

# Florida Department of Environmental Protection

## Memorandum

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TO: Michael G. Cooke, Division of Air Resource Management

THRU: Trina Vielhauer, Bureau of Air Regulation  
Al Linero, Air Permitting South Program *av*

FROM: Jeff Koerner, Air Permitting South Program *JK*

DATE: February 3, 2005

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

The Final Permit for this project is attached for your approval and signature, which authorizes modification of the oil firing systems for existing Boilers 1 and 2. After this project, all of the boilers at this facility except Boiler 3 will be permitted to fire distillate oil as the startup and supplemental fuel instead of residual oil. Boiler 3 will be permanently retired after construction on Boiler 8 is completed and it begins operation.

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

Day #90 is March 29, 2005. I recommend your approval of the attached Final Permit for this project.

Attachments

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. 0510003-027-AC  
Boilers 1 and 2  
Modified Oil Firing Systems  
Hendry County, Florida

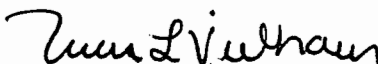
*Authorized Representative:*

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

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

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

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

CERTIFICATE OF SERVICE

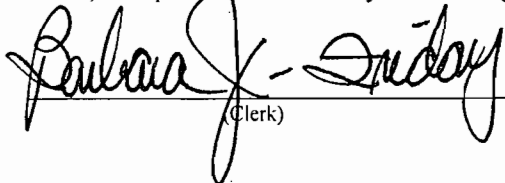
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 2/24/05 to the persons listed:

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

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

Clerk Stamp

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

  
(Clerk)

2/24/05  
(Date)

## FINAL DETERMINATION

### **PERMITTEE**

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

#### *Authorized Representative:*

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

### **PERMITTING AUTHORITY**

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

### **PROJECT**

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

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

### **NOTICE AND PUBLIC ATION**

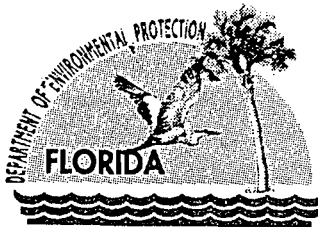
The Department distributed an "Intent to Issue Permit" package on December 30, 2004. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on January 20, 2005. The Department received the proof of publication on January 28, 2005. No petitions for administrative hearings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

### **COMMENTS**

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

### **CONCLUSION**

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



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

## PERMITTEE:

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

### *Authorized Representative:*

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

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

## PROJECT AND LOCATION

This permit authorizes replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

## STATEMENT OF BASIS

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

## PERMIT CONTENT

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

Michael G. Cooke, Director  
Division of Air Resource Management

(Effective Date)

"More Protection, Less Process"

Printed on recycled paper.

## SECTION 1. GENERAL INFORMATION

### FACILITY DESCRIPTION

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

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

### FACILITY REGULATORY CLASSIFICATIONS

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

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

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

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

### RELEVANT DOCUMENTS

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

### APPENDICES

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

Appendix CF. Citation Format

Appendix GC. General Conditions

Appendix SC. Standard Conditions

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Boilers 1 and 2

This section of the permit addresses the following emissions units.

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

#### EQUIPMENT

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

#### PERFORMANCE RESTRICTIONS

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

#### EMISSIONS STANDARDS

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

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Boilers 1 and 2

#### EMISSIONS PERFORMANCE TESTING

7. Performance Tests: For each boiler, the permittee shall conduct an initial performance test to validate the actual installed capacity of the burner system (208 MMBtu per hour, maximum) and the design low-NOx burner specification (0.15 lb/MMBtu hour, maximum). The test shall be conducted for at least 60 consecutive minutes when firing only distillate oil. During the test, the following parameters shall be recorded: firing rate (gallons), density (lb/gallon) and heating value of the distillate oil (Btu/lb); and production rate (lb/hour), temperature (° F), and pressure (psig) of the steam. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis of the distillate oil. The tests shall be conducted within 120 days of first firing oil with the modified system. Results of the test shall be submitted to the Department within 45 days of the test date. If the results of the performance test show potential NOx emissions greater than 40 tons per year, the permittee shall submit a PSD permit application or an application to modify this permit to avoid PSD preconstruction review. Applications shall be filed within 90 days of submitting the test report as necessary. [Rule 62-4.070(3), F.A.C.]
8. Emissions Compliance Tests: This permit does not impose any new emissions compliance test requirements. The permittee shall continue to perform emissions compliance testing in accordance with the requirements of the current Title V air operation permit. [Rules 62-4.070(3) and 62-297.310, F.A.C.]
9. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

#### RECORDS AND REPORTS

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

#### OTHER APPLICABLE REQUIREMENTS

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

Filename: 0510003-027-AC - Draft Permit



**SECTION 4. APPENDICES**

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**CONTENTS**

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

**SECTION 4. APPENDIX CF**

**CITATION FORMAT**

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*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**

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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**

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- 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**

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

**EMISSIONS AND CONTROLS**

1. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
8. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

**RECORDS AND REPORTS**

10. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
11. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SENDER: COMPLETE THIS SECTION**

- 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.

1. Article Addressed to:  
 Mr. William A. Raiola, V.P. of  
 Sugar Processing Operations  
 United States Sugar Corporation  
 111 Ponce DeLeon Avenue  
 Clewiston, Florida 33440

2. Article Number  
 (Transfer from service label) 7000 2870 0000 7027 9942

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) C. Date of Delivery  
 2/28/05

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

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

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

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$</b>

Postmark  
 Here

Sent To  
 Mr. William A. Raiola, V.P. of Sugar Processing  
 Street, Apt. No.; or PO Box No.  
 111 Ponce DeLeon Avenue  
 City, State, ZIP+4  
 Clewiston, Florida 33440

7000 2870 0000 7027 9942

**DEP ROUTING AND TRANSMITTAL SLIP**

TO: (NAME, OFFICE, LOCATION)

- 1. JEFF KOERNER - ARM
- 2. MAIL STATION #5505

PLEASE PREPARE REPLY FOR:

- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE: \_\_\_\_\_

ACTION/DISPOSITION:

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

COMMENTS:

FROM: MARA NASCA / SD      DATE: 1/25/05      PHONE: SC 748-6975



111 Ponce de Leon Ave.  
Clewiston, Florida 33440-1207  
Telephone 863/983-8121  
Fax 863/902-2729

Thursday, January 20, 2005

Florida Department of Environmental Protection  
Post Office Box 2549  
Fort Myers, Florida 33902-2549

RECEIVED

JAN 28 2005

BUREAU OF AIR REGULATION

RE: United States Sugar Corporation, Clewiston  
Hendry County, Florida  
Boiler #1 and #2 Air Permit – Replace Oil Burner Systems  
File No. 0510003-027AC


Gentlemen:

We are enclosing Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Permit" of reference was published in the legal section of the January 20, 2005 issue of *The Clewiston News*.

Please advise if there is anything further we need provide in this respect.

Sincerely,

UNITED STATES SUGAR CORPORATION

  
Donald Griffin  
Manager, Specialty Sugar

DG:jt  
Enclosure

cc: Michael Low  
Peter Briggs  
David Buff

RECEIVED

JAN 24 2005

D.E.P. - South District



**PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT**

Florida Department of Environmental Protection  
Air Permit No. 0510003-027-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. William A. Raio-la, Senior 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:** The applicant proposes to replace the existing oil burner systems for Boilers 1 and 2 with new low-NOx burners. The boilers currently fire No. 6 fuel oil containing up to 2.5% sulfur by weight as a startup fuel and to supplement bagasse. The new system allows the firing of cleaner distillate oil containing no more than 0.05% sulfur by weight. Bagasse will remain the primary fuel with distillate oil used as a startup fuel and to supplement bagasse. These boilers supply steam to the mill during the sugarcane crop season and serve as backup units during the off-crop season for the refinery.

The existing Clewiston sugar mill/refinery is a major facility in accordance with Rule 62-212.400, F.A.C., the regulatory program for the Prevention of Significant Deterioration (PSD) of Air Quality. The existing facility is located in Hendry County, which is an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. The project does not result in emissions increases that exceed the PSD significant emission rates specified in Rule 62-212.400, F.A.C. based on the application, past actual emissions, the requested restrictions, and representative emission factors for these units. Therefore, the project is not subject to PSD preconstruction review.

**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 tax 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 26-106.205, 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.

547093 CGS 1/20/05

# The Clewiston News

Published Weekly

Clewiston, Florida

## AFFIDAVIT OF PUBLICATION

State of Florida

County of Hendry

Before the undersigned authority, personally appeared Mark Young, who on oath says he is the News Editor of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement being a notice in the matter of United States Sugar Corporation Intent to issue Air permit Ad # 547093 in the \_\_\_\_\_ court, was published in said newspaper in the issue(s) of January 20, 2005

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 next preceding the first publication says that she 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.

Mark Young

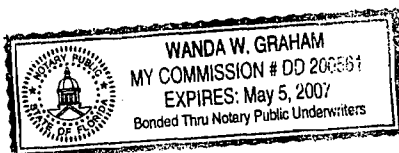
**Mark Young**

Sworn to and subscribed before me this 20<sup>th</sup> day of January 2005.

Wanda W. Graham

Wanda W. Graham

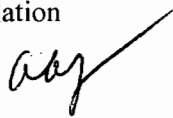

Notary Public



## Memorandum

# Florida Department of Environmental Protection

---

TO: Trina Vielhauer, Chief - Bureau of Air Regulation  
THROUGH: Al Linero, Manager of Air Permitting South   
FROM: Jeff Koerner, Air Permitting South   
DATE: December 13, 2004  
SUBJECT: Project No. 0510003-027-AC  
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery  
Boilers 1 and 2 – Oil Burner Modifications

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 January 30, 2005. I recommend your approval of the attached Draft Permit for this project.

Attachments

**BEST AVAILABLE COPY**  
**P.E. CERTIFICATION STATEMENT**

**PERMITTEE**

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

Air Permit No. 0510003-027-AC  
Clewiston Sugar Mill and Refinery  
Boilers 1/2, Oil Burner Modifications

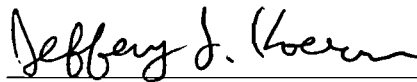
**PROJECT DESCRIPTION**

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

U.S. Sugar proposes to replace the existing No. 6 fuel oil burners on existing Boilers 1 and 2 with new Peabody multi-stage combustion (MSC) burners to fire distillate oil. The burners are based on a "low-NOx" design with a maximum NOx emission rate of 0.15 lb/MMBtu. 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. Each boiler will have two oil burners with a maximum heat input rate to each burner of 104 MMBtu/hour. Based on the higher heating value of 19,200 Btu/lb of distillate oil, the maximum firing rates for each boiler will be 1541 gph and 3,500,000 gallons per year. The modified boilers will be able to produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. Bagasse will remain the primary fuel with distillate oil used as a startup and supplemental fuel.

The Clewiston sugar mill and refinery is an existing PSD-major facility in accordance with Rule 62-212.400, F.A.C. The project does not result in emissions increases that exceed the PSD significant emission rates specified in Rule 62-212.400, F.A.C. based on the application, past actual emissions, the requested restrictions, and representative emission factors for these units. Therefore, the project is not subject to PSD preconstruction review.

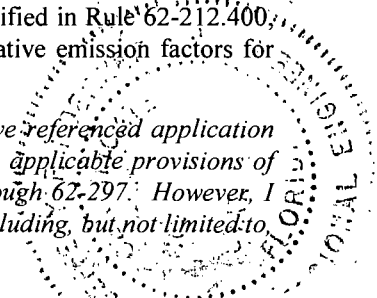
***I HEREBY CERTIFY** that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code 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

12-30-04

(Date)





# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

December 30, 2004

Mr. William A. Raiola, 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. 0510003-027-AC  
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery  
Boilers 1 and 2 – Oil Burner Modifications

Dear Mr. Raiola:

On September 22, 2004, 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,

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

Draft Air Permit No. 0510003-027-AC  
Clewiston Sugar Mill and Refinery  
Boilers 1/2, Oil Burner Modifications  
Hendry County, Florida

*Authorized Representative:*

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

**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:** The applicant proposes to replace the existing oil burner systems for Boilers 1 and 2 with new low-NOx burners. The boilers currently fire No. 6 fuel oil containing up to 2.5% sulfur by weight. The new system will fire distillate oil containing no more than 0.05% sulfur by weight. Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination".

