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

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

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

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

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

Executed in Tallahassee, Florida.

Trina Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

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

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

Clerk Stamp

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

Victoria Gibson (Clerk) June 3, 2003 (Date)

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, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery 6/5/03

C. Signature
X [signature] ☐ Agent ☐ Addressee

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

7001 0320 0001 3692 5863

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

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

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

Postmark Here

Sent To
William A. Raiola
Street, Apt. No.; or PO Box No.
111 Ponce DeLeon Avenue
City, State, ZIP+4
Clewiston, FL 33440

7001 0320 0001 3692 5863

PS Form 3800, January 2001 See Reverse for Instructions

FINAL DETERMINATION

PERMITTEE

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

PROJECT

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

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

NOTICE AND PUBLICATION

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

COMMENTS

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

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

CONCLUSION

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

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE:

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

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

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

PROJECT AND LOCATION

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

STATEMENT OF BASIS

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

CONTENTS

Howard L. Rhodes 6/2/03

Howard L. Rhodes, Director (Date)
Division of Air Resources Management

FACILITY AND PROJECT DESCRIPTION

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

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

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

REGULATORY CLASSIFICATION

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

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

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

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

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

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

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

This section of the permit addresses the following emissions units.

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

COMPONENT REPAIRS AND REPLACEMENT

1. Schedule: This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]

2. Maintenance Activities: The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:

   - **Boiler 1**: tube replacements in the main generating bank, superheater, and air heater.
   - **Boiler 2**: tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
   - **Boiler 3**: tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
   - **Boiler 4**: tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
   - **Boiler 7**: stoker repairs; tube replacements in economizer

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

EMISSIONS AND PERFORMANCE REQUIREMENTS

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

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

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]

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

CONTENTS

SECTION 4. APPENDIX CF
CITATION FORMATS

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001"identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (NA);
    b. Determination of Prevention of Significant Deterioration (NA); and
    c. Compliance with New Source Performance Standards (NA).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Memorandum

Florida Department of Environmental Protection

TO: Howard Rhodes, DARM

THRU: Trina Vielhauer, BAR
Al Linero, NSR

FROM: Jeff Koerner, NSR

DATE: May 29, 2003

SUBJECT: Final Air Permit No. 0510003-022-AC
U.S. Sugar Corporation
Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

The Final Permit for this project is attached for your approval and signature, which authorizes a 3-year boiler maintenance project at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. The Department distributed an "Intent to Issue Permit" package on May 2, 2003. The applicant published the "Public Notice of Intent to Issue" in The Clewiston News on May 8, 2003. The Department received the proof of publication on May 15, 2003. No requests for administrative hearings were filed.

EPA Region 4 provided informal comments on evaluating PSD applicability if a project included "non-routine" physical changes. The Final Determination clarifies that the Department presumes that the proposed maintenance activities are routine based on U.S Sugar's claim and the available information. The permit requires U.S. Sugar to track and report progress of maintenance activities each year for further assessment of the nature of the project.

Day #90 is August 21, 2003. I recommend your approval of the attached Final Permit for this project.

Attachments

UNITED STATES SUGAR CORPORATION

Post Office Box 1207 • Clewiston, Florida 33440-1207
Telephone 863/983-8121

May 13, 2003

Florida Department of Environmental Protection
Bureau of Air Regulation
(111 S. Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

RE: United States Sugar Corporation, Clewiston Sugar Mill and Refinery Boiler Maintenance Project, Hendry County
Draft Air Permit No. 0510003-022-AC

Attention: Trina L. Vielhauer
Chief, Bureau of Air Regulation

Gentlemen:

We are enclosing the Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Construction Permit " was duly published in the legal section of the May 8, 2003 issue of *THE CLEWISTON NEWS*.

Sincerely,

UNITED STATES SUGAR CORPORATION

Donald Griffin
Project Manager, Specialty Sugar

DG: kcb
Enclosure
cc:
Phil Barbaccia – SD-DEP
David Buff, Golder Associates
William A. Raiola, USSC
Michael Low, USSC
Arthur Jacquelin, USSC
Peter Briggs, USSC

THE CLEWISTON NEWS

Published Weekly | Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida
County of Hendry

Before the undersigned authority, personally appeared Debra Miller, who on oath says she is the Editor of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement being a Public Notice of Intent to issue Air Construction Permit in the matter State of Florida Department of Environmental Protection

in the _____ court, was published in said newspaper in the issue(s) of May 8th, 2003

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.

Debra Miller

Sworn to and subscribed before me this 8th day of May, 2003

Tracy L. Rounds
Notary Public

RECEIVED
MAY 15 2003
BUREAU OF AIR REGULATION

Tracy L. Rounds
Commission #DD161434
Expires: Oct 28, 2006
Bonded Thru
Atlantic Bonding Co., Inc.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0510003-022-AC
U.S. Sugar Corporation
Clewiston Sugar Mill and Refinery
- Boiler Maintenance Project

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to U.S. Sugar Corporation (applicant) to perform repairs to boilers at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. The applicant's authorized representative is Mr. William A. Raiola, V.P. of Sugar Processing Operations. The applicant's mailing address is United States Sugar Corporation, Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through the milling process to the bagasse fired in the boilers and creates a very abrasive flue gas, which has lead to premature tube and component wear. For the 2003-2005 cane milling off seasons, the draft permit authorizes a maintenance project to maintain the boilers at normal operational levels and reliability for the upcoming cane milling seasons. Repairs primarily involve component tube replacements, but also include stoker maintenance, and overfire/distributor air fan replacements. In performing the repairs, U.S. Sugar is prohibited from increasing the capacity of any boiler or changing the basic design parameters such as fuel firing rates or heat input rates. The draft permit requires summary reports on completed repairs, updated repair schedules, emissions tests, and tested capacities. For this project, the Department does not believe that the proposed repairs are physical changes that will result in the increase in actual emissions of any pollutant.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 South Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400
Telephone: (850)488-0114

Department of Environmental Protection
Air Resources Section
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3381
Telephone: (239)332-6975

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

376222-CN 5/8/03

CERTIFIED MAIL

UNITED STATES SUGAR CORPORATION
POST OFFICE DRAWER 1207
CLEWISTON, FLORIDA 33440

7001 1940 0006 6170 9247

U.S.POSTAGE
MAY 13'03
$4.42

RETURN RECEIPT REQUESTED

Department of Environmental Protection
Bureau of Air Regulation
(111 South Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

32399+2400 01

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 2, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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. 0510003-022-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
3-Year Boiler Maintenance Project

Dear Mr. Raiola:

Enclosed is one copy of the draft permit to perform the requested boiler repairs at the existing Clewiston Sugar Mill and Refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The Department's "Technical Evaluation and Preliminary Determination", "Intent to Issue Permit", and the "Public Notice of Intent to Issue Permit" are also included.

The "Public Notice of Intent to Issue Permit" must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, Administrator of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Jeff Koerner at 850/921-9536.

Sincerely,

Trina Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

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
Vice President of Sugar Processing Operations
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
111 Ponce DeLeon Avenue
Clewiston, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Jeanette Taylor — B. Date of Delivery 5-5-03

C. Signature — X Jeanette Taylor — ☐ Agent ☐ Addressee

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

7001 0320 0001 3692 6167

PS Form 3811, July 1999 — Domestic Return Receipt — 102595-99-M-1789

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

7001 0320 0001 3692 6167

OFFICIAL USE

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

Postmark Here

Sent To William A. Raiola
Street, Apt. No.; or PO Box No. 111 Ponce DeLeon Avenue
City, State, ZIP+4 Clewiston, FL 33440

PS Form 3800, January 2001 — See Reverse for Instructions

In the Matter of an
Application for Air Permit by:

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

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

Draft Air Permit No. 0510003-022-AC
Clewiston Sugar Mill and Refinery
Facility ID No. 0510003
3-Year Boiler Maintenance Project
Hendry County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of Draft Permit attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below. The applicant, United States Sugar Corporation, applied on April 28, 2003 to the Department for a permit to perform off season repairs to existing boilers over the next three years. The project is located at the existing Clewiston Sugar Mill and Refinery located in Hendry County Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-210, and 62-212, F.A.C. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to perform proposed work. The Department intends to issue this air construction permit based on the belief that the applicant has provided reasonable assurances to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting 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 Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) and (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of Public Notice of Intent to Issue Air Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S. however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at

the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

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

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

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

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

Executed in Tallahassee, Florida.

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit package (including the Public Notice of Intent to Issue Air Construction Permit, 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 5/2/03 to the persons listed:

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

Clerk Stamp

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

Victoria Gibson (Clerk) May 2, 2003 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0510003-022-AC

U.S. Sugar Corporation
Clewiston Sugar Mill and Refinery
Boiler Maintenance Project

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to U.S. Sugar Corporation (applicant) to perform repairs to boilers at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. The applicant's authorized representative is Mr. William A. Raiola, V.P. of Sugar Processing Operations. The applicant's mailing address is United States Sugar Corporation, Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through the milling process to the bagasse fired in the boilers and creates a very abrasive flue gas, which has lead to premature tube and component wear. For the 2003-2005 cane milling off seasons, the draft permit authorizes a maintenance project to maintain the boilers at normal operational levels and reliability for the upcoming cane milling seasons. Repairs primarily involve component tube replacements, but also include stoker maintenance, and overfire/distributor air fan replacements. In performing the repairs, U.S. Sugar is prohibited from increasing the capacity of any boiler or changing the basic design parameters such as fuel firing rates or heat input rates. The draft permit requires summary reports on completed repairs, updated repair schedules, emissions tests, and tested capacities. For this project, the Department does not believe that the proposed repairs are physical changes that will result in the increase in actual emissions of any pollutant.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner

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

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

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 S. Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400
Telephone: 850/488-0114

Department of Environmental Protection
Air Resources Section
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901-3381
Telephone: 239/332-6975

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Draft Air Construction Permit No. 0510003-022-AC
Boiler Repair Project

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
New Source Review Section

May 2, 2003

{Filename: USSCC Repairs - TEPD}

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

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

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

Processing Schedule

01/28/03 *Meeting in Tallahassee*: Discussed NSR reform and routine maintenance and repair issues.

02/06/03 *U.S. Sugar's Letter*: Requested Department's concurrence that 3-year schedule of off season maintenance is normal and routine and does not require an air construction permit.

02/24/03 *Department's Letter*: Requested additional information from U.S. Sugar of repairs.

03/13/03 *Meeting in Clewiston*: Discussed proposed new Boiler 8 and routine maintenance and repair issues.

03/27/03 *U.S. Sugar's Letter*: Response to request for additional information on repairs.

04/18/03 *Meeting in Tallahassee*: Department provided a preliminary review of application for proposed new Boiler 8 and discussed routine maintenance and repair issues.

04/25/03 *Teleconference*: Department discussed that individual repair activities could be routine, but that overall 3-year effort may be non-routine; requested submittal of a minor source air construction permit. The 2003 maintenance activities for Boilers 4 and 7 (newest units) are considered routine.

04/25/03 *U.S. Sugar Letter*: As discussed in the teleconference, reaffirms that the 2003 maintenance activities for Boilers 4 and 7 (newest units) are considered routine and do not require a permit.

04/28/03 Application for 3-year maintenance project received by the Department.

Facility Description and Location

The United States Sugar Corporation (U.S. Sugar) operates the existing Clewiston sugar mill and refinery (SIC Nos. 2061 and 2062), which located 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). Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. A minor source draft permit was recently issued that authorizes the upgrade of the oil firing systems for Boiler 4 and 7. An application is also under review by the Department to add a new boiler (Boiler 8) and to retire existing Boiler 3.

Regulatory Categories

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

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

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

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

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

Project Description

During harvest, sand and soil cling to the sugarcane stalk. Although the cane is washed prior to milling, some inert materials carry through the milling process to the bagasse that is fired in the boilers. This makes the boiler flue gas very abrasive and causes metal wastage and component wear. For this reason, the sugars mills have an aggressive off season inspection and maintenance program to identify problems and perform required repairs. Florida's sugarcane milling season, which typically lasts from October through April, provides a recurring five months each year to conduct such work.

In 1985, about 30% of the sugarcane processed at the Clewiston Mill was harvested from sand fields as opposed to muck fields. Over the last 15 years, this percentage has steadily grown and now the percentage of cane from sand fields is nearly 70%. As previously mentioned the sand is difficult to wash out and accelerates the erosion of metal tubes and components. The shift to cane from sand fields has exacerbated the maintenance activities.

U.S. Sugar proposes to conduct the following repairs and replacements during the 2003 – 2005 off seasons:

- Boiler 1: tube replacements in the main generating bank; tube replacements in the superheater; and tube replacements in the air heater.
- Boiler 2: tube replacements in the roof, front, and sidewalls; tube replacements in the main generating bank; tube replacements in the superheater; tube replacements in the air heater; replacement of overfire air fan; and replacement of distributor air fan.
- Boiler 3: tube replacements in the main generating bank; and tube replacements in the superheater.
- Boiler 4: tube replacements in sidewall; tube replacement in main generating bank; tube replacements in screenwall; tube replacements in the superheater tube replacements in the superheater; and tube replacements in the air heater.
- Boiler 7: tube replacements in economizer; and stoker repairs.

All of the boilers undergo periodic refractory repair. The off season maintenance activities are intended to maintain the boilers at current steam production capabilities for the upcoming cane milling seasons and continued normal operating levels. After further inspection, some activities may not be required to the extent requested and other similar minor activities may be necessary. The total costs of these repairs are estimated at approximately $4.5 million over the next three years. U.S Sugar believes that the proposed maintenance, repair, and replacement of components are routine for the sugar industry.

2. APPLICABLE REGULATIONS

State Regulations

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

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

PSD Applicability and Preconstruction Review

The Department regulates major air pollution sources 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 only in areas currently in attainment with the National Ambient Air Quality Standard (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 of any regulated pollutant, or

≥ 100 tons per year of any regulated pollutant and belonging to one of 28 PSD Major Facility Categories, or

≥ 5 tons per year of lead.

For new projects at 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.

3. DEPARTMENT'S REVIEW

Sugar Industry Practices

The sugar industry in Florida is an agricultural operation that revolves around the seasonal harvest and processing of sugarcane from October through about April of each year. At a certain maturity, the sugar content of cane reaches its highest level and then begins to gradually decrease. It is important to cut the cane at the proper time to maximize sugar production. Once cut, purity of the sucrose begins to decline and the useful sugar content is reduced. Therefore, it is equally important to process the cane as rapidly as possible.[1]

For these reasons, the mill boilers operate almost continually until the entire crop is processed. Facilities that can shorten the milling season will reduce operating costs. Reliability of the equipment is an important consideration. The agricultural cycle in Florida provides a five-month off season, which is used to perform boiler maintenance and repairs. The off season work is intended to maintain each unit at normal operational levels and increase the reliability.

