 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.]
8. 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

9. 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

10. 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.]

Filename: 0510003-036-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

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.]

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <input type="checkbox"/> C. Date of Delivery</p>
<p>1. Article Addressed to:</p> <p>Mr. Neil Smith, V.P. of Sugar Processing Operations Clewiston Sugar Mill and Refinery United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, Florida 33440</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3: Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) 7000 1670 0013 3110 1007</p>	
<p>PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540</p>	

U.S. Postal Service CERTIFIED MAIL RECEIPT <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>									
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<p>PS Form 3800, May 2000 See Reverse for Instructions</p>									

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The Clewiston News
RECEIVED
AFFIDAVIT OF PUBLICATION

Published Weekly

Clewiston, Florida

JUL 24 2006

State of Florida
County of Hendry

BUREAU OF AIR REGULATION

Before the undersigned authority, personally appeared Jose Zaragoza, who on oath says he is Editor of Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida,

that the attached copy of advertisement being a notice
in the matter Public Notice of intent to issue air permit
in the _____ court, was published in said newspaper in the issue of June 29, 2006

Affiant further says that the said Clewiston News is a newspaper published at Clewiston, in said Hendry County, continuously published in said Hendry County, Florida, each week, and has been entered as a public matter at the post office in Clewiston, in said Hendry County, Florida, for a period of one year preceding the first publication says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Jose Zaragoza
Jose Zaragoza
Sworn to and subscribed before me this 30 day of June, 2006
[Signature]
Notary Public

Applicant: The applicant for this project is the United States Sugar Corporation. The applicant's authorized representative is Mr. Neil Smith, VP of Sugar Processing Operations. The applicant's mailing address is the Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

Facility Location: The United States Sugar Corporation operates an existing sugar mill and refinery in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

Project: In February of 2005, the Department issued air construction Permit No. 0510003-027-AC, which authorized modification of the oil firing systems on Boilers 1 and 2 to accommodate the use of distillate oil instead of No. 6 fuel oil. The original permit authorized the installation of two low-NOx (0.15 lb/MMBtu) burners per boiler with a maximum heat input rate of 104 MMBtu per hour per burner. However, only one burner was installed in each boiler with a maximum heat input rate of 130 MMBtu per hour per burner. In addition, subsequent testing indicated slightly higher (~13%) NOx emissions.

Specific Condition 7 of Permit No. 0510003-027-AC requires, "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." Accordingly, the applicant requests that the original air construction permit be revised for the following: identify installation of only one burner per boiler; specify the maximum burner capacity as 130 MMBtu/hour; identify the design NOx emissions rate of 0.17 lb/MMBtu; and reduce annual distillate oil firing from 7.0 to 6.0 million gallons per year (from both boilers combined).

The revised project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. Bagasse is the primary fuel for these boilers and is fired when available. Oil is fired as a startup fuel, a supplemental fuel during mill interruptions, and as a backup fuel during the refinery season should bagasse be unavailable. Distillate oil is a much cleaner firing fuel than No. 6 fuel and actual emissions are expected to decrease.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/468-0114 and fax number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-3381. The South District's telephone number is 239/332-6975.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all email or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. For additional information, contact the Permitting Authority at the above address or phone number. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a Revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. 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 attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each 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 state; (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 the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature: <i>Rochel Felton</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name): <i>Rochel Felton</i> C. Date of Delivery: <i>6/20/06</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p>
<p>1. Article Addressed to:</p> <p>Mr. Neil Smith, V.P. of Sugar Processing Operations Clewiston Sugar Mill and Refinery United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, Florida 33440</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p><i>7000 1670 0013 3110 1489</i></p>

PS Form 3811, February 2004

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To: Mr. Neil Smith, V.P. of Sugar Processing Operations
 Clewiston Sugar Mill and Refinery
 United States Sugar Corporation
 111 Ponce DeLeon Avenue
 Clewiston, Florida 33440

PS Form 3800, May 2000 See Reverse for Instructions

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