**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.

**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

## WRITTEN 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.

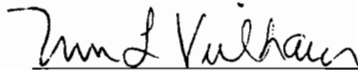
**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's 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 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.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

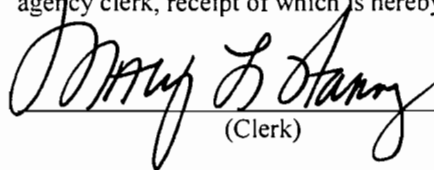
**CERTIFICATE OF SERVICE**

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 12/30/04 to the persons listed below.

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

Clerk Stamp

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

  
\_\_\_\_\_  
(Clerk)

12/30/04  
\_\_\_\_\_  
(Date)



## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection  
Draft Air Permit No. 0510003-027-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. William A. Raiola, 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:** The applicant proposes to replace the existing oil burner systems for Boilers 1 and 2 with new low-NOx burners. The boilers currently fire No. 6 fuel oil containing up to 2.5% sulfur by weight as a startup fuel and to supplement bagasse. The new system allows the firing of cleaner distillate oil containing no more than 0.05% sulfur by weight. Bagasse will remain the primary fuel with distillate oil used as a startup fuel and to supplement bagasse. These boilers supply steam to the mill during the sugarcane crop season and serve as backup units during the off-crop season for the refinery.

The existing Clewiston sugar mill/refinery is a major facility in accordance with Rule 62-212.400, F.A.C., the regulatory program for the Prevention of Significant Deterioration (PSD) of Air Quality. The existing facility is located in Hendry County, which is an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. The project does not result in emissions increases that exceed the PSD significant emission rates specified in Rule 62-212.400, F.A.C. based on the application, past actual emissions, the requested restrictions, and representative emission factors for these units. Therefore, the project is not subject to PSD preconstruction review.

**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 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

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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.

**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**PROJECT**

Draft Air Construction Permit No. 0510003-027-AC  
Clewiston Boilers 1 and 2 – Oil Burner Modifications

**COUNTY**

Hendry County

**APPLICANT**

United States Sugar Corporation  
Clewiston Sugar Mill and Refinery  
ARMS Facility ID No. 0510003

**PERMITTING  
AUTHORITY**

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



December 13, 2004

{Filename: 0510003-027-AC - TEPD}

## **1. GENERAL PROJECT INFORMATION**

### **Applicant Name and Address**

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

### **Processing Schedule**

On September 22, 2004, the Department received the initial application to modify the oil burners for Boilers 1 and 2. On September 27, 2004, the Department requested additional information. On November 18, 2004, the Department received the requested additional information making the application complete.

### **Facility Description and Location**

The United States Sugar Corporation (USSC) 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. 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).

### **Standard Industrial Classification Code (SIC)**

SIC Nos. 2061, 2062 – Sugarcane processing and refining

### **Facility Regulatory 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 of air pollution 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**

The existing Clewiston sugar mill includes active Boilers 1, 2, 3, 4, and 7 and proposed Boiler 8 is under construction. Bagasse is the primary fuel for each boiler and oil is a startup and supplemental fuel. Only Boilers 1 and 2 are affected by this project. These units are currently described as follows.

- 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.

U.S. Sugar proposes to replace the existing No. 6 fuel oil burners with new Peabody multi-stage combustion (MSC) burners. 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 a new combustion air fan with associated ductwork, a new fuel oil pump set, and a new burner management system. Each boiler will have two oil burners with a maximum heat input rate to each burner of 104 MMBtu/hour. Based on a higher heating value of 18,750 Btu/lb, the maximum distillate oil firing rate will be approximately 770.5 gallons per hour per burner. It is estimated that the modified boilers will produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. Bagasse will remain the primary fuel with distillate oil used as a startup and supplemental fuel.

Distillate oil is the authorized fuel for Boilers 4, 7, and 8. Boilers 1, 2, and 3 are currently permitted to fire No. 6 fuel oil, which contains more fuel sulfur. The modified burner systems will allow Boilers 1 and 2 to also fire distillate oil with a maximum fuel sulfur content of 0.05% sulfur by weight. Boiler 3 is scheduled for permanent shutdown once Boiler 8 commences commercial operation. Eventually all of the Clewiston sugar mill boilers will fire only distillate oil.

No changes are being requested for the firing of bagasse. Boilers 1 and 2 fire oil as a startup fuel and to supplement bagasse. Bagasse is available from the sugar milling process and is not purchased. Due to the additional cost of fuel oil, the facility minimizes oil firing to the extent possible. The proposed distillate oil will have even higher costs, but lower air emissions. For these reasons, the review of this project will be limited to a comparison of the current No. 6 oil firing capabilities with the proposed distillate oil firing.

## **2. APPLICABLE REGULATIONS**

### **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

Boilers may be regulated by one of the New Source Performance Standards specified in 40 CFR 60 as Subparts D, Da, Db, or Dc. Boilers 1 and 2 are not subject to these regulations for the following reasons.

- NSPS Subpart D applies to each fossil fuel fired steam generator with a maximum heat input rate greater than 250 MMBtu per hour and for which construction commenced after August 17, 1971. This regulation does not apply because the boilers were constructed before this date and the maximum heat input rates from oil firing are less than 250 MMBtu per hour.
- NSPS Subpart Da applies to each electric utility steam generating unit with a maximum heat input rate greater than 250 MMBtu per hour of heat input from fossil fuel (either alone or in combination with any other fuel) constructed or modified after September 18, 1978. This regulation does not apply because the boilers are not considered electric utility steam generating units.
- NSPS Subpart Db only applies to each steam generator that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity 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.

NSPS Pollutant	Maximum Emissions Rates (lb/hour)		Increase?
	Current (No. 6 Oil)	Future (Distillate Oil)	
Nitrogen Oxides	22.8	3.1	No
Sulfur Dioxide	172.5	11.1	No
Particulate Matter	70.5	31.2	No

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The project does not constitute “reconstruction” as defined by the NSPS requirements because the total capital costs for the project (\$400,000 per boiler) will not exceed 50% of the capital costs for a new boiler (\$7 million per boiler). Therefore, the regulation does not apply.

- NSPS Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 MMBtu per hour or less, but greater than or equal to 10 MMBtu per hour. This rule does not apply because the maximum heat input rates to the boilers are more than 100 MMBtu per hour.

### 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.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
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.

### 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.

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

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 (Table 62-212.400-1, F.A.C.), 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 listed in Table 62-212.400-2, 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 applicability of PSD preconstruction review. The following table shows the applicant’s estimated maximum annual emissions increases that will result from this project.

Table 2A. Applicant’s PSD Applicability Summary

Pollutant*	Boilers 1 and 2			Project	
	Past Actual TPY	Future Potential TPY	Increase TPY	PSD SER TPY	PSD?
CO	3.43	17.5	14.1	100	No
NOx	32.24	70.9	38.6	40	No
PM	10.48	7.0	-3.5	25	No
PM10	8.91	3.5	-5.4	15	No
SAM	3.5	1.2	-2.3	7	No
SO2	79.30	25.2	-54.1	40	No
VOC	0.19	0.70	0.51	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 3.5 million gallons per boiler; AP-42 emission factors for CO, PM, PM10, and VOC emissions; the vendor guarantee of 0.15 lb/MMBtu for NOx emissions; and the stoichiometric calculation from fuel sulfur for SO2 and SAM emissions.
- The boilers also emit trace amounts of lead, beryllium, and mercury from oil firing.

Based on the applicant’s estimated emissions increases, the project to modify the oil firing systems of Boilers 1 and 2 do not trigger PSD preconstruction review. It is noted that the applicant has requested a limit on distillate oil firing (3.5 million gallons per boiler) to keep the project just below the PSD significant emissions rate (40 tons per year). Over the last two years, Boilers 1 and 2 have each fired less than 1 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 annual emissions than predicted above.

### 3. DRAFT PERMIT CONDITIONS

The project is not subject to PSD preconstruction review or any new requirements pursuant to state or federal regulations. NO<sub>x</sub> is the only pollutant that approaches the PSD significant emissions rate. This is primarily because the applicant is requesting the ability to fire a substantial quantity of distillate oil (3.5 million gallons per year per boiler) compared to past historical operations (~ 700,000 gallons per year per boiler for the last 2 years). Oil firing for most sugar mill boilers is a function of bagasse quality, weather, and mill interruptions. However, Boilers 1 and 2 are also used as backup boilers during the refinery season; therefore, oil firing for these units is also a function of the refinery demands as well as the availability of the primary units used during the refinery season (Boilers 4 and 7).

The maximum NO<sub>x</sub> emissions from each boiler are estimated to be only 35 tons per year. In addition, the boilers almost always fire oil in combination with bagasse, which would tend to further inhibit NO<sub>x</sub> emissions. At the Department's request, the applicant provided a vendor guarantee of 0.15 lb NO<sub>x</sub>/MMBtu from Peabody, the burner manufacturer. Because the entire burner system is being replaced and the burners are used primarily for startup and to supplement bagasse firing, the Department believes the manufacturer's guarantee provides reasonable assurance that actual NO<sub>x</sub> emissions will not exceed the PSD significant emission rates. Therefore, the following "performance tests" are required.

For each boiler, the permittee shall conduct an initial performance test to validate the actual installed capacity of the burner system (208 MMBtu per hour, maximum) and the design low-NO<sub>x</sub> burner specification (0.15 lb/MMBtu hour, maximum). The test shall be conducted for at least 60 consecutive minutes when firing only distillate oil. During the test, the following parameters shall be recorded: firing rate (gallons), density (lb/gallon) and heating value of the distillate oil (Btu/lb); and production rate (lb/hour), temperature (° F), and pressure (psig) of the steam. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis of the distillate oil. The tests shall be conducted within 120 days of first firing oil with the modified system. Results of the test shall be submitted to the Department within 45 days of the test date. If the results of the performance test show potential NO<sub>x</sub> emissions greater than 40 tons per year, the permittee shall submit a PSD permit application or an application to modify this permit to avoid PSD preconstruction review. Applications shall be filed within 90 days of submitting the test report. [Rule 62-4.070(3), F.A.C.]

In addition, the draft permit specifies the burner modifications and includes the following primary requirements for each boiler.

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



## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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- Emissions of particulate matter shall not exceed 0.1 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. This standard is used to prorate the corresponding final standard if a compliance test is conducted while firing a combination of bagasse and oil. A separate emissions performance test on oil only is not required. [Rule 62-296.410, F.A.C.]
- 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.]
- 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.]

The application also requested acknowledgement that Boilers 1 and 2 could co-fire the dewatered filter material from the Dissolved Aeration Flotation (DAF) system with other authorized fuels. The firing of this material was reviewed in Project No. 0510003-024-AC (Permit No. PSD-FL-333A). The conclusion was that the amount of material would be incidental and would result in insignificant impacts. The permit includes the following requirement in Condition 1 of Appendix I, "The permittee may co-fire incidental amounts de-watered DAF filter material. To the extent practicable, the de-watered DAF filter material shall be commingled with bagasse in the existing conveyor system and distributed among the operational boilers. [Rule 62-4.070, F.A.C.]" This condition was included in the draft permit for this project to clarify that the DAF filter material may also be fired in Boilers 1 and 2.

#### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed 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. William A. Raiola, V.P. of Sugar Processing Operations

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

This permit authorizes replacement of the oil burner systems for Boilers 1 and 2 to fire distillate oil. The boilers are installed at the existing Clewiston Sugar Mill and Refinery (SIC Nos. 2061 and 2062) located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

## STATEMENT OF BASIS

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

## PERMIT CONTENT

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

(DRAFT PERMIT)

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Michael G. Cooke, Director  
Division of Air Resource Management

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(Effective Date)

## SECTION 1. GENERAL INFORMATION

### FACILITY DESCRIPTION

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

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

### FACILITY REGULATORY CLASSIFICATIONS

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

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

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

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

### RELEVANT DOCUMENTS

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

### APPENDICES

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

Appendix CF. Citation Format

Appendix GC. General Conditions

Appendix SC. Standard Conditions

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403 of the Florida Statutes, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
5. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
6. Relaxations of Restrictions on Pollutant Emitting Capacity: If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Boilers 1 and 2

This section of the permit addresses the following emissions units.