Site inspections performed by District and Local Air Programs verify that each mill routinely performs a variety of off season maintenance. Each facility performs work necessary to restore each boiler to the current operating levels and reliability for the upcoming year. The most common work performed includes tube replacements for the main generating bank, economizers, superheaters, and air heaters in addition to repairs of the grates, refractory, wet scrubbers, and stacks.[2]

Comparison to Coal-Fired Boilers

The major components of a boiler include: furnace/convection pass; steam drum; lower drum; waterwall tubing;

superheater; economizer; air preheaters; fuel feed grates; supplemental fuel burners; and forced/induced draft fans. Of course, all of this equipment is subject to normal wear and tear. The steam drum is probably the most expensive single boiler component and would be expected to last the life of the unit. The superheater is a critical component that is continually exposed to high temperatures and flue gas erosion. For comparison, repair or replacement of the superheater for a coal-fired boiler might be required every 20 years. Other components are replaced or repaired more frequently subject to the given operating conditions. The expected useful life of a coal-fired boiler is estimated at approximately 30 to 55 years. [3]

Based on industry references for coal-fired boilers, about 80% to 90% of all forced outages are due to waterwall, superheater, air preheater, and economizer tubing leaks. Although several factors can lead to tubing leaks, boiler manufacturers recognize the potential abrasive nature of the flue gas and recommend regular inspections for equipment in the gas path. Excessive metal "wastage" from erosion can result in premature tube failure. While economizers typically experience the most metal erosion, superheaters can suffer as well. Industry practices have been developed for evaluating and measuring metal wastage as well as standard operating procedures for performing tubing replacements. However, it is not uncommon to contract skilled labor to perform such repairs. It is also recognized that the flue gas is much more abrasive in carbonaceous fuel-fired boilers than coal-fired boilers. Therefore, it is reasonable to expect that inspections would occur more often, repairs would be more extensive, and maintenance activities would be more frequent for a boiler firing carbonaceous fuels. This has been the observed case for the sugar industry. [1, 3, 4]

Problems Related to Sand

The proposed repairs include components subject to wear and erosion that are in direct contact with the boiler exhaust flue gas. Harvested sugarcane contains sand and soil on the stalk and leaves. Although the cane is washed during processing, some sand carries through to the boiler operations and increases the abrasiveness of the boiler flue gas causing accelerated wear of downstream equipment. Component metal is actually eroded from the equipment surface. Similar boiler industry references indicate that the ash from wood/bark fired boilers is predominantly silica and much more abrasive in nature than the ash from coal-fired units. [1, 3] This would result in an accelerated maintenance schedule.

U.S. Sugar has noticed increasing wear in boiler components over the last 15 years. It is believed that normal component wear has been aggravated due to a gradual shift in processing more sugarcane from "sandy soils" than from "muck soils". Sugarcane harvested from sand acreage and processed at the Clewiston Mill has steadily increased from about 30% in 1985 to about 70% in 2002. Although harvested sugarcane typically contains significant amounts of silica on the leaves [1], it is reasonable to expect even higher levels from cane grown in sandy soils. As an indicator of the abrasiveness of the flue gas, a comparison of bagasse samples collected over the years shows the following levels of inert materials:

Table 3A. Inert Material Content of Sugar Mill Boiler Ash

Sugar Mill	Inert Materials in Ash , Percent by Weight, Dry		
	1978/1979 Season	1984/1985 Season	2001/2002 Season
U.S. Sugar Clewiston Mill	2.1%	3.53%	4.44%
U.S. Sugar Bryant Mill	---	1.98%	2.63%
Sugar Cane Growers Cooperative of Florida	1.0%	1.68%	1.74%
Atlantic Sugar Association	0.72%	1.11%	1.30%

This information supports U.S. Sugar's claim that component wear at the Clewiston Mill may be worse than at other mills and is getting worse. To further illustrate the issue, U.S. Sugar related the following history for Boiler 7, which was installed in 1997. The original design specified the flue gas exhaust fan to be placed prior to the ESP and without any pre-controls. The flue gas from the boiler was so abrasive that components of the fan had to be replaced after only three months of operation. Ultimately, a wet cyclone separator (~ 50% removal

efficiency) was installed prior to the exhaust fan. This provided about three years before additional maintenance was required.

Again, Boiler 7 began operation in 1997 and is the most modern sugar mill boiler in Florida. In 2002, about $460,000 in repairs were performed, primarily to replace excessively worn superheater tubing. In 2003, approximately $267,000 of maintenance is scheduled to repair the fuel grate and replace economizer tubing. This boiler has experienced only six years of operation. These are the types of repairs and representative costs that can be expected for maintaining such boilers at present operating levels given the existing conditions at the Clewiston Mill.

Consideration as a Routine Effort

For each boiler, the applicant provided a discussion of the nature, extent, purpose, frequency, and costs of the proposed project based on EPA's criteria for determining "routine" repair or replacement. These criteria are outlined in a May 2000 guidance letter from EPA that is commonly referred to as the Detroit Edison "Dense-Pack" Project. The following is the Department's summary of the proposed project as a whole.

Nature

- The boilers are major components of the mill and important to sugarcane processing.
- The proposed activities do not require any pre-approvals of state commissions.
- U.S. Sugar has characterized the proposed work as routine for the sugar industry in Florida. The Department understands that the types of activities identified are commonly performed by all of the mills during the cane milling off season. The extent, frequency, and perhaps costs may be greater for the proposed project than is typical for the Florida sugar industry.
- Most of the maintenance activities could not be performed while the boilers were functioning. However, the proposed work will be conducted during the normal five month off season, which is typically used to inspect each boiler and perform such repairs.
- Most of the materials, equipment and resources necessary to carry out the planned activities are not on site. Labor for most of the work will be contracted to an outside company.

Extent

- U.S. Sugar does not propose to replace an entire emissions unit, but rather component parts of the boilers.
- The repairs will take a significant amount of time to complete. However, the normal cycle of sugarcane processing affords more than sufficient time to complete the repairs.
- U.S. Sugar believes that the proposed work represents routine maintenance activities for the sugar industry in Florida. The Department believes that although most of the activities could be considered routine for the industry, the collection of activities (taken as a whole) can be viewed as a non-routine effort. However, this effort appears to be a reasonable response to the additional sand handled by the Clewiston boilers compared to boilers at other Florida sugar mills.
- The proposed work does not require the addition of new types of parts to existing equipment, only the replacement with functionally equivalent components. The majority of work involves the replacement of tubing that has been prematurely worn due to the sand problem. Although this type of replacement is common in Florida's sugar industry, the extent of the replacements may be greater than other similar mills.

Purpose

- U.S. Sugar asserts that the purpose of the effort is not to extend the useful life of the unit, but to maintain each boiler at current steam production capabilities for the upcoming cane milling seasons. U.S. Sugar did retire two bagasse-fired boilers (Boilers 5 and 6) as part of the 1997 project to construct Boiler 7, which was

subject to PSD preconstruction review. Boiler 7 is the most modern sugar mill boiler in Florida and controls particulate matter emissions with an ESP. Similarly, U.S. Sugar proposes to retire Boiler 3 as part of the project to add proposed new Boiler 8 to the mill, which is currently under review. The project does not appear to be an attempt to avoid PSD review.

- The proposed work is intended to keep each boiler in its present operating condition. The repairs will not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project will not increase the emission rates of any boiler, fuel capabilities, or the cane milling capacity of the plant.

Frequency

- The majority of this project involves the replacements of tubing, which is performed relatively frequently in the life of a typical sugar mill boiler. Similarly, grates and refractory are also repaired fairly frequently. Overfire air and distributor air fans are replaced less frequently.
- These types of repairs are typically performed at the Clewiston mill. However, due to the sand problem experienced at this mill, the frequency of these typical replacements appears to be increasing.

Cost

- None of the repairs approach 50% of the fixed capital costs to replace (or reconstruct) any boiler. The total cost of the project over the three years is estimated to be approximately $4.5 million. Of this total, approximately 75% is for contracted labor and the remaining 25% is for replacement materials. For perspective, replacement of an entire boiler would be approximately $5.5 to $8.5 million in equipment costs alone depending on size. The total project costs each year represent less than 5% of the estimated costs to replace the five boilers (purchased equipment costs).
- U.S. Sugar provided information indicating that the estimated annual maintenance costs for the entire "boiler room" would total approximately $8.1 million for the 2002/2003 fiscal year. These costs have ranged from $4.4 to $6.5 million over the last four previous years.
- All of the repair costs will be paid out of the operating budget.

The above categories are interrelated. No one factor by itself would conclusively render a project to be routine or not. Many of the individual proposed activities are typically performed for sugar mill boilers in Florida and could be considered routine. However, when considering the project as a whole, the Department believes that the project could be viewed as a non-routine effort resulting from complications due to the sand problems at this facility. As stated previously, U.S. Sugar believes that the proposed maintenance, repairs, and replacements of components are considered routine practices for the Florida sugar industry. Nevertheless, at the request of the Department, U.S. Sugar submitted an application for an air construction permit to authorize these activities.

Conclusion

In considering the 3-year project as a whole, the Department believes the maintenance activities may be a *non-routine* effort to maintain the boilers at present operating conditions. The repairs, mostly the replacement of tubing, involve components that are directly in the path of the boiler exhaust flue gas. Such work is typical off season maintenance for the Florida sugar industry. However, the metal wastage from boiler components at the Clewiston mill is not necessarily typical of Florida sugar mills. The shift to processing more cane from sand acreage at the Clewiston mill has caused accelerated wear and premature component replacements. The extent and frequency of repairs appear to be greater than for other similar facilities. However, the proposed work is a reasonable and prudent response to an identifiable problem. The Department will require a minor source permit to authorize the 3-year effort and provide a means to track progress.

PSD Applicability

Sugarcane processing, like all agricultural operations, may vary from year to year. Mills are subject to a variety factors that can affect annual production including drought, excessive rain, heat, freezes, pests, etc. However, since the 1998/1999 crop season, cane grinding at the Clewiston mill has not varied by more than 6% from an annual average of about $7.0 \times 10^{+06}$ tons. Since 1999, the steam demands at the plant (including the refinery) have not varied by more than 6% from an annual average of about 4.18 billion pounds. The amount of land in Florida available for sugarcane is not expanding, but rather contracting. In fact, the Talisman sugar mill was recently shut down and thousands of acres were returned to wetlands as part of the Everglades Restoration Project. The scheduled maintenance activities are intended to maintain each boiler at normal operation to meet the consistent annual steam demands of the mill and refinery. It is not reasonable to expect that the proposed changes would cause increased production or utilization.

Rule 62-210.200(169), F.A.C. defines a *modification* as, "Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility." The definition also states that a physical change shall not include the routine maintenance, repair, or replacement of component parts of an emissions unit or facility. Rule 62-212.400(4), F.A.C. provides a similar definition for purposes of PSD review. Although the Department believes that the 3-year maintenance project may be a non-routine effort, it does not believe that the proposed physical changes will result in any increases in the actual emissions. Therefore, the Department concludes that PSD review is not applicable to the project.

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. Florida's sugar industry has many distinctive factors as an agricultural operation with defined seasons for growing, harvesting, milling and refining. In addition, operating conditions at the Clewiston Mill may be unique within the industry. This determination was made on a case-by-case basis after careful review of the details and circumstances with regard to this specific project. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Satisfactory air quality modeling analyses for the Clewiston mill were review in 1996 (Boiler 7) and 2000/2001 (Boiler 4). The Department is currently reviewing an extensive modeling effort for the proposed new Boiler 8 project at the Clewiston mill. 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.

5. REFERENCES

1. Cane Sugar Handbook
   Meade and Chen; 1997, 10th Edition
2. *District and Local Program Inspections*: Personal experiences and conversations with engineers in the South District Office and the Palm Beach County Health Department.
3. Steam: Its Generation and Use
   Babcock and Wilcox; 1993, 40th Edition
4. Combustion Fossil Power
   Singer; Combustion Engineering, Inc.; ABB; 1991, 4th Edition

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. 0510003-022-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: October 1, 2005

PROJECT AND LOCATION

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

STATEMENT OF BASIS

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

CONTENTS

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

FACILITY AND PROJECT DESCRIPTION

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

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

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

REGULATORY CLASSIFICATION

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

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

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

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

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

RELEVANT DOCUMENTS

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

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at the above address.

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); and Appendix GC (General Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Operation Permit: As this construction permit does not alter any emissions standards, operational restrictions, or monitoring requirements specified in the current Title V operation permit, a revised application is not required. [Rules 62-4.070, F.A.C.]

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

This section of the permit addresses the following emissions units.

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

COMPONENT REPAIRS AND REPLACEMENT

1. Schedule: This permit authorizes a series of maintenance activities that are expected to occur during 2003, 2004, and 2005. In general, these repairs will occur during each milling off season (May through September). Specific repairs have not been linked to a given year to provide the permittee flexibility to perform work during the scheduled seasonal shutdown as identified below. The permittee shall summarize the repair activities for each year and update the schedule for the following years as required by Specific Condition No. 4 of this permit. [Rule 62-4.070(3), F.A.C.]

2. Maintenance Activities: The following general maintenance, repairs, and replacements are authorized to occur during the 2003, 2004, and 2005 cane milling off seasons:

   - **Boiler 1**: tube replacements in the main generating bank, superheater, and air heater.
   - **Boiler 2**: tube replacements in the roof, front, sidewalls, main generating bank, superheater, and air heater; replacement of overfire air and distributor air fans.
   - **Boiler 3**: tube replacements in the main generating bank and superheater. *{Permitting Note: Boiler 3 is proposed for retirement as part of the proposed new Boiler 8 project.}*
   - **Boiler 4**: tube replacements in sidewall, main generating bank, screenwall, superheater, and air heater ; repair lagging on superheater tubes
   - **Boiler 7**: stoker repairs; tube replacements in economizer

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

EMISSIONS AND PERFORMANCE REQUIREMENTS

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

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

REPORTS

4. Maintenance Summary Report: Within 60 days of beginning the cane milling season, the permittee shall submit a report to the Department's New Source Review Section that summarizes the following information: a general description of the work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; a revised schedule of maintenance and repair activities for the next off season. [Rule 62-4.070(3), F.A.C.]

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

CONTENTS

SECTION 4. APPENDIX CF
CITATION FORMATS

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001"identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX GC
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (NA);
    b. Determination of Prevention of Significant Deterioration (NA); and
    c. Compliance with New Source Performance Standards (NA).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

P.E. CERTIFICATION STATEMENT

PERMITTEE

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

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

PROJECT DESCRIPTION

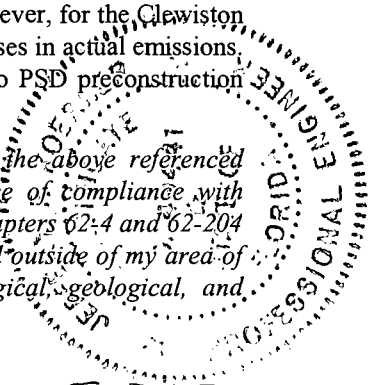
The United States Sugar Corporation (U.S. Sugar) operates the existing Clewiston Sugar Mill and Refinery in Hendry County, Florida. The facility includes five boilers that primarily fire bagasse to provide steam for the mill and refinery. In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through to bagasse fired in the boilers and creates a very abrasive flue gas, which has lead to premature tube and component wear. U.S. Sugar proposes a 3-year maintenance project to primarily replace tubes in the main generating banks, sidewalls, superheaters, economizers, and air heaters. Other work includes stoker repairs and the replacement of overfire/distributor air fans. The repairs are intended to maintain the boilers at current operating levels. U.S. Sugar believes that the repairs and replacements are routine for Florida's sugar industry and that a permit is not required.

In considering the 3-year project as a whole, the Department believes the maintenance activities may be a *non-routine* effort necessary to maintain the boilers at present operating conditions. The repairs, mostly the replacement of tubing, involve components that are directly in the path of the boiler exhaust flue gas. Such work is typical off season maintenance for the Florida sugar industry. However, the metal wastage from boiler components at the Clewiston mill is not necessarily typical of Florida sugar mills. The shift to processing more cane from sand acreage at the Clewiston mill has caused accelerated wear and premature component replacements. The extent and frequency of repairs appear to be greater than for other similar mills. However, the proposed work is a reasonable and prudent response to an identifiable problem. If cane from sand acreage continues to be processed at the current levels, then the extent and frequency of the repairs could later become routine for the Clewiston mill. The Department will require a minor source permit to authorize the proposed work and provide a means to track progress.