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

#### EQUIPMENT

- Oil Firing Modifications:** For each boiler, the permittee is authorized to replace the existing oil burners with new Peabody multi-stage combustion (MSC) burners (or equivalent) to fire distillate oil. In general, each burner consists of a steam-atomized center-fired oil gun, a flame scanner, an ignitor with flame proving rod, and an individual burner windbox with an electrically-operated modulating damper. The project also includes new combustion air fans with associated ductwork, new fuel oil pump sets, and new burner management systems. The burners shall be low NO<sub>x</sub> burners designed for a maximum NO<sub>x</sub> emission rate of 0.15 lb/MMBtu. Each boiler will have two oil burners with a maximum heat input rate to each burner of 104 MMBtu/hour. Based on a higher heating value of 18,750 Btu/lb, the maximum distillate oil firing rate will be approximately 770.5 gallons per hour per burner. The modified boilers are estimated to produce approximately 156,000 pounds of steam per hour from the sole firing of distillate oil. Bagasse will remain the primary fuel and distillate oil will be fired as a startup and supplemental fuel. This permit only addresses the oil firing aspects of these boilers. [Application; Design]

#### PERFORMANCE RESTRICTIONS

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

#### EMISSIONS STANDARDS

- 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

#### EMISSIONS PERFORMANCE TESTING

7. Performance Tests: For each boiler, the permittee shall conduct an initial performance test to validate the actual installed capacity of the burner system (208 MMBtu per hour, maximum) and the design low-NOx burner specification (0.15 lb/MMBtu hour, maximum). The test shall be conducted for at least 60 consecutive minutes when firing only distillate oil. During the test, the following parameters shall be recorded: firing rate (gallons), density (lb/gallon) and heating value of the distillate oil (Btu/lb); and production rate (lb/hour), temperature (° F), and pressure (psig) of the steam. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis of the distillate oil. The tests shall be conducted within 120 days of first firing oil with the modified system. Results of the test shall be submitted to the Department within 45 days of the test date. If the results of the performance test show potential NOx emissions greater than 40 tons per year, the permittee shall submit a PSD permit application or an application to modify this permit to avoid PSD preconstruction review. Applications shall be filed within 90 days of submitting the test report as necessary. [Rule 62-4.070(3), F.A.C.]
8. Emissions Compliance Tests: This permit does not impose any new emissions compliance test requirements. The permittee shall continue to perform emissions compliance testing in accordance with the requirements of the current Title V air operation permit. [Rules 62-4.070(3) and 62-297.310, F.A.C.]
9. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

#### RECORDS AND REPORTS

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

#### OTHER APPLICABLE REQUIREMENTS

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

Filename: 0510003-027-AC - Draft Permit

**SECTION 4. APPENDICES**

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**CONTENTS**

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

**SECTION 4. APPENDIX CF**  
**CITATION FORMAT**

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*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**

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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**

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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**

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

**EMISSIONS AND CONTROLS**

1. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
8. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

**RECORDS AND REPORTS**

10. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
11. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SENDER: COMPLETE THIS SECTION**

- 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.

## 1. Article Addressed to:

Mr. William A. Raiola  
 V.P. of Sugar Processing  
 Operations  
 Clewiston Sugar Mill and Refinery  
 111 Ponce DeLeon Avenue  
 Clewiston, Florida 33440

2. Article Number  
(Transfer from service label)

7000 1670 0013 3109 9021

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

## A. Signature

X



- Agent  
 Addressee

## B. Received by (Printed Name)

## C. Date of Delivery

1/3/05

D. Is delivery address different from item 1?  YesIf YES, enter delivery address below:  No

## 3. Service Type

- Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

## 4. Restricted Delivery? (Extra Fee)

 Yes

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

7000 1670 0013 3109 9021

[Redacted area]

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To: Mr. William A. Raiola  
Clewiston Sugar Mill and Reginery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL USA 32653  
Telephone (352) 336-5600  
Fax (352) 336-6603  
www.golder.com  
November 17, 2004



Florida Department of Environmental Protection **BUREAU OF AIR REGULATION**  
Department of Air Resources Management  
2600 Blair Stone Road, MS #5500  
Tallahassee, FL 32399-2400

Attention : Mr. Jeffery F. Koerner, P. E., Air Permitting South Program

RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – CLEWISTON MILL  
BOILER NOS. 1 AND 2 FUEL OIL BURNING MODIFICATIONS  
PROJECT NO. 0510003-027-AC  
REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Koerner:

U.S. Sugar and Golder Associates Inc. have received the Department's request for additional information (RAI) dated September 27, 2004, in regard to the above referenced project. Responses to the Department's requests are provided below.

1. The description contained in Item 1 of the RAI is accurate. The only difference is that not all the Clewiston boilers will be permitted to fire No. 2 distillate oil. Boiler No. 3 at Clewiston does not have the ability to burn No. 2 fuel oil; it is permitted for No. 6 fuel oil. Note, however, that Boiler No. 3 will be shutdown in early 2005, after the startup of Boiler No. 8.
2. The vendor specification sheet for the new burners is attached. The guaranteed NO<sub>x</sub> emission rate for No. 2 fuel oil firing is 0.15 lb/MMBtu. U.S. Sugar is not planning on any performance tests on the burners at this time. We believe that the vendor guarantee provides reasonable assurance that the project will not trigger PSD review.

In addition to the fuel oil burner modifications, U.S. Sugar requests that Boiler Nos. 1 and 2 be permitted to fire material from the Dissolved Aeration Filtration (DAF) system at the Clewiston Mill. This material contains small amounts of used oil. Boiler Nos. 4, 7, and 8 at Clewiston have recently been authorized to burn this material (Permit Nos. 0510003-023-AC and 0510003-024-AC). Boiler Nos. 1 and 2 are already authorized to fire facility-generated on-spec used oil. This request will allow all the boilers to burn DAF material, which is necessary since the material will be transferred to the bagasse conveyor system where it is commingled with the bagasse that is fed to all of the boilers. A more detailed description of the DAF material and its handling is contained in Draft Air Permit No. 0510003-024-AC/PSD-FL-333A.

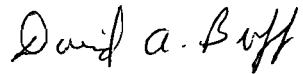
No pages of the air permit application form need to be revised to support this request. The segment section of the application form for Boiler Nos. 1 and 2 already include facility-generated on-spec used oil. No emissions would change as a result of this request.



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

Sincerely,

GOLDER ASSOCIATES INC.



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

Principal Engineer

DB/

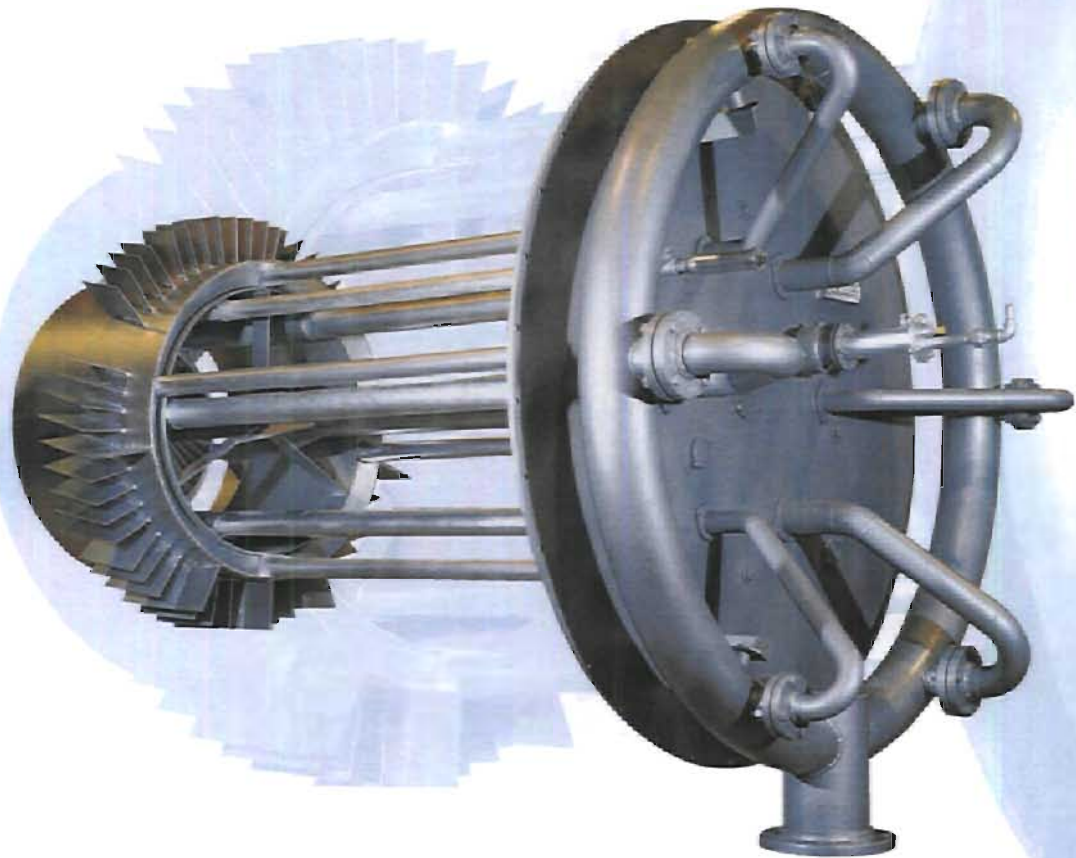
Enclosure

cc: Don Griffin

Ron Blackburn, DEP

Model MSC

# LOW-NO<sub>x</sub> OIL & GAS BURNER



Multi-Stage Combustion (MSC) techniques coupled with precision flame shaping offer these performance benefits for new or retrofit applications:

- Up to 80% NO<sub>x</sub> reduction including both thermal and fuel NO<sub>x</sub>.
- Ten percent or less excess air operation and significantly reduced particulate formation.
- Meets required NO<sub>x</sub> reduction while maintaining acceptable CO levels.
- Precise flame fit capability with excellent stability.
- Available with 12 to 52 inch throat diameters and firing capacities from 20 to more than 400 million BTU/hour.
- Oil unit and air slide can be pneumatically controlled.
- Adjustable gas spud geometry available.
- Suitable for use with or without flue gas recirculation.
- Available with water or steam injection.



Peabody Engineering



## MSC Low-NOx Burners

The Peabody Multi-Stage Combustion (MSC) burner achieves NOx emission compliance without compromising efficiency or other emission performance.

The flexible, high efficiency burner can be retrofitted to most existing boiler designs, and is also ideal for use with new field-erected or package boilers.

Low CO levels with full load excess air values of less than 10% are typical when firing either oil or gas. This performance is coupled with outstanding flame stability characteristics resulting in efficient, reliable and safe operation.

### How It Works

Combustion air and fuel are staged to produce rich, lean flame zones thus inhibiting NOx formation. Single source combustion air is divided into two streams. Primary air passes through the center of the flow divider and air diffuser. Secondary air flows in an annular section via swirl vanes, and discharges through a convergent/divergent throat.

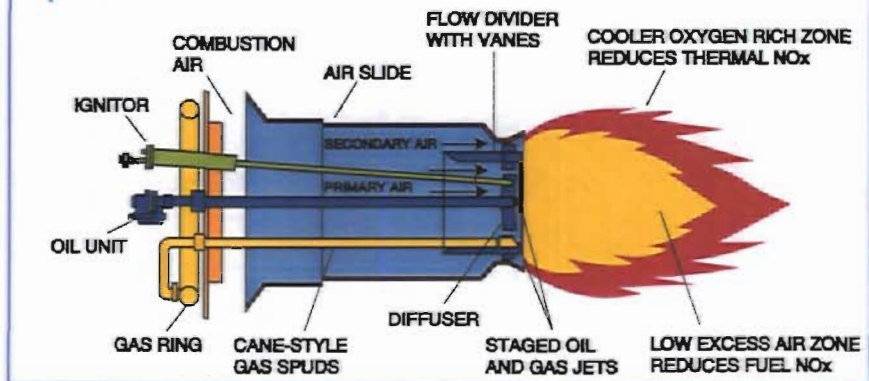
Gas jets and fuel oil atomizers are designed to further enhance combustion staging as well as produce the precision flame shaping essential for CO and particulate performance.

The above techniques result in low excess air in the primary combustion zone limiting the oxygen available to combine with nitrogen in the fuel. In the second combustion stage, additional air is introduced forming a cooler oxygen-rich zone where combustion is completed and the formation of thermal NOx is limited.

### Efficient, Safe Combustion

The blending of these technologies within the Peabody MSC burner results in reduced NOx formation without compromising other performance criteria. Exceptional flame stability, even when using flue gas recirculation, ensures that operational safety is not compromised.

### Operation of low-NOx MSC burner



### SPECIFICATIONS

<b>Throat diameter:</b>	12 to 52 inches
<b>Firing rate:</b>	20 to >400 million BTU/hr
<b>NOx reduction:</b>	To 60%, up to 80% with flue gas recirculation
<b>CO Emissions:</b>	<100 ppm corrected to 3% O <sub>2</sub>
<b>Excess air operation:</b>	10% or less typical firing oil or gas
<b>Fuels fired:</b>	Light and heavy oil Natural gas and propane Waste gases
<b>Oil atomization:</b>	Choice of steam, air, or mechanical
<b>Gas unit:</b>	Internal plenum or external gas ring with gas spuds
<b>Register:</b>	Multiple concentric annular flow and axial swirl flame stabilization
<b>Ignitor:</b>	Peabody gas-electric, oil-electric, or direct spark-high energy
<b>Auxiliary ports:</b>	Flame scanner, sight port
<b>Turndown ratio:</b>	Up to 10:1
<b>Combustion air:</b>	Ambient to 700°F
<b>Fuel pressure:</b>	Oil, 150 psig typical Gas, 8 psig typical

For further information or to obtain a quotation dealing with any Peabody product, contact:

**Peabody Engineering Corporation**  
70 Shelton Technology Center  
Shelton, CT 06484  
Tel: 203-922-1199, Fax: 203-922-8866  
Toll free: 1-877-PEABODY  
E-mail: sales@peabodyengineering.com

**Peabody Engineering Canada**  
360 Guelph Street, #36B  
Georgetown, Ont. L7G 4B5 Canada  
Tel: 905-877-2222, Fax: 905-877-1985  
E-mail: sales@peabodyengineering.com

**Ingenieria Peabody S.A. de C.V.**  
Calle Dante No. 32 Bis. - 4 Piso  
Col. Nueva Anzures  
11590 Mexico, D.F.  
Tel: +52 (55) 5254-6510  
Fax: +52 (55) 5254-6364  
E-mail: ingenieriapeabody@prodigy.net.mx





**HAMWORTHY  
Peabody**  
COMBUSTION

Incorporating:  
AIROIL - FLAREGAS  
CHENTRONICS



Hamworthy Peabody Proposal No. S-14839

September 29, 2004

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

E-Mail bnesbitt@ussugar.com

Attention: Mr. Brett Nesbitt

Reference: Replacement Burners for Boiler Nos. 1 and 2

Dear Mr. Nesbitt,

In response to the "Request for Additional Information" from the DEP we have the following comments.

1. Each burner will be designed for a heat input of 104 MM BTU/hr when firing No. 2 fuel oil with ambient combustion air. Based on a HHV of 19,200 BTU/lb it is expected that the oil flow will be 1505 gallons/hr total for both burners.
2. The Hamworthy Peabody Combustion scope consists of:
  - 2- MSC low NOx burners for steam-atomized oil firing. Each burner will include a center-fired oil gun, flame scanner and ignitor with flame proving rod.
  - 2- Individual burner windboxes, each with electrically operated modulating damper.
  - 1- Set, ignitor valve trains.

We cannot comment on the combustion air fan, fuel oil pump set, burner management system and oil/steam valve train as they are not in the Hamworthy Peabody scope.

3. The NOx emissions are guaranteed to be 0.15 lb/MM or less provided the fuel bound nitrogen content of the fuel oil is 0.05% (wt) or less and the burners are

**Hamworthy Peabody Combustion, Inc.**

70 Shelton Technology Center, Shelton, Connecticut, 06484-6406, USA Tel: 203 922 1199 Fax: 203 922 8866

fired with ambient combustion air. Emissions testing is not included in the Hamworthy Peabody scope of supply.

4. Descriptive literature for the Hamworthy Peabody low NOx burner is attached.

Specific burner information is:

Burner Data:

Burner Model	MSC 600
Nominal Throat Diameter	23.6"
Register Draft Loss @ MCR	7.6" w.c. maximum
Estimated Flame Length	17.6 Ft. (oil)
Estimated Flame Diameter	6 Ft.

Burner Design Specification:

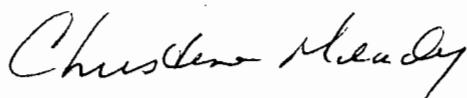
Heat Input per Burner	104 MM BTU/hr
No. Burners per Boiler	2
Excess Air @ MCR	15%
Combustion Air Flow per Burner	90,500 PPH
Combustion Air Temperature	100°F
Oil Pressure at Burner	80-120 psig*
Steam Pressure at Burner	20 psi greater than oil pressure
Gas Pressure at Ignitor	1-2 psig

Fuel Data:

Type	No. 2 Fuel Oil
Higher Heating Value	19,200 BTU/lb.
Pressure Available	Not specified*
Viscosity at Burner	35 SSU
Nitrogen	0.05% wt max.

If you need any additional information or clarifications I can be reached by telephone at extension 251 or by e-mail at [cmeady@hamworthy-peabody.com](mailto:cmeady@hamworthy-peabody.com) with any questions.

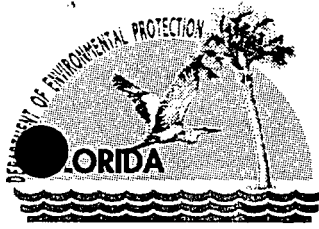
Yours truly,  
HAMWORTHY PEABODY COMBUSTION



Christine Meady  
Sr. Proposal Engineer

cc: L. Berry/HPC  
S. Brewer/HPC  
F. Odom/Sunbelt Energy  
file

Attachment



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

September 27, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William Raiola  
Sr. Vice President of Sugar Processing  
U. S. Sugar Corporation, Clewiston Sugar Mill and Refinery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440

Re: Project No. 0510003-027-AC  
Request for Additional Information  
U. S. Sugar Corporation – Clewiston Sugar Mill and Refinery  
Boilers 1 and 2, Replacement of Oil Burners

Dear Mr. Raiola:

On September 22, 2004, the Department received your application requesting authorization to replace the existing No. 6 fuel oil burner systems for Boilers 1 and 2 with new distillate oil burner systems at the Clewiston mill in Hendry County, Florida. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the requested items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please verify the following description of the new oil burner systems.

For each boiler, the existing No. 6 fuel oil burner system will be replaced with the following new equipment:

- Two new Peabody multi-stage combustion (MSC) burners with fuel/steam valve train, steam atomized center-fired oil gun, flame scanner, ignitor and flame proving rod;
- New burners will be a low-NOx type with a maximum emission rate of 0.15 lb/MMBtu;
- New multi-burner windbox with electrically operated modulating dampers;
- New combustion air fan with associated ductwork;
- New fuel oil pump set; and
- New burner management system.

Each burner will have a maximum heat input rate of 104 MMBtu/hour. With both burners, each boiler will have a maximum oil firing rate of 1541 gallons/hour. The new systems will allow the firing of distillate oil containing 0.05% sulfur by weight or less. After completing the project, all of the existing Clewiston sugar mill boilers will be permitted for firing distillate oil. The modified boilers will be able to produce approximately 156,000 pounds of steam per hour when firing only distillate oil. Bagasse will remain the primary fuel with distillate oil used as a startup and supplemental fuel when bagasse is unavailable or the supply is interrupted from the mill.

2. The application indicates that the new burners will incorporate a "low-NOx" design with a NOx emission rate of 0.15 lb/MMBtu. Please provide the vendor specification sheets describing the burners and emissions. Does U.S. Sugar have a manufacturer guarantee for this NOx emission rate? If so, please provide. Will performance tests be conducted to verify the manufacturer's NOx rate? Based on the PSD applicability analysis for this project, potential NOx emissions approach the PSD significant emission rate. The Department requires reasonable assurance of the maximum NOx emission rate for the burners.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the

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*Printed on recycled paper.*

State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

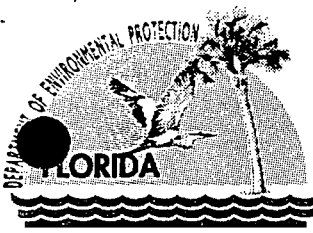
If you have any questions regarding this matter, please call me at 850/921-9536.

Sincerely,



Jeffery F. Koerner  
Air Permitting South Program

cc: Mr. David Buff, Golder Associates Inc.  
Mr. Ron Blackburn, DEP South District Office  
Mr. James Stormer, PBCHD  
Mr. Gregg Worley, EPA Region 4  
Mr. John Bunyak, NPS



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

September 27, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William Raiola  
Sr. Vice President of Sugar Processing  
U. S. Sugar Corporation, Clewiston Sugar Mill and Refinery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440

Re: Project No. 0510003-026-AC  
Request for Additional Information  
U. S. Sugar Corporation – Clewiston Sugar Mill and Refinery  
New Sugar Dryer No. 2

Dear Mr. Raiola:

On September 13, 2004, the Department received your application requesting the installation of a new sugar dryer for the existing refinery operations at the Clewiston mill in Hendry County, Florida. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the requested items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please verify the following description and details of the new dryer.

The new sugar dryer will be a fluidized bed-type dryer/cooler manufactured by Entoleter LLC with a rated capacity of 85 tons per hour of refined sugar. After wet refined sugar is centrifuged the dryer will be used to drive off remaining moisture. The dryer suspends sugar in a fluidized bed with jets of hot, conditioned air. A maximum of 11,000 pounds per hour of low pressure steam (12 psig) from the existing mill boilers will supply heat for the process. The refined sugar is then transferred to the conditioning silos. No other new equipment is being added.

*Dryer Inlet Conditions:* Sugar at 1.5% moisture; inlet temperature of 120° to 140° F

*Dryer Outlet Conditions:* Sugar at 0.03% moisture; outlet temperature of 92° to 102° F

2. The information in the following table was taken from the application. Please verify this data.

Table 1. Cyclone/Wet Scrubber Data – PM Loading and Removal

Point	Inlet Loading		Control Efficiency	Outlet Loading	
	lb/hour	gr/dscf		lb/hour	gr/dscf
From Centrifuges	---	---	---	11,760	14
Cyclones	11,760	14	~ 99%	118	0.14
Wet Scrubber	118	0.14	~ 96%	4.2	0.005
Overall	---	---	99.96%	---	---

Please provide any data available for the particle size distribution of the particulate matter (sugar).

3. What is the rated capacity of existing sugar dryer No. 1 (tons/hour of refined sugar)? Please detail the problems and causes of the problems associated with the baghouse on dryer No. 1. What steps have been taken to correct these problems? How many bags does the existing particulate control device have? What is the cost of a single bag? What is the labor cost for the replacement of a bag? When problems occur, how many bags are replaced on average? What

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is the down time for such a bag replacement? Must the refinery operations be shut down for such replacements? How many bags have been replaced during each of the past two years?

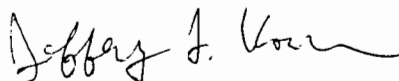
4. Based on the application, U.S. Sugar is requesting the following production restrictions: No more than 2000 tons of refined sugar per day and no more than 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than **2250** tons of refined sugar per day and no more than 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. These restrictions will replace those in Condition 2 in Section IIIF of Permit No. PSD-FL-272A. Is this correct?
5. Rule 62-212.400(3)(d), F.A.C. states, "Modifications Under Fifty Tons Per Year. If a proposed modification subject to the preconstruction review requirements of this rule would be made to a facility that was in existence on March 1, 1978, and would result in a net emissions increase of each pollutant listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates, of less than 50 tons per year after the application of BACT, such modification shall be exempt from the requirements of Rule 62-212.400(5)(d), (e), (f), and (g), F.A.C., **as they relate to any maximum allowable increase for a Class II area.**" From Rule 62-212.400(5), F.A.C. these are modeling requirements related to: (d) Ambient Impact Analysis, (e) Additional Impact Analysis, (f) Preconstruction Air Quality Monitoring and Analysis, and (g) Post Construction Monitoring.