Sugarcane processing, like all agricultural operations, may vary from year to year. Mills are subject to a variety of factors that can affect annual production including droughts, excessive rainfall, heat waves, freezes, pests, etc. However, for the last four years, cane grinding and steam production at the Clewiston mill has not varied by more than 6% from an annual average for this period. The amount of land in Florida available for sugarcane is not expanding, but rather contracting with a portion returned to wetlands as part of the Everglades Restoration Project. It is not reasonable to expect that the proposed changes would cause increased production or utilization.

The Department's rules define a *modification* to be a physical change or a change in the method of operation that would result in an increase in the actual emissions of an emission unit or facility. The rules also state that a physical change shall not include the routine maintenance, repair, or replacement of component parts of an emissions unit or facility. The proposed work is recognized as a physical change that may not be routine. However, for the Clewiston mill, it is not reasonable to expect that the proposed physical changes will result in any increases in actual emissions. Therefore, the Department concludes that the project is not a modification that is 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

5-2-03
(Date)

Florida Department of Environmental Protection

Memorandum

TO: Trina Vielhauer, Chief
Bureau of Air Regulation

THROUGH: Al Linero, Manager
New Source Review Section

FROM: Jeff Koerner, New Source Review Section

DATE: May 2, 2003

SUBJECT: Draft Air Construction Permit No. 0510003-022-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
3-Year Boiler Repair Project

Attached for your review are the following items:

- Intent to Issue Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- PE Certification

The draft permit authorizes a 3-year repair project for boilers at the existing Clewiston mill located in Hendry County, Florida. The draft permit describes the types of activities to be performed in general terms (mostly tube replacements) and provides the flexibility to respond to other similar work resulting from actual inspections. It also requires reports that summarize repairs made during the off season, an updated schedule of repairs for the upcoming off season, emissions test results, and tested capacities. Although I believe that the 3-year project may be a non-routine effort, I do not believe that the proposed physical changes will result in any emissions increases. Therefore, the project is not a modification and is not subject to PSD preconstruction review. The P.E. certification briefly summarizes the proposed project and conclusion. The Technical Evaluation and Preliminary Determination provide a detailed description of the project, rationale, and conclusion. Day #74 is July 10, 2003. I recommend your approval of the attached Draft Permit for this project.

Attachments

Golder Associates Inc.

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

April 25, 2003

0037653

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

Attention: Ms. Trina Vielhauer, Chief, Bureau of Air Regulation

SUBJECT: UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
BOILER NOS. 1, 2 and 4 REPAIRS DURING 2003-2005 OFF-SEASON
0510003-023-AC

Dear Ms. Vielhauer:

On behalf of United States Sugar Corporation (U.S. Sugar), the purpose of this letter is to apply for a construction permit for the planned repairs to Boiler Nos. 1, 2 and 4 at the Clewiston mill. These repairs are planned to be conducted during the 2003-2005 off-seasons. Details of the repairs were contained in letters submitted to the Department dated February 6 and March 27, 2003. We also have had subsequent follow up discussions with you and the Department's staff on this subject.

Attached are the Responsible Official and Professional Engineer signature pages to support this request. Consider this letter and the previous letter submittals referenced above to constitute U. S. Sugar's application. Please call me at (352)336-5600 if you have any questions or comments, or need additional information. Thank you for your consideration of this matter.

Sincerely,
GOLDER ASSOCIATES INC.

David A. Buff

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

DB/jej

Enclosures

cc: Don Griffin
Peter Briggs
Bubba Wade

\\Gatorbait\2000\0037\0037653 US Sugar\4\4.1\L042503a.doc

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   William R. Raiola, Senior Vice President - Sugar Processing
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **United States Sugar Corporation**
   Street Address: **111 Ponce DeLeon Ave.**
   City: **Clewiston** State: **FL** Zip Code: **33440**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (**863**) **902 - 2703** Fax: (**863**) **902 - 2729**
4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Signature

April 25, 2002
Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **David A. Buff**
   Registration Number: **19011**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Golder Associates Inc. ***
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers:
   Telephone: (**352**) **336 - 5600** Fax: (**352**) **336 - 6603**

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

4. Professional Engineer Statement:

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

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

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

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

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

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

David A. Buff
Signature

4/25/03
Date

(seal)

* Attach any exception to certification statement.

Golder Associates Inc.

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

April 25, 2003

0037653

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

Attention: Ms. Trina Vielhauer, Chief, Bureau of Air Regulation.

SUBJECT: UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
BOILER NO. 4 AND BOILER NO. 7 REPAIRS DURING 2003 OFF-SEASON

Dear Ms. Vielhauer:

This letter is being submitted on behalf of United States Sugar Corporation (U.S. Sugar). We appreciate you and your staff meeting with representatives of U.S. Sugar and Golder Associates Inc. in Tallahassee on January 28, 2003, regarding the planned repairs to the Clewiston Mill boilers. At your request, Golder Associates submitted to the Department a detailed description of the boiler repairs in letters dated February 6 and March 27, 2003. We have also had subsequent follow up discussions with you and the Department's staff on this subject.

It is our understanding that the Department agrees that the repairs to be performed on Boiler No. 4 and Boiler No. 7 during the present off-season (2003 off-season) are considered to be routine in nature. For Boiler No. 4, the repairs consist of repairs to sidewall, main generating bank, and air heater tubes. For Boiler No. 7, the repairs consist of repairs to the stoker, economizer, and furnace wall tubes. As a result, these activities do not require a construction permit from the Department, and U. S. Sugar may proceed with the repairs.

Please call me at (352)336-5600 if you have any questions or comments. Thank you for your consideration of this matter.

Sincerely,
GOLDER ASSOCIATES INC.

David A. Buff

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

DB/jej

cc: Don Griffin
Peter Briggs
Bubba Wade

\\Gatorbait\2000\0037\0037653 US Sugar\4\4.1\L042503.doc

Golder Associates Inc.

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

March 27, 2003

0037653

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

Attention: Mr. Jeffery F. Koerner, New Source Review

SUBJECT: UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
BOILER REPAIRS DURING 2003-2005 OFF-SEASONS

Dear Mr. Koerner:

United States Sugar Corporation (U.S. Sugar) has received the Department's request for additional information (RAI) dated February 24, 2003, regarding the off-season repairs at the Clewiston sugar mill. Each of the Department's requests is addressed below, in the same order as they appear in the RAI letter.

1. The requested information is difficult to obtain or non-existent for past activities. The best information available pertains to current and planned repairs. For all tube repairs and replacements, there is no specific number of days each type of repair takes. Duration of activities could range from several days to weeks. Actual time of repair/replacement depends on a number of factors, including type of boiler, number of tubes, location of tubes, difficulty of access, size of labor crew, etc. Boiler type affects gas velocities and flow paths in the boiler, which then affects tube wear and corrosion. If tube access is difficult, such as furnace walls or air heater walls having to be removed, the activity can take much longer to perform. Likewise, if the labor crew is relatively small, the activity could take much longer to perform.

   The frequency of repairs/replacements for steam tubes is difficult to estimate, from the aforementioned lack of historical data, as well as the various factors mentioned above. One additional factor, the amount of sugarcane grown on sand land, is very important in regards to frequency of repair. The amount of cane delivered to Clewiston that was grown on sand land is shown in Figure 1. As shown, the total percentage of cane grown on sand land has increased significantly over the years, while the cane grown on muck lands has decreased somewhat. Due to the higher percentage of sugarcane grown on sand lands for the Clewiston mill, repair activities will likely be more frequent in the future. Some level of tube repair can be expected on an annual or bi-annual basis for each boiler at Clewiston.

   Repair/replacement of overfire or distributor air fans are expected to occur very infrequently at Clewiston. The primary activities performed consist of fan blade replacement, motor replacement, or entire fan replacement. Depending on the age and level of repair to the fan, it may be more logical to completely replace the fan as opposed to repairing it. These fans are of relatively small cost.

As presented previously to the Department, the level of tube and fan repair due to wear and corrosion at the Bryant mill are expected to be much less than at Clewiston. This is due to the much lower level of sugarcane grown on sandy soils, as shown in Figure 2. The percentage of cane grown on sand land has remained relatively constant and relatively small in comparison to cane grown on muck soils.

2. The useful life of a bagasse-fired sugar mill boiler could be dependent on several factors. We are not aware of any standard guideline on the life of such a boiler. However, we can analyze the other boilers in the industry to gain a better understanding of this term. Bagasse boilers located in Florida are listed in Table 1. Also shown are those boilers that have been retired and taken out of service. As shown, the oldest active boiler was built in 1947. This boiler, Boiler No. 3 at the Clewiston mill, will be retired in about 3 years, when the new Boiler No. 8 comes on line. Thus, it will be about 60 years old when retired. A number of other active boilers in Florida were built during the 1960's, and these boilers are about 40 years old.

   The retired boilers from Florida, not considering those at Okeelanta, were up to 70 years old when retired. Okeelanta is not considered to be representative of retired boilers since these shutdowns were part of a cogeneration project that prematurely ended the lives of these boilers. As shown in Table 1, the oldest boilers when retired were Boiler Nos. 5 and 6 located at Clewiston. These boilers were built in 1927, when the mill was originally constructed. They were retired about 1997, and therefore were approximately 70 years old when retired.

   Bagasse-fired boilers located in Louisiana are listed in Table 2. This list was current as of about 4 years ago, and was obtained from survey forms sent to each sugar mill by EPA in relation to the MACT rulemaking for industrial boilers. This list is sorted by age. As shown, there were a number of boilers built in the 1930's and 1940's that were still operating.

   These boiler ages suggest that the useful life of a bagasse-fired boiler can be up to 70 years or more. The year of initial installation for each boiler at the Clewiston mill is shown in Table 1. The only boiler at Clewiston whose initial construction date is not the same as the installation date was Boiler No. 4. Boiler No. 4 was originally constructed in the 1950's and was moved to Clewiston in 1983.

3. The actual annual repair costs for the "Boiler Room" at Clewiston and Bryant for the fiscal years 1997-1998 through 2001-2002 are presented in Tables 3 and 4 attached. Also shown are the projected costs for the 2002-2003 fiscal year. These include all repair costs incurred on the boilers. Note that repair costs by individual boiler have not been recorded by U. S. Sugar, and therefore these data are unavailable.

   Actual annual steam production rates for each boiler for the annual periods 1998-2002 are shown in Table 5 attached. The annual amount of sugarcane processed by each mill during the last five years by crop year is shown below (also refer to Figures 1 and 2).

Tons of Cane Ground

Crop Year	Clewiston	Bryant	Total
2001/02	3.8×10^6	2.9×10^6	6.8×10^6
2000/01	3.7×10^6	2.9×10^6	6.6×10^6
1999/00	4.2×10^6	3.1×10^6	7.3×10^6
1998/99	4.0×10^6	3.3×10^6	7.3×10^6
1997/98	3.6×10^6	2.9×10^6	6.5×10^6

4. As shown in Table 5, the steam demands of the sugar mill or the refinery at Clewiston have not increased over the last 5 years. Steam production has varied generally based on the amount of cane ground each year.

5. The requested information is provided below, along with the permitted steam rates.

Compliance Test Steaming Rates (lb/hr) - Clewiston

Boiler #	2002 / 03	2002/02	Permitted Steam Rate
1	194,351	201,572	255,000
2	179,086	196,660	230,000
3	69,924	89,433	130,000
4	275,758	257,941	285,000*
7	316,343	329,896	350,000*

* Maximum 24-hour average steam rate.

Boiler No. 1 – the compliance test rate 201,572 lb/hr steam is approximately 80 percent of the permitted rate of 255,000 lb/hr. Historically, the boiler has achieved 200,000 lb/hr on a 24-hour average basis (during March 2002). Since this was a 24-hour average, the maximum hourly steam production was somewhat above 200,000 lb/hr.

Boiler No. 2 - the compliance test rate of 196,660 lb/hr steam is approximately 86 percent of the permitted rate of 230,000 lb/hr. Historically, the boiler has achieved 220,000 lb/hr on a 24-hour average basis (during December 2001). Since this was a 24-hour average, the maximum hourly steam production was somewhat above 220,000 lb/hr.

Boiler No. 3 - the compliance test rate of 89,433 lb/hr steam is approximately 68 percent of the permitted rate of 130,000 lb/hr. Historically, the boiler has achieved 120,000 lb/hr on a 24-hour average basis (during December 2002). Since this was a 24-hour average, the maximum hourly steam production was somewhat above 120,000 lb/hr. [Note that this boiler is scheduled to be retired in the next several years, when new Boiler No. 8 comes on-line.]

Boiler No. 4 - the compliance test rate of 275,758 lb/hr is approximately 97 percent of the permitted 24-hour steam rate of 285,000 lb/hr. This is within 90 percent of the permitted capacity.

Boiler No. 7 - the compliance test rate of 329,896 lb/hr steam is approximately 94 percent of the permitted 24-hour steam rate 350,000 lb/hr. This is within 90 percent of the permitted capacity.

6. The ash content of bagasse can be used as an indicator of the level of inerts in bagasse. Based on recent bagasse analysis, spanning about 6 months duration, the ash content of Clewiston bagasse currently averages about 4.44 percent (dry basis). This compares to 2.63 percent ash at Bryant, and 1.74 percent ash or less at two other mills in Florida. These levels confirm the fact that the Clewiston mill processes a large amount of cane grown on "sand" soils versus "muck" soils, and that the Bryant mill also shows some influence from sandy soils.

   The only comparable data from 1985 or a similar year is contained in the 1985 F-Factor study conducted by KBN Engineering for the Florida Sugar Industry. This study was submitted to the Florida DEP. A number of bagasse samples were taken and analyzed for ash and other constituents. The results of the study, along with the more recent study, were as follows:

Mill	1978/1979 Season Ash (%), dry	1984/1985 Season Ash (%), dry	2001/2002 Season Ash (%), dry
U. S. Sugar Clewiston	2.1	3.53	4.44
U. S. Sugar Bryant	--	1.98	2.63
Sugar Cane Growers	1.0	1.68	1.74
Atlantic Sugar	0.72	1.11	1.30

7. The materials of construction for the replacement tubes will be the same as the existing tubes.

8. The Department is correct. An updated table for Boiler No. 2 is provided below.

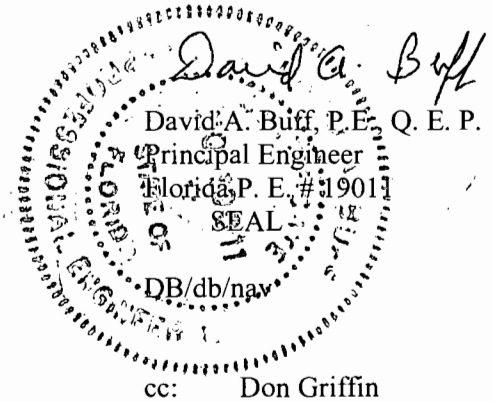
Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Roof, Front and Sidewall Tubes; Superheater Tubes	82,000	277,000	359,000	23	77
Main Generating Bank Tubes	46,000	270,000	316,000	15	85
Air Fans	32,000	26,000	58,000	55	45
Air Heater Tubes	150,000	150,000	300,000	50	50
Total	**310,000**	**723,000**	**1,033,000**	**30**	**70**

As discussed on our February 6, 2003, letter, U. S. Sugar believes that due to the nature of these activities, the activities qualify under the routine maintenance, repair and replacement exemptions under the Department's air rules. As such, we believe that no air construction permit is required prior to commencing the requested repairs on the boilers.