After a discussion with our staff meteorologists, Rule 62-212.400(3)(d), F.A.C. does not waive any of the modeling requirements for Ambient Air Quality Standards (AAQS) or Class I areas. Please provide a modeling analysis of impacts from the project with regards to the AAQS and the affected Class I areas.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please call me at 850/921-9536.

Sincerely,



Jeffery F. Koerner  
Air Permitting South Program

cc: Mr. David Buff, Golder Associates Inc.  
Mr. Ron Blackburn, DEP South District Office  
Mr. James Stormer, PBCHD  
Mr. Gregg Worley, EPA Region 4  
Mr. John Bunyak, NPS



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- 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.

1. Article Addressed to:

Mr. William Raiola  
 Sr. Vice President of Sugar  
 Processing  
 U.S. Sugar Corporation  
 Clewiston Sugar Mill and Refinery  
 111 Ponce DeLeon Avenue  
 Clewiston, Florida 33440

2. Article Number

(Transfer from service label)

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PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

X

- Agent  
 Addressee

B. Received by (Printed Name)

C. Date of Delivery

9/30/04

D. Is delivery address different from item 1?  Yes

If YES, enter delivery address below:  No

3. Service Type

- Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

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Total Postage & Fees	\$

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Sent to: Mr. William Raiola  
 Sr. Vice President of Sugar Processing  
 Street, Apt. No., or PO Box No. 111 Ponce DeLeon Avenue  
 City Clewiston, Florida 33440

PS Form 3800, May 2000

See Reverse for Instructions

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax (352) 336-6603  
September 17, 2004



**RECEIVED**

0437618

**SEP 22 2004**

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

Attention: Mr. A. A. Linero, P. E., Administrator

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

Dear Mr. Linero:

Please find enclosed three (3) copies of an air construction permit application for modifications of the fuel oil burning capability of Boiler Nos. 1 and 2 at the Clewiston Mill. We believe that the new systems will not result in an increase in actual emissions of any pollutant above the PSD significant emission rates, and therefore PSD review does not apply. I have forwarded one (1) copy of the application to Ron Blackburn of the Department's 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/jkw

Enclosure

cc: Don Griffin  
Ron Blackburn, DEP

Y:\Projects\2004\0437618 USSC Birs 1 & 2\4\4.1\091704-618.doc

**AIR PERMIT APPLICATION  
TO MODIFY FUEL OIL BURNERS  
BOILER NOS. 1 AND 2  
*U.S. SUGAR CORPORATION  
CLEWISTON, FLORIDA***

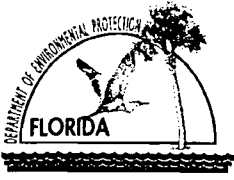
**Prepared For:  
United States Sugar Corporation  
111 Ponce DeLeon Ave.  
Clewiston, Florida 33440**

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

**September 2004  
0437618**

**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

RECEIVED

SEP 22 2004

### I. APPLICATION INFORMATION

BUREAU OF AIR RECREATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

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

**Air Operation Permit** – Use this form to apply for:

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

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

To ensure accuracy, please see form instructions.

#### Identification of Facility

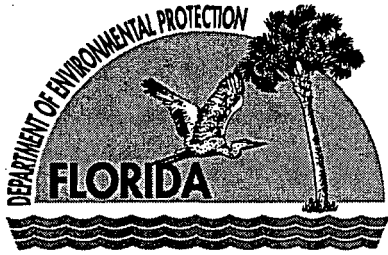
1. Facility Owner/Company Name: <b>United States Sugar Corporation</b>	
2. Site Name: <b>U.S. Sugar Clewiston Mill</b>	
3. Facility Identification Number: <b>0510003</b>	
4. Facility Location...: Street Address or Other Locator: <b>W.C. Owens Ave. and S.R. 832</b> City: <b>Clewiston</b> County: <b>Hendry</b> Zip Code: <b>33440</b>	
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: <b>William A. Raiola, Senior Vice President, Sugar Processing Operations</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>United States Sugar Corporation</b> Street Address: <b>111 Ponce DeLeon Ave.</b> City: <b>Clewiston</b> State: <b>Florida</b> Zip Code: <b>33440</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(863) 983-8121</b> ext. Fax: <b>(863) 902-2729</b>	
4. Application Contact Email Address: <b>wraiola@ussugar.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<b>9-22-04</b>
2. Project Number(s):	<b>0510003-037-AC</b>
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	



# Florida Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

## F A X T R A N S M I T T A L S H E E T

DATE: 9-22-04

TO: Golden Associates

PHONE: \_\_\_\_\_

FAX: 352-336-6603

FROM: Patricia Adams

PHONE: 850-921-9505

**Division of Air Resources Management**

FAX: **850.922.6979**

RE: \_\_\_\_\_

CC: \_\_\_\_\_

Total number of pages including cover sheet: ~~4~~ 3

### Message

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6241 NW 23RD STREET  
SUITE 500  
GAINESVILLE, FL 32653  
UNITED STATES US

Ship Date: 20SEP04  
Actual Wgt: 3.5 LB  
System#: 0049046/CAFE2224  
Account: S 100944294

TO MR. AL LINERO  
FDEP  
111 SOUTH MAGNOLIA DRIVE STE 4  
MAGNOLIA PARK COURTYARD  
TALLAHASSEE, FL 32301

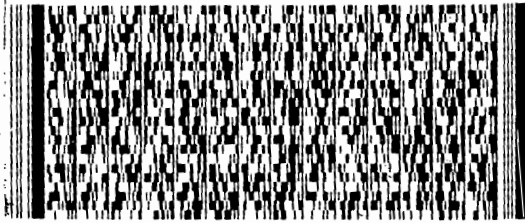
(850) 921-9530 **FedEx**  
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Barcode



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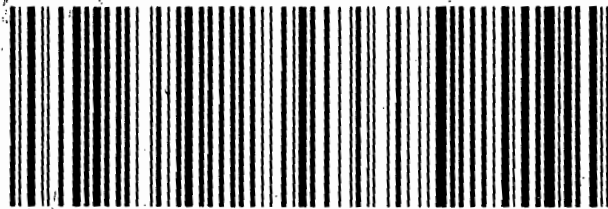
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**XH TLHA**

Part # 156148-434 NRIT 11-02



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<b>Signed for by</b>	J.AUXTINEE		/nav/mhr
<b>Ship date</b>	Sep 20, 2004	<b>Delivery location</b>	TALLAHASSEE, FL
<b>Delivery date</b>	Sep 22, 2004 9:20 AM	<b>Delivered to</b>	Receptionist/Front Desk
		<b>Service type</b>	Priority Box
		<b>Weight</b>	4.0 lbs.

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	4:56 AM In transit	MEMPHIS, TN	
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	12:07 AM Package data transmitted to FedEx; package not in FedEx possession		

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To

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## APPLICATION INFORMATION

### Purpose of Application

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

#### **Air Construction Permit**

Air construction permit.

#### **Air Operation Permit**

Initial Title V air operation permit.

Title V air operation permit revision.

Title V air operation permit renewal.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

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

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

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

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

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

### Application Comment

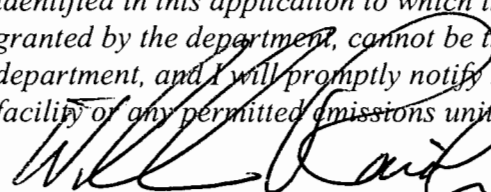
**Air Construction Permit application to modify the fuel oil burners on Boiler Nos. 1 and 2.**



APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name :	<b>William A. Raiola, Senior Vice President, Sugar Processing Operations</b>		
2. Owner/Authorized Representative Mailing Address...	Organization/Firm: <b>United States Sugar Corporation</b> Street Address: <b>111 Ponce DeLeon Ave.</b> City: <b>Clewiston</b> State: <b>FL</b> Zip Code: <b>33440</b>		
3. Owner/Authorized Representative Telephone Numbers...	Telephone: <b>(863) 983-8121</b>	ext.	Fax: <b>(863) 902-2729</b>
4. Owner/Authorized Representative Email Address:	<b>wraiola@ussugar.com</b>		
5. Owner/Authorized Representative Statement:	<p><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 of any permitted emissions unit.</i></p> <p> <span style="float: right;"><u>Sept. 17, 2004</u></span></p> <p>Signature <span style="float: right;">Date</span></p>		



APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: <b>David A. Buff</b> Registration Number: <b>19011</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>6241 NW 23<sup>rd</sup> Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 336-5600</b> ext. <b>545</b> Fax: <b>(352) 336-6603</b>
4. Professional Engineer Email Address: <b>dbuff@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i>  <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i>  <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i>  <i>(3) 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>  <i>(4) 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>  <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <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>9/17/04</u> A. BUFF Professional Engineer (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 <sub>2</sub>	A	No
Nitrogen Oxides - NO <sub>x</sub>	A	No
Carbon Monoxide - CO	A	No
Particulate Matter - PM <sub>10</sub>	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: <b>08/2003</b>
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: <b>03/2003</b>
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 or Modification: <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment A</b>
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment A</b>
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), 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(5)(h)5., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input 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] of [2]

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] of [2]

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 fuel oil with a maximum sulfur content of 0.05% by weight.**

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

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] of [2]  
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: <b>BLR-1</b>		2. Emission Point Type Code: <b>1</b>	
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: <b>V</b>	6. Stack Height: <b>213</b> feet	7. Exit Diameter: <b>8.0</b> feet	
8. Exit Temperature: <b>150 °F</b>	9. Actual Volumetric Flow Rate: <b>204,000</b> 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] of [2]  
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): <b>1-02-011-01</b>		3. SCC Units: <b>Tons Burned</b>
4. Maximum Hourly Rate: <b>68.89</b>	5. Maximum Annual Rate: <b>603,467</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>7.2</b>
10. Segment Comment: <b>Based on 496 MMBtu/hr and 3,600 Btu/lb wet bagasse.</b>		

**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): <b>1-02-005-01</b>		3. SCC Units: <b>1000 Gallons Burned</b>
4. Maximum Hourly Rate: <b>1.541</b>	5. Maximum Annual Rate: <b>3,500</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.05</b>	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>135</b>
10. Segment Comment: <b>Maximum hourly and annual rates based on proposed 208 MMBtu/hr and 3,500,000 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.</b>		



**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: <b>PM</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>124.0 lb/hour                      543.1 tons/year</b>		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: <b>0.25 lb/MMBtu</b>  Reference: <b>Permit No. 0510003-014-AV</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions: <b>Bagasse: 496 MMBtu/hr × 0.25 lb/MMBtu = 124.0 lb/hr</b> <b>124.0 lb/hr × 8,760 hr/yr × ton/2000 lb = 543.1 TPY</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Maximum emissions representative of bagasse firing.</b>			

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [1] of [2]  
Boiler No. 1

Page [1] of [10]  
Particulate Matter - Total

**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: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.25 lb/MMBtu</b>	4. Equivalent Allowable Emissions: <b>124.0 lb/hour      543.1 tons/year</b>
5. Method of Compliance: <b>EPA Method 5 or 17</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.</b>	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.1 lb/MMBtu</b>	4. Equivalent Allowable Emissions: <b>20.8 lb/hour      23.6 tons/year</b>
5. Method of Compliance: <b>EPA Method 5 or 17</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Rule 62-296.410, F.A.C. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 mos.</b>	

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] of [2]  
Boiler No. 1

Page [2] of [10]  
Particulate Matter – PM<sub>10</sub>

**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: <b>PM<sub>10</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>115.3 lb/hour                      505.1 tons/year</b>		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: <b>93% of PM</b>  Reference: <b>Test data</b>		7. Emissions Method Code: <b>1</b>	
8. Calculation of Emissions: <b>124.0 lb/hr × 0.93 = 115.3 lb/hr</b>  <b>543.1 TPY × 0.93 = 505.1 TPY</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Maximum emissions representative of bagasse firing.</b>			

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]  
Boiler No. 1

**POLLUTANT DETAIL INFORMATION**

Page [2] of [10]  
Particulate Matter - PM<sub>10</sub>

**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**

**POLLUTANT DETAIL INFORMATION**

Section [1] of [2]  
Boiler No. 1

Page [3] of [10]  
Sulfur Dioxide

**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: <b>SO<sub>2</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>29.8 lb/hour                      130.3 tons/year</b>	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: <b>0.06 lb/MMBtu and 0.05% of S Oil</b>  Reference: <b>Industry Test Data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>Bagasse: 496 MMBtu/hr × 0.06 lb/MMBtu = 29.76 lb/hr</b> <b>Fuel Oil: 208 MMBtu/hr × 0.053 lb/MMBtu = 11.1 lb/hr</b>  <b>Annual: 29.76 lb/hr × 8,760 hr/yr × ton/2,000 lb = 130.3 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Fuel oil based on 0.05% sulfur oil. See Attachment UC-EU1-F9 for potential emissions due to fuel oil firing.</b>	

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [1] of [2]  
Boiler No. 1

Page [3] of [10]  
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: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.05 % sulfur oil</b>	4. Equivalent Allowable Emissions: <b>11.1 lb/hour      12.6 tons/year</b>
5. Method of Compliance: <b>Fuel oil analysis.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Requested limit. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 mos. See Attachment UC-EU1-F9 for calculations.</b>	

**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] of [2]  
Boiler No. 1

Page [4] of [10]  
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: <b>NO<sub>x</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>99.2 lb/hour                      434.5 tons/year</b>	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: <b>0.20 lb/MMBtu</b>  Reference: <b>Industry test data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>Bagasse: 0.20 lb/MMBtu × 496 MMBtu/hr = 99.2 lb/hr</b> <b>99.2 lb/hr × 8,760 hr/yr × ton/2,000 lb = 434.5 TPY</b>  <b>Fuel oil: 0.15 lb/MMBtu × 208 MMBtu/hr = 31.2 lb/hr</b> <b>472,500 MMBtu/yr × 0.15 lb/MMBtu × ton/2,000 lb = 35.4 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See Attachment UC-EU1-F9 for potential emissions due to fuel oil firing.</b>	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]  
Boiler No. 1

**POLLUTANT DETAIL INFORMATION**

Page [4] of [10]  
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):	

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [1] of [2]  
Boiler No. 1

Page [5] of [10]  
Carbon Monoxide

**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: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>3,224 lb/hour      14,121.1 tons/year</b>		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: <b>6.5 lb/MMBtu</b>  Reference: <b>Industry test data</b>		7. Emissions Method Code: <b>1</b>	
8. Calculation of Emissions: <b>Bagasse: 6.5 lb/MMBtu × 496 MMBtu/hr = 3,224 lb/hr</b> <b>3,224 lb/hr × 8,760 hr/yr ÷ 2,000 lb/ton = 14,121.1 TPY</b>  <b>Fuel oil: 0.037 lb/MMBtu × 208 MMBtu/hr = 7.7 lb/hr</b> <b>472,500 MMBtu/yr × 0.037 lb/MMBtu × ton/2,000 lb = 8.8 TPY</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See Attachment UC-EU1-F9 for potential emissions due to fuel oil firing.</b>			

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [1] of [2]  
Boiler No. 1

Page [5] of [10]  
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: 744.0 lb/hour      3,258.7 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: 1.50 lb/MMBtu  Reference: Industry test data	7. Emissions Method Code: 0
8. Calculation of Emissions: <b>Bagasse: 1.50 lb/MMBtu × 496 MMBtu/hr = 744.0 lb/hr</b> <b>744.0 lb/hr × 8,760 hr/yr ÷ 2,000 lb/ton = 3,258.7</b>  <b>Fuel oil: 0.0015 lb/MMBtu × 208 MMBtu/hr = 0.3 lb/hr</b> <b>472,500 MMBtu/yr × 0.0015 lb/MMBtu × ton/2,000 lb = 0.35 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: See Attachment UC-EU1-F9 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):	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

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: <b>VE30</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>30 %</b> Exceptional Conditions: <b>40 %</b> Maximum Period of Excess Opacity Allowed: <b>2 min/hour</b>	
4. Method of Compliance: <b>DEP Method 9</b>	
5. Visible Emissions Comment: <b>Permit No. 0510003-014-AV and Rule 62-296.410(1)(b)1., F.A.C.</b>	

**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] of [2]

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: <b>PRS</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>Custom Design</b> Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors pressure drop across wet scrubber. Monitored to ensure proper operation of scrubber.</b>	

**Continuous Monitoring System:** Continuous Monitor 2 of 6

1. Parameter Code: <b>FLOW</b>	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ITT Barton or equivalent</b> Model Number: <b>Flowco F500</b> Serial Number: <b>see comment</b>	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Permit No. 0510003-014-AV. Monitors fuel oil flow to Boiler No. 1. No serial # or installation date provided because monitors are routinely replaced to ensure optimum performance.</b>	



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

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: <b>Nozzle Pressure</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621G</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors wet scrubber spray nozzle pressure.</b>	

**Continuous Monitoring System:** Continuous Monitor 4 of 6

1. Parameter Code: <b>Steam Temp</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>Preferred Instruments or equivalent</b> Model Number: <b>PCC-III Controller</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam temperature.</b>	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]  
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: <b>Steam Pressure</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621G</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam pressure.</b>	

**Continuous Monitoring System:** Continuous Monitor 6 of 6

1. Parameter Code: <b>FLOW</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621D</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam flow rate.</b>	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]  
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 _____
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-I2</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input 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] of [2]  
Boiler No. 1

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input 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 checked="" type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

Boiler No. 1

**Additional Requirements Comment**

**ATTACHMENT UC-EU1-F9**

**POTENTIAL EMISSIONS  
DUE TO FUEL OIL FIRING**

## Attachment UC-EU1-F9. 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 <sup>a</sup> MMBtu/hr	Annual <sup>b</sup> MMBtu/yr		
Particulate Matter (PM)	0.015	1	208	472,500	3.1	3.5
Particulate Matter (PM <sub>10</sub> )	0.007	2	208	472,500	1.5	1.8
Sulfur Dioxide (SO <sub>2</sub> )	0.053	3	208	472,500	11.1	12.6
Nitrogen Oxides (NO <sub>x</sub> )	0.15	4	208	472,500	31.2	35.4
Carbon Monoxide (CO)	0.037	1	208	472,500	7.7	8.8
Volatile Organic Compounds (VOC)	1.5E-03	1	208	472,500	0.3	0.35
Sulfuric Acid Mist (SAM)	0.0026	1	208	472,500	0.5	0.6
Lead (Pb)	9.0E-06	5	208	472,500	1.9E-03	2.1E-05
Beryllium (Be)	3.0E-06	5	208	472,500	6.2E-04	7.1E-06
Mercury (Hg)	3.0E-06	5	208	472,500	6.2E-04	7.1E-04

## 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 SO<sub>3</sub>. Convert to H<sub>2</sub>SO<sub>4</sub> by multiplying by 98/80. Factors were converted to lb/MMBtu by dividing by 135,000 Btu/gal.  
 PM = 2 lb/1000 gal  
 CO = 5 lb/1000 gal  
 SO<sub>3</sub> = 5.7S lb/1000 gal, where S = 0.05      VOC = 0.2 lb/1000 gal
- Factors for distillate fuel oil, PM<sub>10</sub> 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; 0.05% sulfur.
- Burner manufacturer's predicted emissions for Peabody MSC low-NOx burners.
- Factors for No. 2 fuel oil combustion, AP-42 Table 1.3-10 (9/98).

## Note:

- <sup>a</sup> Based on proposed maximum heat input due to No. 2 fuel oil combustion, calculated as follows:  
 104 MMBtu/hr per burner x 2 burners = 208 MMBtu/hr
- <sup>b</sup> Based on No. 2 fuel oil usage of 3,500,000 gallons per year and heating value of 135,000 Btu/gal.

**ATTACHMENT UC-EU1-I2**

**FUEL ANALYSIS**



ATTACHMENT UC-EU1-I2

Boiler Nos. 1 and 2  
Fuel Analysis

Parameter	Fuel	
	Carbonaceous Fuel <sup>a</sup>	No. 2 Fuel Oil (0.05% S max)
Density (lb/gal)	--	7.2 <sup>c</sup>
Approximate Heating Value (Btu/lb)	3,600 <sup>b</sup>	19,910
Approximate Heating Value (Btu/gal)	--	135,000-139,000
<u>Ultimate Analysis (dry basis):</u>		
Carbon	48.48%	87.3% <sup>d</sup>
Hydrogen	6.01%	12.6% <sup>d</sup>
Nitrogen	0.33%	0.22% <sup>d</sup>
Oxygen	43.65%	0.04% <sup>d</sup>
Sulfur	0.01% - 0.40%	0.05%
Ash/Inorganic	0.2% - 8.6%	<0.001% <sup>c</sup>
Moisture	50% - 55%	0.05%

Note:

<sup>a</sup> Source: sugar industry fuel analysis averages.

<sup>b</sup> Wet basis for bagasse.

<sup>c</sup> Source: Marathon Ashland Petroleum LLC; Coastal Fuels.

<sup>d</sup> 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-I7****LIST OF APPLICABLE REGULATIONS**

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

## EMISSIONS UNIT INFORMATION

Section [2] of [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] of [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: <b>A</b>	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: <b>20</b>	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--------------------------------	--------------------------	--	--

9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

10. Generator Nameplate Rating: \_\_\_\_\_ MW

11. Emissions Unit Comment:

**Vibrating grate boiler fired by carbonaceous fuel and fuel oil with a maximum sulfur content of 0.05% by weight.**

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

Boiler No. 2

**Emissions Unit Control Equipment**

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

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



**EMISSIONS UNIT INFORMATION**

Section [2] of [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: <b>BLR-1</b>		2. Emission Point Type Code: <b>1</b>	
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: <b>V</b>		6. Stack Height: <b>213</b> feet	
		7. Exit Diameter: <b>8.0</b> feet	
8. Exit Temperature: <b>150 °F</b>		9. Actual Volumetric Flow Rate: <b>201,000</b> 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] of [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): <b>1-02-011-01</b>		3. SCC Units: <b>Tons Burned</b>
4. Maximum Hourly Rate: <b>62.08</b>	5. Maximum Annual Rate: <b>543,850</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Based on 447 MMBtu/hr and 3,600 Btu/lb wet bagasse.		