Please call me at (352) 336-5600 if you have any questions concerning this request, or need additional information.

Sincerely,

GOLDER ASSOCIATES INC.



David A. Buff, P.E., Q. E. P.
Principal Engineer
Florida P. E. #19011
SEAL

DB/db/nav

cc: Don Griffin
Peter Briggs
Bubba Wade

L032803

Table 1. Ages of Bagasse-Fired Boilers in Florida

ICCR Facility ID	Plant Name	Combustor Description	Comb. Type	Primary Vendor	Year Built	Reported Capacity	Capacity (lbs Steam/hr)
ACTIVE BOILERS							
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #1, SPREADER STOKER, TRAVELING GRATE	SS	RILEY	1963	334 MMBtu/hr	175,000
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #2, SPREADER STOKER, TRAVELING GRATE	SS	RILEY	1963	334 MMBtu/hr	175,000
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #3, SPREADER STOKER, DUMPING GRATE,	SS	COMB. ENG.	1966	229 MMBtu/hr	100,000
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #4, SPREADER STOKER, TRAVELING GRATE	SS	RILEY	1975	572 MMBtu/hr	300,000
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #5, SPREADER STOKER, TRAVELING GRATE	SS	RILEY	1968	439 MMBtu/hr	230,000
120990026	*SUGAR CANE GROWERS CO-OP*	BOILER #8, SPREADER STOKER, TRAVELING GRATE	SS	RILEY	1982	504 MMBtu/hr	264,000
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #1, VIBRATING GRATE, WITH SCRUBBER	SS	RILEY	1968	496 MMBtu/hr	255,100
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #2, VIBRATING GRATE, WITH SCRUBBER	SS	RILEY	1968	496 MMBtu/hr	255,100
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #3, DUMPING GRATE, WITH SCRUBBER	SS	B&W	1947	342 MMBtu/hr	167,600
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #4, TRAVELING GRATE, WITH SCRUBBER	SS	FOSTER-WHE	1983	633 MMBtu/hr	300,000
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #7, VIBRATING GRATE, WITH ESP	SS	ALPHA	1997	812 MMBtu/hr	385,000
120990016	*ATLANTIC SUGAR ASSOCIATION*	BOILER #1, DUMPING GRATE STOKER, WITH SCRUBBER	SS	Erie City	1964	280 MMBtu/hr	144,000
120990016	*ATLANTIC SUGAR ASSOCIATION*	BOILER #2, DUMPING GRATE STOKER, WITH SCRUBBER	SS	Erie City	1964	280 MMBtu/hr	144,000
120990016	*ATLANTIC SUGAR ASSOCIATION*	BOILER #3, CELL TYPE, WITH SCRUBBERS	C	BIGELOW	1965	260 MMBtu/hr	130,000
120990016	*ATLANTIC SUGAR ASSOCIATION*	BOILER # 4, CELL TYPE, WITH SCRUBBER	C	BIGELOW	1974	275 MMBtu/hr	141,000
120990016	*ATLANTIC SUGAR ASSOCIATION*	BOILER #5, TRAVELING GRATE STOKER, WITH SCRUBBER	SS	ALPHA	1981	253 MMBtu/hr	130,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #2, INCLINED GRATE STOKER, W/2 SCRUBBERS	SS	Bigelow	1965	280 MMBtu/hr	140,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #3, INCLINED GRATE STOKER, WITH SCRUBBER	SS	Springfield	1961	292 MMBtu/hr	150,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #4, CELL TYPE, WITH 2 SCRUBBERS AND 2 STACKS	C	Bigelow	1965	280 MMBtu/hr	140,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #5, CELL TYPE, WITH 2 SCRUBBERS & 2 STACKS	C	Alpha	1978	330 MMBtu/hr	165,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #6, TRAVELING GRATE, WITH SCRUBBER	SS	Distral	1981	379 MMBtu/hr	195,000
120990061	*UNITED STATES SUGAR -BRYANT*	BOILER #1, VIBRATING GRATE STOKER, WITH SCRUBBER	SS	Riley	1962	385 MMBtu/hr	194,600
120990061	*UNITED STATES SUGAR -BRYANT*	BOILER #2, VIBRATING GRATE STOKER, WITH 2 SCRUBBERS	SS	Riley	1962	385 MMBtu/hr	194,600
120990061	*UNITED STATES SUGAR -BRYANT*	BOILER #3, VIBRATING GRATE STOKER, WITH SCRUBBER	SS	Riley	1963	385 MMBtu/hr	194,600
120990061	*UNITED STATES SUGAR -BRYANT*	BOILER #5, VIBRATING GRATE STOKER, WITH 2 SCRUBBERS	SS	Bigelow	1979	671 MMBtu/hr	342,384
RETIRED BOILERS							
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #5, CELL TYPE, WITH SCRUBBER	C	1927	1927	140 MMBtu/hr	70,200
120510003	*UNITED STATES SUGAR -CLEWISTON*	BOILER #6, CELL TYPE, WITH SCRUBBER	C	1927	1927	144 MMBtu/hr	72,200
120990005	*OKEELANTA CORP*	BAGASSE BOILER #4, CELL TYPE	C	B & W	1954	182 MMBtu/hr	90,000
120990005	*OKEELANTA CORP*	BOILER #5, SPREADER STOKER W/ DUMPING GRATE	SS	B & W	1963	260 MMBtu/hr	116,800
120990005	*OKEELANTA CORP*	BOILER #6, SPREADER STOKER W/ INCLINED GRATE	SS	BIGELOW/AL	1964	260 MMBtu/hr	120,000
120990005	*OKEELANTA CORP*	BOILER #10, CELL TYPE	C	BIGELOW	1974	285 MMBtu/hr	125,000
120990005	*OKEELANTA CORP*	BOILER #11, SPREADER STOKER W/ TRAVLING GRATE	SS	ALPHA	1975	279 MMBtu/hr	125,000
120990005	*OKEELANTA CORP*	BOILER #12, SPREADER STOKER W/ TRAVLING GRATE	SS	B & W	1977	342 MMBtu/hr	150,000
120990005	*OKEELANTA CORP*	BOILER #14, SPREADER STOKER W/ TRAVLING GRATE	SS	B & W	1977	333 MMBtu/hr	150,000
120990005	*OKEELANTA CORP*	BOILER #15, SPREADER STOKER W/ TRAVLING GRATE	SS	ALPHA	1978	279 MMBtu/hr	125,000
120990019	*OSCEOLA FARMS COMPANY*	BOILER #1, INCLINED GRATE STOKER, W/2 SCRUBBERS	SS	?	?	-- MMBtu/hr	40,000

Table 2. Ages of Bagasse-Fired Boilers Located in Louisiana and Texas

ICCR Facility ID	Plant Name	Combustor Description	Comb. Type	Primary Vendor	Year Built	Reported Capacity
220450006	IBERIA SUGAR CO-OP INC.	BOILER #1, HORSESHOE (CELL) TYPE	C	EDGEMOORE	1937	40 M lbs Stm/hr
220450006	IBERIA SUGAR CO-OP INC.	BOILER #2, HORSESHOE (CELL) TYPE	C	EDGEMOORE	1937	40 M lbs Stm/hr
220450006	IBERIA SUGAR CO-OP INC.	BOILER #3, SPREADER STOKER, FIXED GRATE	SS	EDGEMOORE	1937	40 M lbs Stm/hr
220450006	IBERIA SUGAR CO-OP INC.	BOILER #4, SPREADER STOKER, FIXED GRATE	SS	EDGEMOORE	1937	40 M lbs Stm/hr
220770001	ALMA PLANTATION, LTD.	BOILER #1, CELL TYPE	C	WICKERS	1940	28 M lbs Stm/hr
220770001	ALMA PLANTATION, LTD.	BOILER #2, CELL TYPE	C	WICKERS	1940	28 M lbs Stm/hr
220570028	CALDWELL SUGARS CO-OP., INC.	BOILER #5, CELL TYPE	C	EDGEMORE	1946	45 M lbs Stm/hr
221010006	ST.MARY SUGAR COOPERATIVE, INC.	BOILER 1, CELL TYPE	C	BIGELOWF26	1947	50 M lbs Stm/hr
221010006	ST.MARY SUGAR COOPERATIVE, INC.	BOILER 2, CELL TYPE	C	BIGELOWF26	1947	50 M lbs Stm/hr
221010006	ST.MARY SUGAR COOPERATIVE, INC.	BOILER 3, CELL TYPE	C	BIGELOWF26	1947	50 M lbs Stm/hr
220070006	LULA-WESTFIELD LLC-LULA FACTORY	BOILER #4, SPREADER STOKER, DUMP GRATE	SS	CE	1950	40 M lbs Stm/hr
220770001	ALMA PLANTATION, LTD.	BOILER #3, CELL TYPE	C	HEINE	1951	49 M lbs Stm/hr
220770001	ALMA PLANTATION, LTD.	BOILER #4, CELL TYPE	C	HEINE	1951	49 M lbs Stm/hr
220070004	LULA-WESTFIELD LLC-WESTFIELD FACTORY	BOILER #4, SPREADER STOKER, DUMP GRATE	SS	CE	1952	34 M lbs Stm/hr
220450006	IBERIA SUGAR CO-OP INC.	BOILER #5, MASS FEED, FIXED GRATE	SS	BIGELOW-RI	1953	40 M lbs Stm/hr
220070004	LULA-WESTFIELD LLC-WESTFIELD FACTORY	BOILER #2, SPREADER STOKER, DUMP GRATE	SS	CE	1955	43 M lbs Stm/hr
220070004	LULA-WESTFIELD LLC-WESTFIELD FACTORY	BOILER #1, SPREADER STOKER, DUMP GRATE	SS	CE	1958	43 M lbs Stm/hr
221210008	HARRY L. LAWS & COMPANY, INC.	BOILER #1, CELL TYPE	C	WICKES	1958	50 M lbs Stm/hr
220075170	GLENWOOD COOPERATIVE, INC.	BOILER #6, FIXED GRATE	SS	B&W	1959	60 M lbs Stm/hr
220930012	ST JAMES SUGAR CO-OP INC	BOILER #3, SPREADER STOKER	SS	CE VU-10	1959	50 M lbs Stm/hr
220570005	RACELAND SUGARS INC	BOILER NO. 3, SPREADER STOKER, FIXED GRATE	SS	Vogt VL	1960	80 M lbs Stm/hr
221010006	ST.MARY SUGAR COOPERATIVE, INC.	BOILER 4, CELL TYPE	C	BIGELOWF26	1960	50 M lbs Stm/hr
221010012	M.A. PATOUT & SON, LTD.	BOILER #1, CELL TYPE	C	CASEY-HEDG	1960	60 M lbs Stm/hr
221010012	M.A. PATOUT & SON, LTD.	BOILER #2, CELL TYPE	C	B & W	1960	40 M lbs Stm/hr
220050017	EVAN HALL SUGAR COOP.,INC.	BOILER #7, CELL TYPE	C	BIGELOW	1961	100 M lbs Stm/hr
220070004	LULA-WESTFIELD LLC-WESTFIELD FACTORY	BOILER #3, SPREADER STOKER, DUMP GRATE	SS	RILEY	1961	70 M lbs Stm/hr
220070006	LULA-WESTFIELD LLC-LULA FACTORY	BOILER #2, SPREADER STOKER, DUMP GRATE	SS	UNION IRON	1961	70 M lbs Stm/hr
220570000	LAFOURCHE SUGAR CORP	BOILER #3, CELL TYPE, CYCLONE-FIRED	C	BIGELOWF40	1961	168 MMBtu/hr
220570000	LAFOURCHE SUGAR CORP	BOILER #4, CELL TYPE, CYCLONE-FIRED	C	BIGELOWF40	1961	168 MMBtu/hr
220050017	EVAN HALL SUGAR COOP.,INC.	BOILER #5, SPREADER STOKER	SS	VOGT	1962	65 M lbs Stm/hr
220070006	LULA-WESTFIELD LLC-LULA FACTORY	BOILER #1, SPREADER STOKER, DUMP GRATE	SS	CE	1962	40 M lbs Stm/hr
220450006	IBERIA SUGAR CO-OP INC.	BOILER #6, SPREADER STOKER, FIXED GRATE	SS	UNION-RILE	1962	100 M lbs Stm/hr
220570005	RACELAND SUGARS INC	BOILER NO. 4, SPREADER STOKER, FIXED GRATE	SS	Vogt VL	1962	80 M lbs Stm/hr
220990005	LA. SUGAR CANECOOP-St. Martinville	BOILER #4, CELL TYPE (previously Blr #3)	C	BIGELOWF33	1962	53 M lbs Stm/hr
220990005	LA. SUGAR CANECOOP-St. Martinville	BOILER #6, CELL TYPE (previously Blr #5)	C	BIGELOWF44	1962	86 M lbs Stm/hr
221010011	STERLING SUGARS INC	BOILER NO 1, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1962	120 M lbs Stm/hr
221010011	STERLING SUGARS INC	BOILER NO 2, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1962	120 M lbs Stm/hr
221010012	M.A. PATOUT & SON, LTD.	BOILER #3, CELL TYPE	C	EDGEMOOR	1962	80 M lbs Stm/hr
220050017	EVAN HALL SUGAR COOP.,INC.	BOILER #8, CELL TYPE	C	BIGELOW	1963	100 M lbs Stm/hr
220070004	LULA-WESTFIELD LLC-WESTFIELD FACTORY	BOILER #6, SPREADER STOKER, DUMP GRATE	SS	BIGELOW	1963	100 M lbs Stm/hr
220930012	ST JAMES SUGAR CO-OP INC	BOILER #4, SPREADER STOKER	SS	RILEY STOK	1963	100 M lbs Stm/hr
221010012	M.A. PATOUT & SON, LTD.	BOILER #4, CELL TYPE	C	EDGEMOOR	1963	80 M lbs Stm/hr
221210008	HARRY L. LAWS & COMPANY, INC.	BOILER #5, CELL TYPE	C	BIGELOWF40	1963	100 M lbs Stm/hr
220070006	LULA-WESTFIELD LLC-LULA FACTORY	BOILER #3, SPREADER STOKER, DUMP GRATE	SS	UNION IRON	1964	70 M lbs Stm/hr
220450008	CAJUN SUGAR COOPERATIVE,INC.	BOILER #1, SPREADER STOKER, FIXED GRATE	SS	RILEY VO	1964	100 M lbs Stm/hr
220450008	CAJUN SUGAR COOPERATIVE,INC.	BOILER #2, SPREADER STOKER, FIXED GRATE	SS	RILEY VO	1964	100 M lbs Stm/hr
220470004	CORA TEXAS MANUFACTURING COMPANY	BOILER 1, SPREADER STOKER, FIXED GRATE	SS	BIGELOW F40	1964	100 M lbs Stm/hr
221210008	HARRY L. LAWS & COMPANY, INC.	BOILER #6, CELL TYPE	C	BIGELOWF40	1964	100 M lbs Stm/hr
220570000	LAFOURCHE SUGAR CORP	BOILER #1, CELL TYPE, CYCLONE-FIRED	C	BIGELOWF40	1965	168 MMBtu/hr
220990005	LA. SUGAR CANECOOP-St. Martinville	BOILER #5, CELL TYPE (previously Blr #4)	C	BIGELOWF33	1965	53 M lbs Stm/hr
221010012	M.A. PATOUT & SON, LTD.	BOILER #5, CELL TYPE	C	BIGELOW	1966	85 M lbs Stm/hr
220450008	CAJUN SUGAR COOPERATIVE,INC.	BOILER #3, CELL TYPE	C	BIGELOW	1967	85 M lbs Stm/hr
220470004	CORA TEXAS MANUFACTURING COMPANY	BOILER 2, MASS FEED	SS	BIGELOW F40	1968	100 M lbs Stm/hr
220570028	CALDWELL SUGARS CO-OP., INC.	BOILER #1, CELL TYPE	C	BIGELOW	1968	80 M lbs Stm/hr
220570028	CALDWELL SUGARS CO-OP., INC.	BOILER #6, CELL TYPE	C	HEINE,V363	1968	65 M lbs Stm/hr
220570028	CALDWELL SUGARS CO-OP., INC.	BOILER #7, CELL TYPE	C	RILEY	1968	100 M lbs Stm/hr