**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): <b>1-02-005-01</b>		3. SCC Units: <b>1,000 Gallons Burned</b>
4. Maximum Hourly Rate: <b>1.541</b>	5. Maximum Annual Rate: <b>3,500</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.05</b>	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>135</b>
10. Segment Comment: Maximum hourly and annual rates based on proposed 208 MMBtu/hr and of 3,500,000 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 [2] of [2]  
Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [1] of [10]  
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: <b>PM</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>111.8 lb/hour                      490 tons/year</b>		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: <b>0.15 lb/MMBtu</b>  Reference: <b>Permit No. 0510003-014-AV</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions: <b>Bagasse: 447 MMBtu/hr × 0.25 lb/MMBtu = 111.8 lb/hr</b> <b>111.8 lb/hr × 8,760 hr/yr × ton/2000 lb = 490 TPY</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Maximum emissions representative of bagasse firing.</b>			

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]  
Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [1] of [10]  
Particulate Matter - Total

**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: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.25 lb/MMBtu</b>	4. Equivalent Allowable Emissions: <b>111.8 lb/hour      490 tons/year</b>
5. Method of Compliance: <b>EPA Method 5 or 17</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit No. 0510003-014-AV. Emissions representative of bagasse firing only.</b>	

**Allowable Emissions Allowable Emissions 2 of 2**

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.1 lb/MMBtu</b>	4. Equivalent Allowable Emissions: <b>20.8 lb/hour      23.6 tons/year</b>
5. Method of Compliance: <b>EPA Method 5 or 17</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Rule 62-296.410, F.A.C. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 mos.</b>	

**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] of [2]  
Boiler No. 2

Page [2] of [10]  
Particulate Matter – PM<sub>10</sub>

**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: <b>PM<sub>10</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>104.0 lb/hour      455.7 tons/year</b>	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: <b>93% of PM</b>  Reference: <b>Test data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>111.8 lb/hr × 0.93 = 104.0 lb/hr</b>  <b>490 TPY × 0.93 = 455.7 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Maximum emissions representative of bagasse firing.</b>	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]  
Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [2] of [10]  
Particulate Matter - PM<sub>10</sub>

**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**

**POLLUTANT DETAIL INFORMATION**

Section [2] of [2]  
Boiler No. 2

Page [3] of [10]  
Sulfur Dioxide

**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: <b>SO<sub>2</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>26.82 lb/hour      117.5 tons/year</b>	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: <b>0.06 lb/MMBtu and 0.05% of S Oil</b>  Reference: <b>Industry Test Data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>Bagasse: 447 MMBtu/hr × 0.06 lb/MMBtu = 26.82 lb/hr</b> <b>Fuel Oil: 208 MMBtu/hr × 0.053 lb/MMBtu = 11.1 lb/hr</b>  <b>Annual: 26.82 lb/hr × 8,760 hr/yr × ton/2,000 lb = 117.5 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Fuel oil based on 0.05% sulfur oil. See Attachment UC-EU2-F9 for potential emissions due to fuel oil firing.</b>	

**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: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.05 % sulfur oil</b>	4. Equivalent Allowable Emissions: <b>11.1 lb/hour      12.6 tons/year</b>
5. Method of Compliance: <b>Fuel oil analysis.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Requested limit. Emissions representative of fuel oil firing. Annual emissions based on 3,500,000 gallons per any consecutive 12 mos. See Attachment UC-EU2-F9 for calculations.</b>	

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 [2] of [2]  
Boiler No. 2

Page [4] of [10]  
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: <b>NO<sub>x</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>89.4 lb/hour                      391.6 tons/year</b>	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: <b>0.20 lb/MMBtu</b>  Reference: <b>Industry test data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>Bagasse: 0.20 lb/MMBtu × 447 MMBtu/hr = 89.4 lb/hr</b> <b>89.4 lb/hr × 8,760 hr/yr × ton/2,000 lb = 391.6 TPY</b>  <b>Fuel oil: 0.15 lb/MMBtu × 208 MMBtu/hr = 31.2 lb/hr</b> <b>472,500 MMBtu/yr × 0.15 lb/MMBtu × ton/2,000 lb = 35.4 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See Attachment UC-EU2-F9 for potential emissions due to fuel oil firing.</b>	

**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**

**POLLUTANT DETAIL INFORMATION**

Section [2] of [2]  
Boiler No. 2

Page [5] of [10]  
Carbon Monoxide

**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: <b>CO</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>2,905.5 lb/hour      12,726.1 tons/year</b>	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: <b>6.5 lb/MMBtu</b>  Reference: <b>Industry test data</b>	7. Emissions Method Code: <b>1</b>
8. Calculation of Emissions: <b>Bagasse: 6.5 lb/MMBtu × 447 MMBtu/hr = 2,905.5 lb/hr</b> <b>2,905.5 lb/hr × 8,760 hr/yr ÷ 2,000 lb/ton = 12,726.1 TPY</b>  <b>Fuel oil: 0.037 lb/MMBtu × 208 MMBtu/hr = 7.7 lb/hr</b> <b>472,500 MMBtu/yr × 0.037 lb/MMBtu × ton/2,000 lb = 8.8 TPY</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See Attachment UC-EU2-F9 for potential emissions due to fuel oil firing.</b>	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]  
Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [5] of [10]  
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):	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]  
Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [6] of [10]  
Volatile Organic Compound

**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: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>670.5 lb/hour      2,936.8 tons/year</b>		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: <b>1.50 lb/MMBtu</b>  Reference: <b>Industry test data</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions: <b>Bagasse: 1.50 lb/MMBtu × 447 MMBtu/hr = 670.5 lb/hr</b> <b>670.5 lb/hr × 8,760 hr/yr ÷ 2,000 lb/ton = 2,936.8 TPY</b>  <b>Fuel oil: 0.0015 lb/MMBtu × 208 MMBtu/hr = 0.3 lb/hr</b> <b>472,500 MMBtu/yr × 0.0015 lb/MMBtu × ton/2,000 lb = 0.35 TPY</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See Attachment UC-EU2-F9 for potential emissions due to fuel oil firing.</b>			

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

Boiler No. 2

**POLLUTANT DETAIL INFORMATION**

Page [6] of [10]

Volatile Organic Compound

**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] of [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: <b>VE30</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>30 %</b> Exceptional Conditions: <b>40 %</b> Maximum Period of Excess Opacity Allowed: <b>2 min/hour</b>	
4. Method of Compliance: <b>DEP Method 9</b>	
5. Visible Emissions Comment: <b>Permit No. 0510003-014-AV and Rule 62-296.410(1)(b)1., F.A.C.</b>	

**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]** of **[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: <b>PRS</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>Custom Design</b> Model Number: _____ Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors pressure drop across wet scrubber. Monitored to ensure proper operation of scrubber.</b>	

**Continuous Monitoring System:** Continuous Monitor **2** of **6**

1. Parameter Code: <b>FLOW</b>	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ITT Barton or equivalent</b> Model Number: <b>Flowco F500</b> Serial Number: <b>see comment</b>	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Permit No. 0510003-014-AV. Monitors fuel oil flow to Boiler No. 2. No serial # or installation date provided because monitors are routinely replaced to ensure optimum performance.</b>	



**EMISSIONS UNIT INFORMATION**

Section [2] of [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: <b>Nozzle Pressure</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621G</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors wet scrubber spray nozzle pressure.</b>	

**Continuous Monitoring System:** Continuous Monitor 4 of 6

1. Parameter Code: <b>Steam Temp</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>Preferred Instruments or equivalent</b> Model Number: <b>PCC-III Controller</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam temperature.</b>	

**EMISSIONS UNIT INFORMATION**

Section **[2]** of **[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: <b>Steam Pressure</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621G</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam pressure.</b>	

**Continuous Monitoring System:** Continuous Monitor 6 of 6

1. Parameter Code: <b>FLOW</b>	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>ABB-Kent Taylor or equivalent</b> Model Number: <b>621D</b> Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Monitors steam flow rate.</b>	

**EMISSIONS UNIT INFORMATION**

Section [2] of [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 _____
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-I2</u> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input 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 <p>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.</p>
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]  
Boiler No. 2

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input 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 checked="" type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

Boiler No. 2

**Additional Requirements Comment**

**ATTACHMENT UC-EU2-F9**

**POTENTIAL EMISSIONS  
DUE TO FUEL OIL FIRING**

## Attachment UC-EU2-F9. 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 <sup>a</sup> MMBtu/hr	Annual <sup>b</sup> MMBtu/yr		
Particulate Matter (PM)	0.015	1	208	472,500	3.1	3.5
Particulate Matter (PM <sub>10</sub> )	0.007	2	208	472,500	1.5	1.8
Sulfur Dioxide (SO <sub>2</sub> )	0.053	3	208	472,500	11.1	12.6
Nitrogen Oxides (NO <sub>x</sub> )	0.15	4	208	472,500	31.2	35.4
Carbon Monoxide (CO)	0.037	1	208	472,500	7.7	8.8
Volatile Organic Compounds (VOC)	1.5E-03	1	208	472,500	0.3	0.35
Sulfuric Acid Mist (SAM)	0.0026	1	208	472,500	0.5	0.6
Lead (Pb)	9.0E-06	5	208	472,500	1.9E-03	2.1E-05
Beryllium (Be)	3.0E-06	5	208	472,500	6.2E-04	7.1E-06
Mercury (Hg)	3.0E-06	5	208	472,500	6.2E-04	7.1E-04

## 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 SO<sub>3</sub>. Convert to H<sub>2</sub>SO<sub>4</sub> by multiplying by 98/80. Factors were converted to lb/MMBtu by dividing by 135,000 Btu/gal.  
 $PM = 2 \text{ lb}/1000 \text{ gal}$   
 $CO = 5 \text{ lb}/1000 \text{ gal}$   
 $SO_3 = 5.7S \text{ lb}/1000 \text{ gal}$ , where  $S = 0.05$        $VOC = 0.2 \text{ lb}/1000 \text{ gal}$
- Factors for distillate fuel oil, PM<sub>10</sub> 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; 0.05% sulfur.
- Burner manufacturer's predicted emissions for Peabody MSC low-NOx burners.
- Factors for No. 2 fuel oil combustion, AP-42 Table 1.3-10 (9/98).

## Footnotes:

<sup>a</sup> Based on proposed maximum heat input due to No. 2 fuel oil combustion, calculated as follows:

$$104 \text{ MMBtu/hr per burner} \times 2 \text{ burners} = 208 \text{ MMBtu/hr}$$

<sup>b</sup> Based on No. 2 fuel oil usage of 3,500,000 gallons per year and heating value of 135,000 Btu/gal.

**ATTACHMENT UC-EU2-I7**

**OTHER INFORMATION  
REQUIRED BY RULE OR STATUTE**



**ATTACHMENT UC-EU2-17****LIST OF APPLICABLE REGULATIONS**

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

**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. 510003-014-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 some 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, 3, and 4 operate primarily during the crop season, which is typically October through June, to provide steam to the sugar mill and refinery. Boiler No. 7 operates year-around to provide steam to the sugar mill during the crop season and steam to the sugar refinery during the off-crop season. Boiler No. 7 is the primary boiler used to meet the steam demands of the refinery during the off-crop season. Boiler Nos. 1 through 4 can operate as backup units during the off-season when Boiler No. 7 is down for maintenance, repair, or during periods of unusually low steam demand.

Boiler Nos. 1 and 2 are currently 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 is limited to 248 MMBtu/hr and 1,500 gallons per hour (gal/hr).

U.S. Sugar is proposing 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 will be rated for a maximum heat input of 208 MMBtu/hr. To implement this increase, U.S. Sugar will need to make certain physical modifications to the fuel oil burner system, including replacing the existing burners. U.S. Sugar is proposing to burn distillate fuel oil with a maximum sulfur content of 0.05 percent, instead of the currently 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 will not change as a result of the changes to the fuel oil system.

The primary reason for increasing the steaming rate on oil for Boiler Nos. 1 and 2 is 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.

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. 6 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. During the crop season (defined as October through April of each year), the maximum sulfur content of the fuel oil is limited to 2.5 percent. During the off-season (May through September), the maximum sulfur content of the fuel oil burned in the boilers is 1.60 percent. The maximum heat input to each boiler from fuel oil only is limited to 248 MMBtu/hr and 1,500 gal/hr.

U.S. Sugar is proposing to replace the existing No. 6 fuel oil burners on Boiler Nos. 1 and 2 with new No. 2 fuel oil burners. The current maximum fuel oil firing rate is 1,500 gal/hr. This will be increased to 1,541 gal/hr of No. 2 fuel oil [at 135,000 British thermal units per gallon (Btu/gal)] by installing two (2) No. 2 fuel oil burners, each rated at 104 MMBtu/hr, in each boiler. U.S. Sugar is proposing to burn distillate fuel oil with a maximum of 0.05 percent sulfur. Maximum annual fuel oil burning will be limited to 3,500,000 gallons per year (gal/yr) per boiler.

The new burners will allow each boiler to produce up to 156,000 lb/hr steam when firing fuel oil only, as calculated below:

$$208 \text{ MMBtu/hr} \times 80\text{-percent efficiency} \div 1,068 \text{ Btu/lb steam} = 156,000 \text{ lb/hr steam}$$

This calculation is based on an estimated 80-percent thermal efficiency when burning fuel oil only.

The more reliable steam generation from fuel oil will primarily be utilized during the crop season in the event of interrupted bagasse supply. Boiler Nos. 1 and 2 are used only as a backup when they are operated during the off-crop season. Boiler Nos. 1, 2, 3, 4, and 7 are used as the primary units that meet the steam demands of the sugar mill and refinery during the crop season. These boilers burn bagasse as the primary fuel to generate steam for the sugar mill and refinery. All of the boilers are fed by the same bagasse system. If the bagasse supply were to be interrupted, it would affect all five boilers. Under such conditions, when bagasse becomes unavailable due to bagasse conveyor breakdown, rainy conditions, etc., steam production may have to be reduced. At times like this,

typically U.S. Sugar cannot automatically start an additional boiler to help provide the needed steam. Cold startup of another boiler would take 12 to 24 hours.

Interruption of steam supply to the sugar mill and refinery results in operating inefficiencies. Equipment must be throttled back and sugar production is reduced. The sugar mill and refinery must then be operated longer hours to make up for the lost production. This results in increased labor and operating costs. With the more reliable fuel oil firing system, Boiler Nos. 1 and 2 can continue to provide sufficient steam to the mill and the refinery without significant interruption and minimal lost production time.

The physical changes to each Boiler Nos. 1 and 2 to implement the fuel oil burning upgrade consist of the following:

1. Two (2) new Peabody multi-stage combustion (MSC) low-nitrogen oxide ( $\text{NO}_x$ ) burners, with fuel/steam valve train, steam-atomized center-fired oil gun, flame scanner, and ignitor and flame proving rod;
2. New multi-burner windbox with electrically operated modulating dampers;
3. New combustion air fan and ductwork;
4. New fuel oil pump set; and
5. New burner management system.

These components will replace the existing oil-firing system, which is more rudimentary (i.e., no burner management system).

The new burners will be low- $\text{NO}_x$  burners. To accommodate the burners, some refractory on the boiler will need to be removed, and then replaced after the new burners are installed. Removing of some steam tubes in the area of the new burners will also be required.

The furnace volume for Boiler Nos. 1 and 2 is approximately 9,670 cubic feet ( $\text{ft}^3$ ). Based on the maximum heat input due to fuel oil of 208 MMBtu/hr per boiler, the calculated heat release rate for fuel oil firing will be 21,500 Btu/hr- $\text{ft}^3$  for each boiler.

Bagasse firing rates, bagasse heat input rates, and maximum steam rates for Boiler Nos. 1 and 2 will not be affected by these proposed changes. Fuel oil will primarily be utilized when bagasse is not

available. U.S. Sugar intends to burn bagasse when it is available. Typically, No. 2 fuel oil is burned out of necessity.

## **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-F9 and UC-EU2-F9. 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 PM<sub>10</sub>), 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 208 MMBtu/hr and the proposed annual limit of 3,500,000 gallons of fuel oil per year per boiler.

Emissions of sulfur dioxide (SO<sub>2</sub>) 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 nitrogen oxides (NO<sub>x</sub>) are based on the manufacturer's predicted emissions of 0.15 lb/MMBtu for the Peabody MSC burners.

The past actual emissions from Boiler Nos. 1 and 2 due to fuel oil firing are presented in Table I. Detailed calculations are shown in Attachment B. 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 Florida Department of Environmental Protection (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 SO<sub>2</sub>, NO<sub>x</sub>, 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 SO<sub>2</sub>, NO<sub>x</sub>, 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 current 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-F9 and UC-EU2-F9.

As shown in Table 3, the proposed changes will not result in an hourly increase of SO<sub>2</sub>, NO<sub>x</sub>, 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-Year Average (TPY)
	Actual Emissions <sup>a</sup> (TPY)		Actual Emissions <sup>a</sup> (TPY)		
	2002	2003	2002	2003	
Particulate Matter (PM)	6.18	5.06	5.63	4.09	10.48
Particulate Matter (PM <sub>10</sub> )	5.25	4.30	4.79	3.48	8.91
Sulfur Dioxide (SO <sub>2</sub> )	46.41	38.64	42.28	31.27	79.30
Nitrogen Oxides (NO <sub>x</sub> )	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:

<sup>a</sup> 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 Modified Fuel Oil Firing Rates, Boiler No. 4, U.S. Sugar Corporation Clewiston

Regulated Pollutant	Boiler Nos. 1 & 2		Net Change in Emissions (TPY)	PSD Significant Emission Rate (TPY)	PSD Review Applies?
	Boiler Nos. 1 & 2 Past Actual Emissions <sup>a</sup> (TPY)	Boiler Nos. 1 & 2 Future Potential Emissions <sup>b</sup> (TPY)			
Particulate Matter (PM)	10.48	7.0	-3.5	25	NO
Particulate Matter (PM <sub>10</sub> )	8.91	3.5	-5.4	15	NO
Sulfur Dioxide (SO <sub>2</sub> )	79.30	25.2	-54.1	40	NO
Nitrogen Oxides (NO <sub>x</sub> )	32.24	70.9	38.6	40	NO
Carbon Monoxide (CO)	3.43	17.5	14.1	100	NO
Volatile Organic Compound (VOC)	0.19	0.70	0.51	40	NO
Lead - Total	1.0E-03	4.3E-05	-9.9E-04	0.6	NO
Sulfur Acid Mist (SAM)	3.50	1.2	-2.3	7	NO
Beryllium (Be)	1.9E-05	1.4E-05	-4.9E-06	4.0E-04	NO
Mercury (Hg)	7.8E-05	1.4E-03	1.3E-03	0.1	NO

Note:

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

<sup>b</sup> Based on proposed fuel oil firing rates. See Attachments UC-EU1-F9 and UC-EU2-F9 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 <sup>a</sup> (lb/hr)	Future <sup>b</sup> (lb/hr)	
Particulate Matter (PM)	22.8	3.1	No
Sulfur Dioxide (SO <sub>2</sub> )	172.5	11.1	No
Nitrogen Oxides (NO <sub>x</sub> )	70.5	31.2	No

Note:

<sup>a</sup> Based on 1,500 gal/hr of No. 6 fuel oil, and emission factors shown in Attachment B.

<sup>b</sup> Based on Attachments UC-EU1-F9 and UC-EU2-F9.

**ATTACHMENT B**

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

Table B-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 <sub>10</sub> )	1.205	(a)	188,782	113.77	13.06	(a)	804,298	5.25	119.02
Sulfur Dioxide (SO <sub>2</sub> )	0.073	1	188,782	6.89	115.40	5 (b)	804,298	46.41	53.30
Nitrogen Oxides (NO <sub>x</sub> )	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 PM<sub>10</sub> for bagasse, and 85% of PM is PM<sub>10</sub> 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 <sub>2</sub>	0.0101 lb/MMBtu	12/8/2000
NO <sub>x</sub>	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% SO<sub>2</sub> 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: SO<sub>3</sub> represents 3.6% of SO<sub>2</sub>; then convert to H<sub>2</sub>SO<sub>4</sub> (x 98/80).



Table B-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 <sub>10</sub> )	1.205	(a)	225,369	135.82	13.06	(a)	732,805	4.79	140.60
Sulfur Dioxide (SO <sub>2</sub> )	0.073	2	225,369	8.23	115.40	6 (b)	732,805	42.28	50.51
Nitrogen Oxides (NO <sub>x</sub> )	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 PM<sub>10</sub> for bagasse, and 85% of PM is PM<sub>10</sub> 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 <sub>x</sub>	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% SO<sub>2</sub> 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: SO<sub>3</sub> represents 3.6% of SO<sub>2</sub>; then convert to H<sub>2</sub>SO<sub>4</sub> (x 98/80).

Table B-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 <sub>10</sub> )	1.178	(a)	176,732	104.12	12.89	(a)	666,974	4.30	108.42
Sulfur Dioxide (SO <sub>2</sub> )	0.073	1	176,732	6.45	115.87	5 (b)	666,974	38.64	45.09
Nitrogen Oxides (NO <sub>x</sub> )	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 PM<sub>10</sub> for bagasse, and 85% of PM is PM<sub>10</sub> 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 <sub>2</sub>	0.0101 lb/MMBtu	12/8/2000
NO <sub>x</sub>	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% SO<sub>2</sub> 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: SO<sub>3</sub> represents 3.6% of SO<sub>2</sub>; then convert to H<sub>2</sub>SO<sub>4</sub> (x 98/80).

Table B-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 <sub>10</sub> )	1.333	(a)	216,540	144.29	12.89	(a)	539,742	3.48	147.77
Sulfur Dioxide (SO <sub>2</sub> )	0.360	2	216,540	38.98	115.87	6 (b)	539,742	31.27	70.25
Nitrogen Oxides (NO <sub>x</sub> )	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 PM<sub>10</sub> for bagasse, and 85% of PM is PM<sub>10</sub> 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.

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

PM	0.199 lb/MMBtu	11/18/2003
NO <sub>x</sub>	0.101 lb/MMBtu	1/4/1995
CO	9.838 lb/MMBtu	1994 - 1995

2. Based on average industry test data of 0.05 lb/MMBtu or less.

3. Based on test data for similar bagasse boiler. (Bryant Boilers 1, 2, and 3 average = 0.247 lb/MMBtu.)

4. Based on average industry test data of 3.4E-06 lb/MMBtu or less.

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% SO<sub>2</sub> 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: SO<sub>3</sub> represents 3.6% of SO<sub>2</sub>; then convert to H<sub>2</sub>SO<sub>4</sub> (x 98/80).

PLACE STICKER AT TOP OF ENVELOPE  
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1. Article Addressed to:

Mr. William Raiola  
Sr. Vice President of Sugar  
Processing  
U.S. Sugar Corporation  
Clewiston Sugar Mill and Refinery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440

2. Article Number  
(Transfer from service label)

7000 1670 0013 3110 3384

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee  
B. Received by (Printed Name)  
C. Date of Delivery  
9/30/04  
D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No

3. Service Type  
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 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

PS Form 3811, August 2001

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Sr. Vice President of Sugar Processing  
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111 Ponce DeLeon Avenue  
City  
Clewiston, Florida 33440

PS Form 3800, May 2000

See Reverse for Instructions

**PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT**

Florida Department of Environmental Protection  
Air Permit No. 0510003-027-AC  
United States Sugar Corporation, Clewiston Sugar Mill and Refinery  
Henry County, Florida

**Applicant:** The applicant for this project is the United States Sugar Corporation. The applicant's authorized representative is Mr. William A. Raioia, Senior 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 Henry County, Florida.

**Project:** The applicant proposes to replace the existing oil burner systems for Boilers 1 and 2 with new low-NOx burners. The boilers currently fire No. 6 fuel oil containing up to 2.5% sulfur by weight as a startup fuel and to supplement bagasse. The new system allows the firing of cleaner distillate oil containing no more than 0.05% sulfur by weight. Bagasse will remain the primary fuel with distillate oil used as a startup fuel and to supplement bagasse. These boilers supply steam to the mill during the sugarcane crop season and serve as backup units during the off-crop season for the refinery.

The existing Clewiston sugar mill/refinery is a major facility in accordance with Rule 62-212.400, F.A.C., the regulatory program for the Prevention of Significant Deterioration (PSD) of Air Quality. The existing facility is located in Henry County, which is an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. The project does not result in emissions increases that exceed the PSD significant emission rates specified in Rule 62-212.400, F.A.C. based on the application, past actual emissions, the requested restrictions, and representative emission factors for these units. Therefore, the project is not subject to PSD preconstruction review.

**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 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.

547093 CGS 1/20/05

**DEP ROUTING AND TRANSMITTAL SLIP**

TO: (NAME, OFFICE, LOCATION)

- 1. JEFF KOERNER - ARM
- 2. MAIL STATION #5505

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- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE: \_\_\_\_\_

COMMENTS:

ACTION/DISPOSITION:

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

FROM: MARA NASCA / SD      DATE: 1/25/05      PHONE: SC 748-6975

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1. Article Addressed to:  
 Mr. William A. Raiola, V.P. of  
 Sugar Processing Operations  
 United States Sugar Corporation  
 111 Ponce DeLeon Avenue  
 Clewiston, Florida 33440

2. Article Number  
 (Transfer from service label) 7000 2870 0000 7027 9942

**COMPLETE THIS SECTION ON DELIVERY**

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B. Received by (Printed Name) C. Date of Delivery  
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Mr. William A. Raiola, V.P. of Sugar Processing  
 Operations

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 Mr. William A. Raiola, V.P. of Sugar Processing  
 Street, Apt. No.; or PO Box No.  
 111 Ponce DeLeon Avenue  
 City, State, ZIP+ 4  
 Clewiston, Florida 33440

PS Form 3800, May 2000

See Reverse for Instructions

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Clewiston Sugar Mill and Reginery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440