Table 2. Ages of Bagasse-Fired Boilers Located in Louisiana and Texas

ICCR Facility ID	Plant Name	Combustor Description	Comb. Type	Primary Vendor	Year Built	Reported Capacity
220075170	*GLENWOOD COOPERATIVE, INC.*	BOILER #3, FIXED GRATE	SS	BIGELOWF40	1969	100 M lbs Stm/hr
220450008	*CAJUN SUGAR COOPERATIVE,INC.*	BOILER #4, CELL TYPE	C	BIGELOW	1971	85 M lbs Stm/hr
220570028	*CALDWELL SUGARS CO-OP., INC.*	BOILER #2, CELL TYPE	C	BIGELOW	1972	45 M lbs Stm/hr
220990005	*LA. SUGAR CANECOOP-St. Martinville*	BOILER #3, CELL TYPE (previously Blr #2)	C	BIGELOWF40	1972	100 M lbs Stm/hr
221010006	*ST.MARY SUGAR COOPERATIVE, INC.*	BOILER 5, CELL TYPE	C	BIGELOWF40	1972	100 M lbs Stm/hr
221010011	*STERLING SUGARS INC*	BOILER NO 6, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1972	120 M lbs Stm/hr
220075170	*GLENWOOD COOPERATIVE, INC.*	BOILER #7, FIXED GRATE	SS	BIGELOWF40	1973	100 M lbs Stm/hr
220990057	*JEANERETTE SUGAR CO. INC.*	BOILER #4, CELL TYPE	C	SUPERIOR	1973	55 M lbs Stm/hr
220990057	*JEANERETTE SUGAR CO. INC.*	BOILER #5, CELL TYPE	C	SUPERIOR	1973	55 M lbs Stm/hr
482150013	*RIO GRANDE VALLEY SUGAR GROWERS*	BOILER #1, FIXED GRATE	SS	RILEY	1973	150 M lbs Stm/hr
482150013	*RIO GRANDE VALLEY SUGAR GROWERS*	BOILER #2, SPREADER STOKER, FIXED GRATE	SS	RILEY	1973	150 M lbs Stm/hr
482150013	*RIO GRANDE VALLEY SUGAR GROWERS*	BOILER #3, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1973	125 M lbs Stm/hr
482150013	*RIO GRANDE VALLEY SUGAR GROWERS*	BOILER #4, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1973	125 M lbs Stm/hr
220450006	*IBERIA SUGAR CO-OP INC.*	BOILER #7, SPREADER STOKER, FIXED GRATE	SS	BIGELOW-DE	1974	100 M lbs Stm/hr
221210008	*HARRY L. LAWS & COMPANY, INC.*	BOILER #7, CELL TYPE	C	BIGELOWF40	1974	100 M lbs Stm/hr
220050017	*EVAN HALL SUGAR COOP.,INC.*	BOILER #9, SPREADER STOKER	SS	BIGELOW	1975	100 M lbs Stm/hr
220050017	*EVAN HALL SUGAR COOP.,INC.*	BOILER #10, SPREADER STOKER	SS	BIGELOW	1975	100 M lbs Stm/hr
220770001	*ALMA PLANTATION, LTD.*	BOILER #5, SPREADER STOKER, FIXED GRATE	SS	BIGELOW	1975	100 M lbs Stm/hr
220070006	*LULA-WESTFIELD LLC-LULA FACTORY*	BOILER #5, SPREADER STOKER, DUMP GRATE	SS	RILEY STOK	1976	70 M lbs Stm/hr
220570000	*LAFOURCHE SUGAR CORP*	BOILER #5, SPREADER STOKER, PNEUMATIC GRATE	SS	BIGELOWF48	1976	236 MMBtu/hr
220930012	*ST JAMES SUGAR CO-OP INC*	BOILER #2, SPREADER STOKER	SS	RILEY STOK	1976	200 M lbs Stm/hr
221010011	*STERLING SUGARS INC*	BOILER NO 3, CELL TYPE	C	ERIE CITY	1976	120 M lbs Stm/hr
220075170	*GLENWOOD COOPERATIVE, INC.*	BOILER #4, FIXED GRATE	SS	BIGELOWF40	1977	100 M lbs Stm/hr
220470004	*CORA TEXAS MANUFACTURING COMPANY*	BOILER 3, CELL TYPE, FIXED GRATE	C	BIGELOW F40	1978	100 M lbs Stm/hr
220570005	*RACELAND SUGARS INC*	BOILER NO. 2, SPREADER STOKER, FIXED GRATE	SS	ALPHA	1978	150 M lbs Stm/hr
221010012	*M.A. PATOUT & SON, LTD.*	BOILER #6, SPREADER STOKER	SS	UNION IRON	1978	100 M lbs Stm/hr
221010012	*M.A. PATOUT & SON, LTD.*	BOILER #7, CELL TYPE	C	BIGELOW	1980	100 M lbs Stm/hr
220070004	*LULA-WESTFIELD LLC-WESTFIELD FACTORY*	BOILER #5, SPREADER STOKER, INCLINED GRATE	SS	RILEY	1982	100 M lbs Stm/hr
220990057	*JEANERETTE SUGAR CO. INC.*	BOILER #6, CELL TYPE	C	BIGELOW	1982	100 M lbs Stm/hr
220470004	*CORA TEXAS MANUFACTURING COMPANY*	BOILER 4, CELL TYPE, FIXED GRATE	C	BIGELOW F38	1983	100 M lbs Stm/hr
220990005	*LA. SUGAR CANECOOP-St. Martinville*	BOILER #2, SPREADER STOKER (previously Blr #1)	SS	BIGELOWF40	1983	100 M lbs Stm/hr
220930012	*ST JAMES SUGAR CO-OP INC*	BOILER #5, SPREADER STOKER	SS	KEELER	1988	140 M lbs Stm/hr
220990057	*JEANERETTE SUGAR CO. INC.*	BOILER #7, CELL TYPE	C	BIGELOW	1990	100 M lbs Stm/hr
221010012	*M.A. PATOUT & SON, LTD.*	BOILER #8, SPREADER STOKER	SS	ALPHA	1990	150 M lbs Stm/hr
220070006	*LULA-WESTFIELD LLC-LULA FACTORY*	BOILER #6, FIXED GRATE, INCLINE GRATE	SS	FACTORYS&E	1992	80 M lbs Stm/hr
220570005	*RACELAND SUGARS INC*	BOILER NO. 1, SPREADER STOKER, FIXED GRATE	SS	ALPHA	1992	150 M lbs Stm/hr
220770001	*ALMA PLANTATION, LTD.*	BOILER #7, SPREADER STOKER, FIXED GRATE	SS	VALMONT	1992	100 M lbs Stm/hr
220470004	*CORA TEXAS MANUFACTURING COMPANY*	BOILER 5, SPREADER STOKER, FIXED GRATE	SS	FCTRY S&EG	1993	150 M lbs Stm/hr
220450008	*CAJUN SUGAR COOPERATIVE,INC.*	BOILER #5, SPREADER STOKER, FIXED GRATE	SS	FACTORY SA	1995	135 M lbs Stm/hr
221010006	*ST.MARY SUGAR COOPERATIVE, INC.*	BOILER 6, SPREADER STOKER, FIXED GRATE	SS	ALPHA	1995	150 M lbs Stm/hr
220990057	*JEANERETTE SUGAR CO. INC.*	BOILER #8, SPREADER STOKER, INCLINED GRATE	SS	FACTORY SA	1996	150 M lbs Stm/hr
221010011	*STERLING SUGARS INC*	BOILER NO 4, SPREADER STOKER, FIXED GRATE	SS	FCTRY S&EG	1996	70 M lbs Stm/hr
221010011	*STERLING SUGARS INC*	BOILER NO 5, SPREADER STOKER, FIXED GRATE	SS	FCTRY S&EG	1997	70 M lbs Stm/hr
221210008	*HARRY L. LAWS & COMPANY, INC.*	BOILER #8 (installed 1997)	C		1997	100 M lbs Stm/hr
220570028	*CALDWELL SUGARS CO-OP., INC.*	BOILER #8, SPREADER STOKER, INCLINED GRATE	SS	FACTORY SALES	1998	210 M lbs Stm/hr
220990005	*LA. SUGAR CANECOOP-St. Martinville*	BOILER #1, SPREADER STOKER , INCLINED GRATE	SS	BIGELOWF40	1998	130 M lbs Stm/hr
221010006	*ST.MARY SUGAR COOPERATIVE, INC.*	BOILER 7, SPREADER STOKER, INCLINED GRATE	SS	BIGELOW	1998	250 M lbs Stm/hr
221010012	*M.A. PATOUT & SON, LTD.*	BOILER #9, SPREADER STOKER	SS		?	250 M lbs Stm/hr
220070004	*LULA-WESTFIELD LLC-WESTFIELD FACTORY*	BOILER #7				150 M lbs Stm/hr

Table 3. ANNUAL BOILER ROOM MAINTENANCE COSTS, 1998-2002, CLEWISTON MILL

Description	02 / 03 Fiscal Year Projected	01 / 02 Fiscal Year	00 / 01 Fiscal Year	99 / 00 Fiscal Year	98 / 99 Fiscal Year
Salaried Labor	484,365	233,265	163,953	121,176	108,119
Salaried Labor Fringe	238,996	116,633	67,221	43,623	44,329
Hourly Labor	1,362,754	1,717,530	1,439,436	1,343,257	1,055,113
Hourly Labor Fringe	612,401	738,538	676,535	591,033	506,454
Warehouse Maintenance Parts	767,237	988,950	938,687	916,916	858,747
Outside Purchases Maint. Materials	720,000	1,223,438	771,320	1,186,091	814,375
Contract Labor	3,860,000	1,394,704	1,589,945	1,246,881	1,011,502
Rental Equipment	30,000	37,625	8,869	16,645	28,228
Total Maintenance Cost	**8,075,753**	**6,450,683**	**5,655,966**	**5,465,622**	**4,426,867**

Table 4. ANNUAL BOILER ROOM MAINTENANCE COSTS, 1998-2002, BRYANT MILL

Description	02 / 03 Fiscal Year Projected	01 / 02 Fiscal Year	00 / 01 Fiscal Year	99 / 00 Fiscal Year	98 / 99 Fiscal Year
Salaried Labor	241,395	101,967	98,966	96,657	95,068
Salaried Labor Fringe	118,393	50,983	40,576	34,797	38,978
Hourly Labor	770,847	486,401	394,619	415,189	615,115
Hourly Labor Fringe	359,750	228,608	185,471	182,683	295,255
Warehouse Maintenance Parts	282,300	253,149	269,939	255,273	275,705
Outside Purchases Maint. Materials	137,032	300,647	112,886	106,879	76,728
Contract Labor	23,000	13,342	7,179	135	53,425
Rental Equipment	8,000	0	0	3,245	0
Total Maintenance Cost	**1,940,717**	**1,435,097**	**1,109,636**	**1,094,858**	**1,450,274**

Table 5. USSC Clewiston Boiler Steam Output (lbs/yr) from 1998 to 2002

Boiler	1998	1999	2000	2001	2002
1	712,608,720	923,516,000	665,775,000	748,581,000	721,808,000
2	589,699,320	683,680,000	882,520,000	776,975,000	847,248,000
3	299,934,440	257,499,000	321,287,000	324,140,000	228,417,000
4	848,884,720	918,940,000	805,119,000	885,884,192	773,336,000
7	1,095,046,960	1,777,457,000	1,949,713,077	1,343,740,504	1,526,068,000
Total	**3,546,174,160**	**4,561,092,000**	**4,624,414,077**	**4,079,320,696**	**4,096,877,000**

Figure 1. Clewiston - Sugarcane Harvested From Sand vs Muck Soils

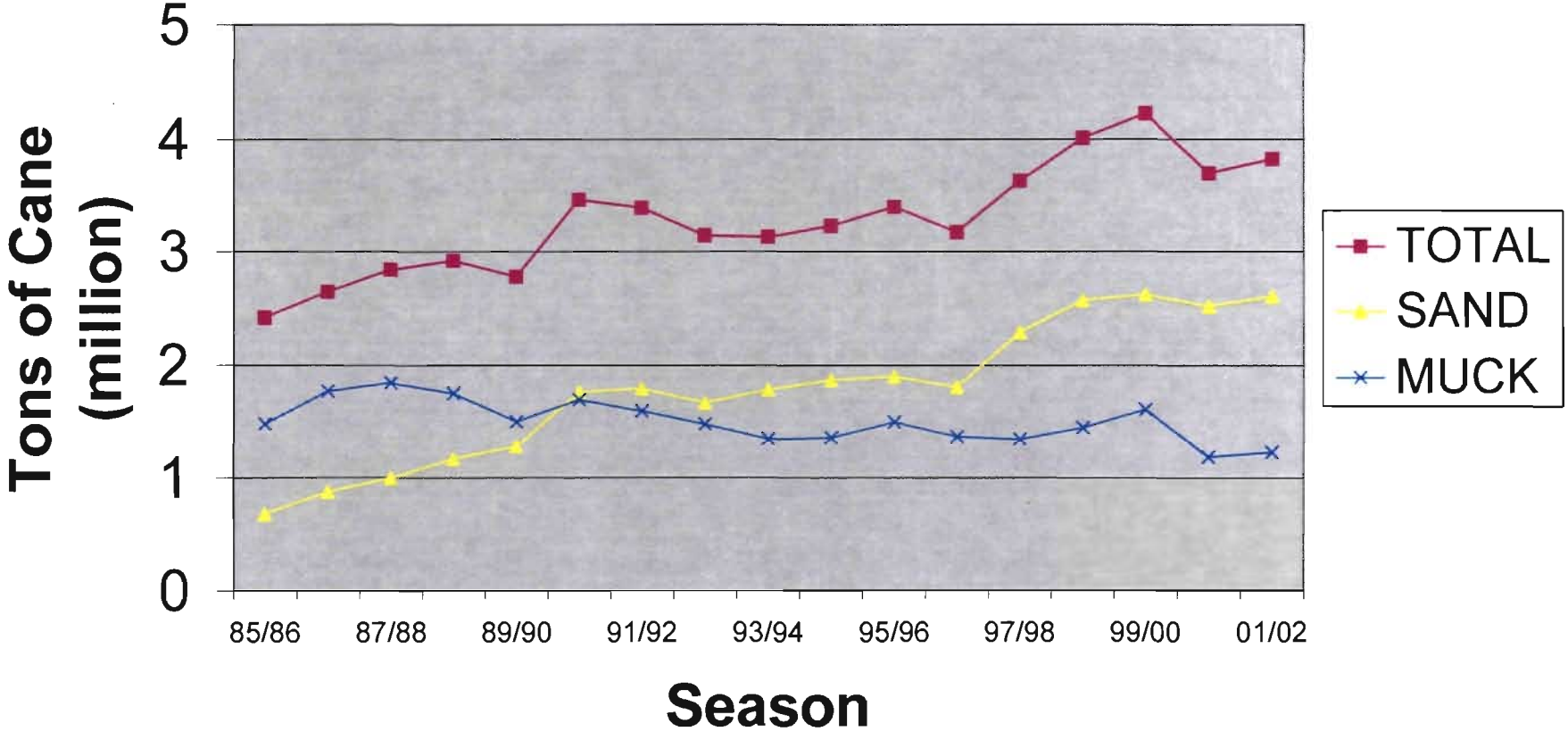
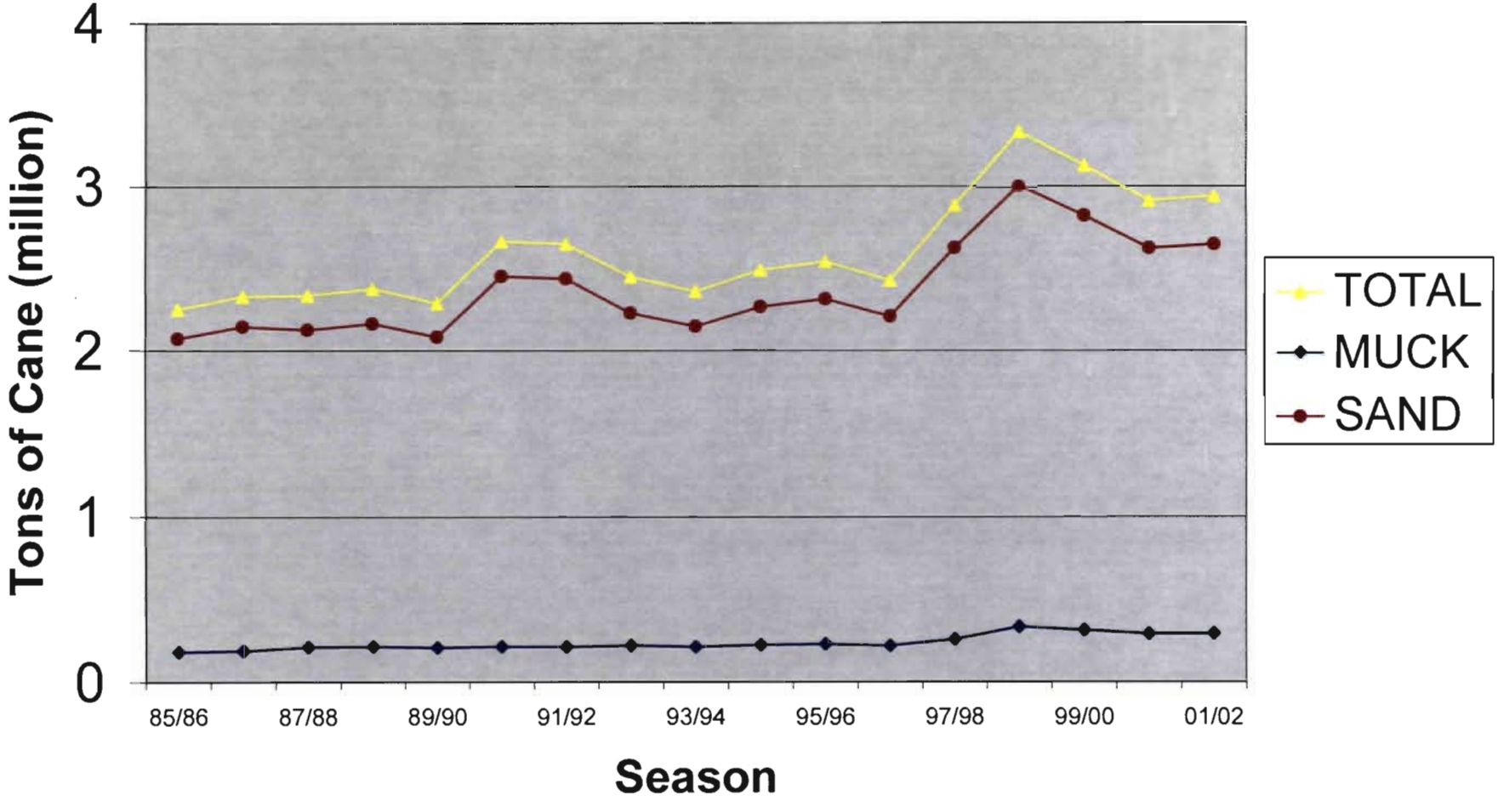


Figure 2. Bryant - Sugarcane Harvested From Sand vs Muck Soils



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 24, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David Buff, P.E.
Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500

Re: **Request for Additional Information**
U.S. Sugar Corporation, Clewiston Mill
Off-Season Repairs

Dear Mr. Buff:

On February 7th, the Department received your letter on behalf of U.S. Sugar requesting concurrence that the off-season repair activities described for each boiler at the Clewiston Mill are considered routine and do not trigger New Source Review requirements. The Department needs additional details upon which to base a conclusion. Please submit the following additional information.

1. Your request describes repairs to the following components: main boiler bank tubes; air heater tubes; superheater tubes; economizer tubes; roof, front, and sidewall tubes; screenwall tubes; overfire fans; and distributor fans. For each type of component, describe the typical repair activities and extent of replacements performed on units during the off-season at USSC's Clewiston Mill. Approximately how many days does it take to complete each type of repair? Estimate the typical frequency (years) for each type of repair activity during the normal useful life of a sugar mill boiler. Provide the same information for boilers located at USSC's Bryant Mill.
2. U.S. Sugar contends that the repairs will not extend the useful life of the boiler, but will ensure attaining the full useful life of each boiler. Based on industry sources, the useful life of a coal-fired boiler is approximately 50 years. What is the useful life of a bagasse-fired sugar mill boiler? For each boiler, identify the year of initial construction and the year of installation at the USSC Clewiston Mill.
3. For each year during the span of 1998 - 2002, provide the following information:
   - Actual annual repair costs for each boiler and identify the primary repairs performed;
   - Actual annual steam production rates (lb/year) for each boiler; and
   - Actual annual amount of sugarcane processed (tons/year) during each of these years.
4. Have the steam demands at either the sugar mill or the refinery increased within the past five years? Please explain.
5. For each boiler, provide the steam production rates (lb/hour) for each compliance test run conducted during the past two seasons. For each boiler, provide steam production records during the past two seasons that indicate the boiler is capable of operating within its permitted capacity.
6. Based on an ultimate fuel analysis, what is the level of "inerts" for the bagasse currently being fired? Similarly, what was the level of "inerts" in 1985? What is the level of "inerts" at a mill processing sugarcane harvested from "muck" fields, such as the Bryant Mill?

7. The majority of repairs identified are to replace tubes in the path of the exhaust flue gas. Will the materials of construction for the replacement tubes be different from the original tubes?

8. For Boiler No. 2, it appears that the itemized cost of the air heater tubing repair was inadvertently omitted. However, it appears that this cost is $300,000 (50% materials, 50% labor) and was included in the total repair costs. Please comment.

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

Sincerely,

Jeffery F. Koerner
New Source Review Section

cc: Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. Ron Blackburn, SD Office
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

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. DAVID BUFF, P.E.
GOLDER ASSOCIATES, INC.
6241 NW 23 ST, STE 500
GAINESVILLE, FL 32653

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X M.H. Reinert ☐ Agent ☐ Addressee

B. Received by (Printed Name) M.H. Reinert C. Date of Delivery 2/26/03

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

7001 0320 0001 3692 6907

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

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

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

Postmark Here

Sent To MR. DAVID BUFF, P.E.
Street, Apt. No.; or PO Box No. GOLDER ASSOCIATES, INC.
City, State, ZIP+4 6241 NW 23 ST, STE 500
GAINESVILLE, FL 32653

7001 0320 0001 3692 6907

PS Form 3800, January 2001 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

February 6, 2003

0037653

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

Attention: Mr. Al Linero, Chief, New Source Review

SUBJECT: UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
BOILER REPAIRS DURING 2003 THROUGH 2005 OFF-SEASONS

Dear Mr. Linero:

United States Sugar Corporation (U.S. Sugar) operates the Clewiston sugar mill located in Hendry County, Florida. Boiler Nos. 1, 2, 3, 4, and 7 at the mill provides process steam to the sugar mill during the sugar cane processing season and to the sugar refinery during the off-season. U.S. Sugar is planning repairs to the boilers in the upcoming 2003 through 2005 off-seasons (starting in May of each year). We believe these repairs are normal and routine and, therefore, do not trigger the requirement for new source review (NSR) under the federal and state prevention of significant deterioration (PSD) rules. The following are descriptions of the boilers and their operations, and the planned repairs to the boilers.

Boiler No. 1

Boiler No. 1 is a vibrating grate type boiler. The boiler is permitted to generate up to 255,000 pounds per hour (lb/hr) steam, with a maximum heat input rate due to bagasse of 495 million British thermal units per hour (MMBtu/hr). During the next three off-seasons, Boiler No. 1 is scheduled to undergo several repair and maintenance activities. These consist of the following (with years of repair given in parenthesis):

- Replace four rows of main generating bank steam tubes, amounting to about 26 percent of the boiler heat transfer surface (2003);
- Replace one-half of air heater tubes (2003 and 2004); and
- Replace 100 percent of the superheater tubes (2004 and 2005).

These repairs are not associated with any other repairs to the boiler, or any other projects planned for Boiler No. 1. As indicated, some of these repairs will be spread over several years. The repairs are estimated to cost:

Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Main Bank Steam Tubes	47,000	268,000	315,000	15	85
Air Heater Tubes	150,000	150,000	300,000	50	50
Superheater Tubes	60,000	400,000	460,000	13	87
Total	**257,000**	**818,000**	**1,075,000**	**24**	**76**

As indicated, these repairs are relatively labor intensive, with the material costs representing a small percentage of the total costs. All costs will come out of the operating budget for the facility (i.e., not from the capital budget).

This project affects only the steam side of the boiler. The gas side (i.e., emissions) is not affected by this project. In addition, the maximum permitted heat input rate, steam production rate, or any other aspect of the boiler will not be changed by the planned repairs. The boiler has been able to achieve varying capacities during compliance testing over the last 10 years. Individual run steam rates have ranged up to 252,000 lb/hr, while individual run heat input rates have ranged up to 491.3 MMBtu/hr (i.e., up to 99 percent of the permitted rates). This variable operation is normal for a bagasse boiler.

Boiler No. 2

Boiler No. 2 is a vibrating grate type boiler. The boiler is permitted to generate up to 230,000 lb/hr steam, with a maximum heat input rate due to bagasse of 447 MMBtu/hr. During the next three off-seasons, Boiler No. 2 is scheduled to undergo several repair and maintenance activities. These consist of the following:

- Replace roof, front, and sidewall tubes, amounting to about 7 percent of the boiler heat transfer surface (2003);
- Replace superheater tube section (2003);
- Replace three rows of main generating bank steam tubes, amounting to about 18 percent of boiler heat transfer surface (2004 and 2005);
- Replace overfire air fan and distributor air fan (2004 and 2005); and
- Replace one-half of air heater tubes (2003 and 2004).

These repairs are not associated with any other repairs to the boiler, or any other projects planned for Boiler No. 2. As described, some of these repairs will be spread over several years. The repairs are estimated to cost:

Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Roof, Front and Sidewall Tubes; Superheater Tubes	82,000	277,000	359,000	23	77
Main Generating Bank Tubes	46,000	270,000	316,000	15	85
Air Fans	32,000	26,000	58,000	55	45
Total	**310,000**	**723,000**	**1,033,000**	**30**	**70**

As shown, these repairs are very labor intensive, with the material costs representing only a small percentage of the total costs. All costs will come out of the operating budget for the facility (no costs from capital budget).

This project affects only the steam side of the boiler. The gas side (i.e., emissions) is not affected by this project. In addition, the planned repairs will not change the maximum permitted heat input rate, steam production rate, or any other aspect of the boiler. The boiler has been able to achieve varying capacities during compliance testing over the last 10 years. Individual run steam rates have ranged up to 212,000 lb/hr, while individual run heat input rates have ranged up to 436.3 MMBtu/hr (i.e., greater than 90 percent of permitted rates). This variable operation is normal for this bagasse boiler.

Boiler No. 3

Boiler No. 3 is a cell type boiler (i.e., has no grate). The boiler is presently permitted to generate up to 130,000-lb/hr steam, at a maximum heat input rate due to bagasse of 265 MMBtu/hr. During the next three off-seasons, Boiler No. 3 is scheduled to undergo the following repair and maintenance activities:

- Replace several rows of main generating bank steam tubes, amounting to about 33 percent of boiler heat transfer surface (2004 and 2005);
- Replace three rows of superheater tubes (2003).

These repairs are not associated with any other repairs to Boiler No. 3, except that the superheater tube repairs are part of a 2-year project that was begun in 2002.

As described, the repairs to the main generating bank tubes will be spread over 2 years. The above repairs are estimated to cost as follows (the superheater tube repairs include costs incurred during 2002):

Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Main Generating Bank Tubes	100,000	300,000	400,000	25	75
Superheater Tubes	47,000	130,000	177,000	27	83
Total	**147,000**	**430,000**	**577,000**	**25**	**75**

As indicated, these repairs are relatively labor intensive, with the material costs representing a small percentage of the total costs. All costs will come out of the operating budget for the facility.

This project affects only the steam side of the boiler. The gas side (i.e., emissions) is not affected by this project. In addition, the planned repairs will not change the maximum permitted heat input rate, steam production rate, or any other aspect of the boiler.

Boiler No. 3 has been able to achieve varying capacities during compliance testing over the last 10 years. Individual run steam rates have ranged up to 117,400 lb/hr, while individual run heat input rates have ranged up to 234.3 MMBtu/hr (i.e., greater than 90 percent of permitted rates). During more recent years, steam rates have only reached about 100,000 lb/hr. This variable operation is normal for this bagasse boiler. It is not expected that the planned repairs to the boiler will result in any greater steam production than recent years have demonstrated.

Boiler No. 4

Boiler No. 4 was originally permitted for the Clewiston mill in 1985, and began operating in 1985. This was an existing coal-fired boiler that was converted to bagasse/oil-firing. The conversion included new steam generating bank tubes, new superheater, and the air heater and economizer were retubed. The boiler has a traveling grate. The boiler is presently permitted to generate up to 300,000-lb/hr steam at a heat input rate of 633 MMBtu/hr.

During the upcoming off-season, Boiler No. 4 is scheduled to undergo the following repair and maintenance activities:

- Replace both side wall tubes during refractory repair, amounting to about 19 percent of the boiler heat transfer surface (2003);
- Replace 40 percent of main generating bank tubes (2004);
- Replace superheater tubes (2005);
- Replace screenwall tubes in gas flow region (2005); and
- Replace one-half of the air heater tubes (2003).

These repairs are not associated with any other repairs to the boiler, or any other projects planned for Boiler No. 4, except for the main generating bank tubes. The main generating bank tube replacement project is part of a 2-year project to replace all the main generating bank tubes.

All of these repairs are estimated to cost as follows (the main generating bank costs include 2002 costs):

Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Sidewall Tubes	23,000	69,000	92,000	25	75
Main Generating Bank Tubes*	149,000	580,000	729,000	20	80
Lagging on Superheater Tubes	100,000	300,000	400,000	25	75
Screenwall Tubes	15,000	75,000	90,000	17	83
Air Heater Tubes	75,000	150,000	225,000	33	67
Total	**362,000**	**1,174,000**	**1,536,000**	**24**	**76**

* Includes 2002 costs.

All of these costs will come from the operating budget for the facility.

This project affects only the steam side of Boiler No. 4. The gas side (i.e., emissions) is not affected by this project. In addition, the planned repairs will not change the maximum permitted heat input rate, steam production rate, or any other aspect of the boiler. The boiler has been able to achieve at least 90 percent of its permitted 24-hour average steam rate capacity during recent compliance testing.

Boiler No. 7

Boiler No. 7 is a bagasse/oil-fired boiler originally permitted in 1996. The boiler was subject to prevention of significant deterioration (PSD) review and a best available control technology (BACT) determination at the time of original permitting. The boiler was constructed and began operating in 1997. Initial compliance tests on the boiler were conducted in November 1997. The boiler is presently permitted to generate up to 385,000-lb/hr steam (350,000, maximum 24-hr average). During the upcoming off-season, Boiler No. 7 is scheduled to undergo the following repair and maintenance activities:

- Repairs to stoker (2003);
- Replace two-thirds of economizer tubes (2003).

These repairs are not associated with any other repairs to the boiler, or any other projects planned for Boiler No. 7, other than the economizer repair. During 2002, the first one-third of the economizer tubes were replaced, and the planned 2003 repairs is to replace the remaining tubes.

All of these repairs are estimated to cost as follows:

Repair	Materials ($)	Labor ($)	Total ($)	Materials (% of total $)	Labor (% of total $)
Stoker	0	150,000	150,000	0	100
Economizer Tubes	92,000	25,000	117,000	77	23
Total	**92,000**	**175,000**	**267,000**	**34**	**66**

As indicated, these repairs are relatively labor intensive, with the material costs representing a small percentage of the total costs. All costs will come out of the operating budget for the facility.

This project affects only the steam side of Boiler No. 7. The stoker repairs will not change the operation of the stoker. Therefore, the gas side of the boiler (i.e., emissions) is not affected by this project. In addition, the planned repairs will not change the maximum permitted heat input rate, steam production rate, or any other aspect of the boiler. The boiler has been able to achieve at least 90 percent of its permitted 24-hour average steam rate capacity during recent compliance testing.

Discussion

To summarize, the types of boiler repairs U. S. Sugar is planning for the Clewiston mill include the following:

- Replace tubes:
  - Rows of main generating bank steam tubes,
  - Air heater tubes,
  - Superheater tubes,
  - Economizer tubes,
  - Roof, front, and sidewall tubes, and
  - Screen tubes;
- Replace overfire air fan and distributor air fan; and
- Repairs to stoker.

Nearly all of the planned repairs to the boilers involve tube repair and replacement.

All of the boilers at the Clewiston mill are routinely repaired and maintained during the off-season. The primary reason for many of the repairs is the nature of the bagasse fuel burned in the boilers. The operating environment created by the bagasse fuel is harsher compared to fossil fuel boilers or even wood-fired boilers. This is due to the relatively high and variable moisture content of bagasse, the lower heating value of the fuel, and the presence of sand in the bagasse fuel. The sulfur in the fuel, although relatively low, coupled with high moisture and cold end temperatures, increases corrosion, scaling and fouling of air heater and economizer tubes, ductwork, and other boiler internals. Therefore, a higher level of repairs and maintenance is required on bagasse boilers compared to boilers burning other fuels.

The sand in the fuel, present even after multiple washings in the cane grinding mills, causes erosion of boiler internals, fans, and ductwork. At the Clewiston mill, the amount of sugar cane grown on

sandy soils as opposed to muck soils has risen steadily over the last 20 years. This increasing trend is shown in Figure 1 attached. As shown, the percentage of cane grown on sandy soils has increased from about 30 percent in 1985 to nearly 70 percent in the 2001 - 2002 crop season. The result is that even a greater level of repairs and maintenance is required on the boilers compared to previous years.

Although a greater level of repairs is required for bagasse boilers, the extended off-season, which can last from 5 to 7 months depending on the sugar cane crop, allows a greater level of repairs and maintenance to be performed compared to boilers in other industries, which generally must operate year-around. Thus, the average life of a bagasse boiler is much greater than that of a boiler burning fossil fuels or wood.

It is also noted, as discussed in our meeting, that U. S. Sugar is in the planning stages for a new boiler at the Clewiston mill, and will be submitting a construction permit application to the Department in the near future. As part of this project, the existing Boiler No. 3 will be retired.

U. S. Sugar has become increasingly aware of U. S. Environmental Protection Agency's (EPA) initiatives related to routine repair and maintenance activities and life extension projects. As a result, U. S. Sugar is presenting this information regarding the Clewiston boilers to gain concurrence that the planned activities do indeed constitute routine repair, maintenance or replacement, as defined under the PSD regulations.

A summary of the boiler repair costs is presented in Table 1. Two important points are to be made from this table. First, the materials costs associated with the repairs are low: less than 30 percent of the total repair cost for each boiler. The majority of costs are due to labor costs. This confirms that these projects do not represent major replacements of the boiler components. The labor costs are high due in part to the contract labor that U. S. Sugar must use. The labor costs would be much less if U. S. Sugar performed the labor. However, U. S. Sugar does not have adequate personnel to perform the necessary labor.

Secondly, the total repair costs for each boiler represent only a small fraction of the cost of a comparable new boiler. The total cost of a new boiler of comparable size to the existing boilers is estimated to range from $5.5 to $8.5 million, depending on boiler size. The total repair costs for each boiler are less than 20 percent of the cost of a comparable new boiler. Material costs associated with the repairs, therefore, represent less than 6 percent of the cost of a comparable new boiler.

As described previously, all costs for the planned repairs will come out of the operating budget for the Clewiston mill.

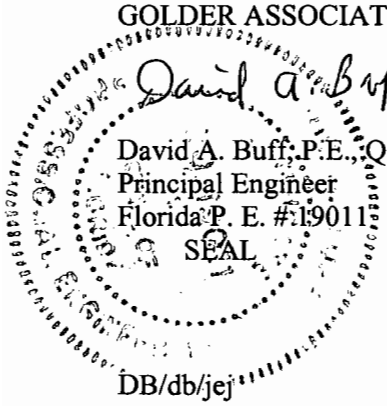
U. S. Sugar believes that, due to the nature of these repairs, they qualify for routine maintenance, repair, and replacement exemptions under the Department's air rules. To assist in this determination, we have addressed EPA's five-factor criteria for assessing whether a project qualifies as routine maintenance, replacement, or repair (see Tables 2 through 6 attached).

As such, we believe that no air construction permit is required prior to commencing these repairs on the boilers. The Department's written concurrence that no air construction permit is required for these activities.

Please call me at (352) 336-5600 if you have any questions concerning this request, or need additional information.

Sincerely,

GOLDER ASSOCIATES INC.



David A. Buff, P.E., Q. E. P.
Principal Engineer
Florida P. E. #: 19011
SEAL

DB/db/jej

cc: Don Griffin
Peter Briggs

0037653/4/4.1/L020603

Table 1. Summary of Planned Repairs to Clewiston Boilers, 2003-2005

Boiler	Years 2003-2005 Estimated Cost of Repairs[a] ($)			Repair Cost as Percentage of		Cost of Comparable New Boiler[b] ($)	Repair Cost as Percentage of New Boiler Cost
	Materials	Labor	Total	Materials	Labor		
Boiler 1	257,000	818,000	1,075,000	24%	76%	7,000,000	15%
Boiler 2	310,000	723,000	1,033,000	30%	70%	7,000,000	15%
Boiler 3	147,000	430,000	577,000	25%	75%	5,500,000	10%
Boiler 4	362,000	1,174,000	1,536,000	24%	76%	8,000,000	19%
Boiler 7	92,000	175,000	267,000	34%	66%	8,500,000	3%

[a] Does not include costs of replacing refractory.

[b] Does not include costs of air pollution control .

Table 2.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 1
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 1 Repairs
Nature	
1. Whether major components of the facility are being modified or replaced	1. A major component of the facility is not being modified or replaced. Only 26% of the tubes (heating surface) of the generating section of the boiler is being replaced, along with one-half of the air heater tubes and 100% of the super heater tubes. The air heater and superheater repairs will be performed over a two year period. This repair consists only of steam tubes.
2. Whether the unit is of considerable size, function, or importance to the operation of the facility	2. Boiler No. 1 is equally important to the other boilers during the crop season, but is a backup boiler during the off-seson operation. During 2002, it provided about 18% of the mills' steam generation.
3. Whether the source itself has characterized the change as non-routine	3. U. S. Sugar considers this project to be routine: the operating environment is harsh. Accelerated wear and corrosion are caused by sand, moisture and sulfur in bagasse fuel, and extended downtime. Cost is coming out of operating budget.
a. Is the repair/replacement common in the industry?	a. Unknown. Sand in the fuel may be unique to U. S. Sugar because 70% of the cane for Clewiston is grown on sand lands. Biomass fuels are more erosive than fossil fuels.
4. Whether the change could be performed during full functioning of the facility or while it was in full working order	4. Boiler No. 1 needs to be off-line to perform the repair. Boiler No. 1 is routinely off-line during the off-season.
5. Whether the materials, equipment and resources necessary to carry out the planned activity are already on site	5. Due to the nature of the work, the materials, equipment and resources to carry out the planned activity will come from off-site.

Table 2.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 1
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 1 Repairs
Extent	
1. Whether an entire emissions unit will be replaced	1. The entire emissions unit will not be replaced. Replacement of only 26% of heating surface of the generating section of the boiler; one-half of air heater tubes, and 100% of the superheater tubes.
2. Whether the change will take significant time to perform	2. The change can occur within a short amount of time, during the off-season when the unit does not typically operate. The work will be performed during the same time period when normal maintenance on the boiler is performed. All work to be performed during the approximate 5 to 7 month off-season.
3. Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine	3. In the Clewiston Mill's operating environment, these repairs taken as a whole are considered routine.
4. Whether the change requires the addition of parts to existing equipment	4. No addition of parts are used - only in kind replacement.
a. Does repair/replacement involve improved design/materials?	a. Generally not, but some tubes could be fitted with additional erosion protection, depending on location in boiler.

Table 2.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 1
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 1 Repairs
Purpose	
1. Whether the purpose of the effort is to extend the useful life of the units; similarly, whether the source proposes to replace a unit at the end of its useful life	1. The purpose is not to "extend the useful life" of the boiler. Conversely, without repair or replacement, the unit's normal life would be shortened. The replacement and repair of the tubes will not extend the life of the unit. The purpose of replacing the tubes is to repair damage due to erosion and corrosion, resulting from sand, moisture and sulfur in the bagasse fuel and extended downtime.
2. Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability)	2. The replacement will not allow enhanced operation in anyway. The tube replacement will have the same primary function as the existing components. There will be no increase in maximum steam rate. Annual operation is dependent upon, and limited by, the amount of sugar cane harvested and refined sugar produced. There is continuous economic incentive to decrease (not increase) boiler usage. The steam needs of the sugar mill and refinery remain the same, regardless of an individual boiler's operation. Boiler No. 1 will continue to operate as it has in the past.
a. Does repair/replacement enhance efficiency?	a. No.
b. Does repair/replacement make the unit more attractive to run from an economic standpoint?	b. No.
c. Does repair/replacement increase capacity of unit?	c. No.
d. Does repair/replacement allow for less frequent maintenance?	d. Potentially, due to reduced tube erosion due to erosion protection for certain replaced tubes.

Table 2.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 1
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 1 Repairs
Frequency	
1. Whether the change is performed frequently in a typical unit's life	1. It is expected that in similar bagasse boilers burning similar fuel that the repair frequency is normal and routine.
a. Has the affected unit performed the repair/replacement frequently at its facility?	a. Portions of the generating tubes are repaired frequently.
Cost	
1. Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit	1. Project cost is approximately $1,075,000, but only about 24% of this total cost is in materials. Also, labor cost and overall cost would be much lower if performed internally by U. S. Sugar. Total project cost is about 15% of a new boiler cost, while the parts cost is less than 4% of a new boiler. The cost of a comparable new boiler is estimated at $7 million.
a. Is the relative cost of the proposed replacement high in comparison to the cost of a typical identical replacement of a worn part?	a. No, the cost is the same.
2. Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source)	2. 100% of costs are being paid out of the operating budget. No portion of the costs will be capitalized.

Table 3.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 2
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 2 Repairs
Nature	
1. Whether major components of the facility are being modified or replaced	1. A major component of the facility is not being modified or replaced. Only 25% of the main generating bank and wall tubes (heating surface) of the boiler is being replaced, along with super heater and air heater tube sections. Additionally, small air distributor fans are being replaced. Several of these repairs will be over a two-year period.
2. Whether the unit is of considerable size, function, or importance to the operation of the facility	2. Boiler No. 2 is equally important to the other boilers during the crop season, but is a backup boiler during the off-season operation. During 2002, it provided about 21% of the mills' steam generation.
3. Whether the source itself has characterized the change as non-routine	3. U. S. Sugar considers this project to be routine: the operating environment is harsh. Accelerated wear and corrosion are caused by sand, moisture and sulfur in bagasse fuel, and extended downtime. Cost is coming out of operating budget.
a. Is the repair/replacement common in the industry?	a. Unknown. Sand in the fuel may be unique to U. S. Sugar because 70% of the cane for Clewiston is grown on sand lands. Biomass fuels are more erosive than fossil fuels.
4. Whether the change could be performed during full functioning of the facility or while it was in full working order	4. Boiler No. 2 needs to be off-line to perform the repair. Boiler No. 2 is routinely off-line during the off-season.
5. Whether the materials, equipment and resources necessary to carry out the planned activity are already on site	5. Due to the nature of the work, the materials, equipment and resources to carry out the planned activity will come from off-site.

Table 3.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 2
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 2 Repairs
Extent	
1. Whether an entire emissions unit will be replaced	1. The entire emissions unit will not be replaced. Replacement of only 25% of heating surface of the generating section of the boiler; one-quarter of air heater tubes, a section of the superheater tubes, and two samll fans.
2. Whether the change will take significant time to perform	2. The change can occur within a short amount of time, during the off-season when the unit does not typically operate. The work will be performed during the same time period when normal maintenance on the boiler is performed. All work to be performed in the 5 to 7 month off-season.
3. Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine	3. In the Clewiston Mill's operating environment, these repairs taken as a whole are considered routine.
4. Whether the change requires the addition of parts to existing equipment	4. No addition of parts are used - only in kind replacement.
a. Does repair/replacement involve improved design/materials?	a. Generally not, but some tubes could be fitted with additional erosion protection, depending on location in boiler.

Table 3.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 2
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 2 Repairs
Purpose	
1. Whether the purpose of the effort is to extend the useful life of the units; similarly, whether the source proposes to replace a unit at the end of its useful life	1. The purpose is not to "extend the useful life" of the boiler. Conversely, without repair or replacement, the unit's normal life would be shortened. The replacement and repair of the tubes will not extend the life of the unit. The purpose of replacing the tubes is to repair damage due to erosion and corrosion, resulting from sand, moisture and sulfur in the bagasse fuel and extended downtime.
2. Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability)	2. The replacement will not allow enhanced operation in anyway. The tube and fan replacements will have the same primary function as the existing components. There will be no increase in maximum steam rate. Annual operation is dependent upon, and limited by, the amount of sugar cane harvested and refined sugar produced. There is continuous economic incentive to decrease (not increase) boiler usage. The steam needs of the sugar mill and refinery remain the same, regardless of an individual boiler's operation. Boiler No. 2 will continue to operate as it has in the past.
a. Does repair/replacement enhance efficiency?	a. No.
b. Does repair/replacement make the unit more attractive to run from an economic standpoint?	b. No.
c. Does repair/replacement increase capacity of unit?	c. No.
d. Does repair/replacement allow for less frequent maintenance?	d. Potentially, due to reduced tube erosion due to erosion protection for certain replaced tubes.

Table 3.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 2
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 2 Repairs
Frequency	
1. Whether the change is performed frequently in a typical unit's life	1. It is expected that in similar bagasse boilers burning similar fuel that the repair frequency is normal and routine.
a. Has the affected unit performed the repair/replacement frequently at its facility?	a. Portions of the generating tubes are repaired frequently.
Cost	
1. Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit	1. Project cost is approximately $1,033,000, but only about 30% of this total cost is in materials. Also, labor cost and overall cost would be much lower if performed internally by U. S. Sugar. Total project cost is less than 16% of a new boiler cost, while the materials cost is less than 5% of a new boiler. The cost of a comparable new boiler is estimated at $7 million.
a. Is the relative cost of the proposed replacement high in comparison to the cost of a typical identical replacement of a worn part?	a. No, the cost is the same.
2. Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source)	2. 100% of costs are being paid out of the operating budget. No portion of the costs will be capitalized.

Table 4.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 3
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 3 Repairs
Nature	
1. Whether major components of the facility are being modified or replaced	1. A major component of the facility is not being modified or replaced. Only 33% of the tubes (heating surface) of the generating section of the boiler is being replaced over a two-year period. Three rows of superheater tubes are also being replaced. This repair consists only of steam tubes.
2. Whether the unit is of considerable size, function, or importance to the operation of the facility	2. Boiler No. 3 is the least important boiler at the mill, due to its size, and is a backup boiler during the off-season operation. During 2002, it provided about 6% of the mills' steam generation.
3. Whether the source itself has characterized the change as non-routine	3. U. S. Sugar considers this project to be routine: the operating environment is harsh. Accelerated wear and corrosion are caused by sand, moisture and sulfur in bagasse fuel, and extended downtime. Cost is coming out of operating budget.
a. Is the repair/replacement common in the industry?	a. Unknown. Sand in the fuel may be unique to U. S. Sugar because 70% of the cane for Clewiston is grown on sand lands. Biomass fuels are more erosive than fossil fuels.
4. Whether the change could be performed during full functioning of the facility or while it was in full working order	4. Boiler No. 3 needs to be off-line to perform the repair. Boiler No. 3 is routinely off-line during the off-season.
5. Whether the materials, equipment and resources necessary to carry out the planned activity are already on site	5. Due to the nature of the work, the materials, equipment and resources to carry out the planned activity will come from off-site.

Table 4.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 3
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 3 Repairs
Extent	
1. Whether an entire emissions unit will be replaced	1. The entire emissions unit will not be replaced. Replacement of only 33% of heating surface of the generating section of the boiler, and three rows of superheater tubes.
2. Whether the change will take significant time to perform	2. The change can occur within a short amount of time, during the off-season when the unit does not typically operate. The work will be performed during the same time period when normal maintenance on the boiler is performed. All work to be performed during the approximate 5 to 7 month off-season.
3. Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine	3. In the Clewiston Mill's operating environment, these repairs taken as a whole are considered routine.
4. Whether the change requires the addition of parts to existing equipment	4. No addition of parts are used - only in kind replacement.
a. Does repair/replacement involve improved design/materials?	a. Generally not, but some tubes could be fitted with additional erosion protection, depending on location in boiler.

Table 4.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 3
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 3 Repairs
Purpose	
1. Whether the purpose of the effort is to extend the useful life of the units; similarly, whether the source proposes to replace a unit at the end of its useful life	1. The purpose is not to "extend the useful life" of the boiler. Conversely, without repair or replacement, the unit's normal life would be shortened. The replacement and repair of the tubes will not extend the life of the unit. The purpose of replacing the tubes is to repair damage due to erosion and corrosion, resulting from sand, moisture and sulfur in the bagasse fuel and extended downtime.
2. Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability)	2. The replacement will not allow enhanced operation in anyway. The tube replacement will have the same primary function as the existing components. There will be no increase in maximum steam rate. Annual operation is dependent upon, and limited by, the amount of sugar cane harvested and refined sugar produced. There is continuous economic incentive to decrease (not increase) boiler usage. The steam needs of the sugar mill and refinery remain the same, regardless of an individual boiler's operation. Boiler No. 3 will continue to operate as it has in the past.
a. Does repair/replacement enhance efficiency?	a. No.
b. Does repair/replacement make the unit more attractive to run from an economic standpoint?	b. No.
c. Does repair/replacement increase capacity of unit?	c. No.
d. Does repair/replacement allow for less frequent maintenance?	d. Potentially, due to reduced tube erosion due to erosion protection for certain replaced tubes.

Table 4.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 3
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 3 Repairs
Frequency	
1. Whether the change is performed frequently in a typical unit's life	1. It is expected that in similar bagasse boilers burning similar fuel that the repair frequency is normal and routine.
a. Has the affected unit performed the repair/replacement frequently at its facility?	a. Portions of the generating tubes are repaired frequently.
Cost	
1. Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit	1. Project cost is approximately $577,000, but only about 25% of this total cost is in materials. Also, labor cost and overall cost would be much lower if performed internally by U. S. Sugar. Total project cost is less than 10% of a new boiler cost, while the parts cost is less than 3% of a new boiler. The cost of a comparable new boiler is estimated at $5.5 million.
a. Is the relative cost of the proposed replacement high in comparison to the cost of a typical identical replacement of a worn part?	a. No, the cost is the same.
2. Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source)	2. 100% of costs are being paid out of the operating budget. No portion of the costs will be capitalized.

Table 5.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 4
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 4 Repairs
Nature	
1. Whether major components of the facility are being modified or replaced	1. A major component of the facility is not being modified or replaced. About 59% of the tubes (heating surface) of the boiler is being replaced over a two-year period. Superheater, screenwall and air heater tubes are also being replaced. This repair consists only of steam tubes.
2. Whether the unit is of considerable size, function, or importance to the operation of the facility	2. Boiler No. 4 is equally important to other boilers at the mill, and is a backup boiler during the off-season operation. During 2002, it provided about 19% of the mills' steam generation.
3. Whether the source itself has characterized the change as non-routine	3. U. S. Sugar considers this project to be routine: the operating environment is harsh. Accelerated wear and corrosion are caused by sand, moisture and sulfur in bagasse fuel, and extended downtime. Cost is coming out of operating budget.
a. Is the repair/replacement common in the industry?	a. Unknown. Sand in the fuel may be unique to U. S. Sugar because 70% of the cane for Clewiston is grown on sand lands. Biomass fuels are more erosive than fossil fuels.
4. Whether the change could be performed during full functioning of the facility or while it was in full working order	4. Boiler No. 4 needs to be off-line to perform the repair. Boiler No. 3 is routinely off-line during the off-season.
5. Whether the materials, equipment and resources necessary to carry out the planned activity are already on site	5. Due to the nature of the work, the materials, equipment and resources to carry out the planned activity will come from off-site.

Table 5.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 4
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 4 Repairs
Extent	
1. Whether an entire emissions unit will be replaced	1. The entire emissions unit will not be replaced. About 59% of heating surface of the generating section of the boiler will be replaced, along with superheater, screenwall and air haeter tubes.
2. Whether the change will take significant time to perform	2. The change can occur within a short amount of time, during the off-season when the unit does not typically operate. The work will be performed during the same time period when normal maintenance on the boiler is performed. All work to be performed during the approximate 5 to 7 month off-season.
3. Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine	3. In the Clewiston Mill's operating environment, these repairs taken as a whole are considered routine.
4. Whether the change requires the addition of parts to existing equipment	4. No addition of parts are used - only in kind replacement.
a. Does repair/replacement involve improved design/materials?	a. Generally not, but some tubes could be fitted with additional erosion protection, depending on location in boiler.

Table 5.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 4
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 4 Repairs
Purpose	
1. Whether the purpose of the effort is to extend the useful life of the units; similarly, whether the source proposes to replace a unit at the end of its useful life	1. The purpose is not to "extend the useful life" of the boiler. Conversely, without repair or replacement, the unit's normal life would be shortened. The replacement and repair of the tubes will not extend the life of the unit. The purpose of replacing the tubes is to repair damage due to erosion and corrosion, resulting from sand, moisture and sulfur in the bagasse fuel and extended downtime.
2. Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability)	2. The replacement will not allow enhanced operation in anyway. The tube replacement will have the same primary function as the existing components. There will be no increase in maximum steam rate. Annual operation is dependent upon, and limited by, the amount of sugar cane harvested and refined sugar produced. There is continuous economic incentive to decrease (not increase) boiler usage. The steam needs of the sugar mill and refinery remain the same, regardless of an individual boiler's operation. Boiler No. 4 will continue to operate as it has in the past.
a. Does repair/replacement enhance efficiency?	a. No.
b. Does repair/replacement make the unit more attractive to run from an economic standpoint?	b. No.
c. Does repair/replacement increase capacity of unit?	c. No.
d. Does repair/replacement allow for less frequent maintenance?	d. Potentially, due to reduced tube erosion due to erosion protection for certain replaced tubes.
Frequency	
1. Whether the change is performed frequently in a typical unit's life	1. It is expected that in similar bagasse boilers burning similar fuel that the repair frequency is normal and routine.
a. Has the affected unit performed the repair/replacement frequently at its facility?	a. Portions of the generating tubes are repaired frequently.

Table 5.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 4
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 4 Repairs
Cost	
1. Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit	1. Project cost is approximately $1,536,000, but only about 24% of this total cost is in materials. Also, labor cost and overall cost would be much lower if performed internally by U. S. Sugar. Total project cost is less than 20% of a new boiler cost, while the materials cost is less than 5% of a new boiler. The cost of a comparable new boiler is estimated at $8 million.
a. Is the relative cost of the proposed replacement high in comparison to the cost of a typical identical replacement of a worn part?	a. No, the cost is the same.
2. Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source)	2. 100% of costs are being paid out of the operating budget. No portion of the costs will be capitalized.

Table 6.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 7
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 7 Repairs
Nature	
1. Whether major components of the facility are being modified or replaced	1. A major component of the facility is not being modified or replaced. Only repairs to the stoker and replacement of two-thirds of the economizer tubes is pbeing permformed. This repair consists primarily of steam tubes.
2. Whether the unit is of considerable size, function, or importance to the operation of the facility	2. Boiler No. 7 is the most important boiler at the mill, since it is used as the primary steam source during the off-season. During 2002, it provided about 37% of the mills' steam generation.
3. Whether the source itself has characterized the change as non-routine	3. U. S. Sugar considers this project to be routine: the operating environment is harsh. Accelerated wear and corrosion are caused by sand, moisture and sulfur in bagasse fuel, and extended downtime. Cost is coming out of operating budget.
a. Is the repair/replacement common in the industry?	a. Unknown. Sand in the fuel may be unique to U. S. Sugar because 70% of the cane for Clewiston is grown on sand lands. Biomass fuels are more erosive than fossil fuels.
4. Whether the change could be performed during full functioning of the facility or while it was in full working order	4. Boiler No. 7 needs to be off-line to perform the repair. Boiler No. 7 can be off-line during the off-season since Boilers 1-4 provide backup.
5. Whether the materials, equipment and resources necessary to carry out the planned activity are already on site	5. Due to the nature of the work, the materials, equipment and resources to carry out the planned activity will come from off-site.

Table 6.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 7
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 7 Repairs
Extent	
1. Whether an entire emissions unit will be replaced	1. The entire emissions unit will not be replaced. Only the stoker and the economizer are affected.
2. Whether the change will take significant time to perform	2. The change can occur within a short amount of time, during the off-season when the unit does not typically operate. The work will be performed during the same time period when normal maintenance on the boiler is performed.
3. Whether the collection of activities, taken as a whole, constitutes a non-routine effort, notwithstanding that individual elements could be routine	3. In the Clewiston Mill's operating environment, these repairs taken as a whole are considered routine.
4. Whether the change requires the addition of parts to existing equipment	4. No addition of parts are used - only in kind replacement.
a. Does repair/replacement involve improved design/materials?	a. No.

Table 6.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 7
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 7 Repairs
Purpose	
1. Whether the purpose of the effort is to extend the useful life of the units; similarly, whether the source proposes to replace a unit at the end of its useful life	1. The purpose is not to "extend the useful life" of the boiler. Conversely, without repair or replacement, the unit's normal life would be shortened. The replacement and repair of the tubes and stoker will not extend the life of the unit. The purpose of the repairs is to repair damage due to erosion and corrosion, resulting from sand, moisture and sulfur in the bagasse fuel and extended downtime.
2. Whether the modification will keep the unit operating in its present condition, or whether it will allow enhanced operation (e.g., will it permit increased capacity, operating rate, utilization, or fuel adaptability)	2. The replacement will not allow enhanced operation in anyway. The repairs will have the same primary function as the existing components. There will be no increase in maximum steam rate. Annual operation is dependent upon, and limited by, the amount of sugar cane harvested and refined sugar produced. There is continuous economic incentive to decrease (not increase) boiler usage. The steam needs of the sugar mill and refinery remain the same, regardless of an individual boiler's operation. Boiler No. 7 will continue to operate as it has in the past.
a. Does repair/replacement enhance efficiency?	a. No.
b. Does repair/replacement make the unit more attractive to run from an economic standpoint?	b. No.
c. Does repair/replacement increase capacity of unit?	c. No.
d. Does repair/replacement allow for less frequent maintenance?	d. Potentially, due to reduced tube erosion due to erosion protection for certain replaced tubes.

Table 6.
United States Sugar Corporation
Clewiston Mill
Repairs for Boiler No. 7
February 5, 2003

Criteria Based on EPA May 23, 2000 Guidance	Boiler No. 7 Repairs
Frequency	
1. Whether the change is performed frequently in a typical unit's life	1. It is expected that in similar bagasse boilers burning similar fuel that the repair frequency is normal and routine.
a. Has the affected unit performed the repair/replacement frequently at its facility?	a. Portions of the generating tubes are repaired frequently.
Cost	
1. Whether the change will be costly, both in absolute terms and relative to the cost of replacing the unit	1. Project cost is approximately $267,000, with only about 34% of this total cost in materials. Also, labor cost and overall cost would be much lower if performed internally by U. S. Sugar. Total project cost is less than 3% of a new boiler cost, while the materials cost is less than 2% of a new boiler. The cost of a comparable new boiler is estimated at $8.5 million.
a. Is the relative cost of the proposed replacement high in comparison to the cost of a typical identical replacement of a worn part?	a. No, the cost is the same.
2. Whether a significant amount of the cost of the change is included in the source's capital expenses, or whether the change can be paid for out of the operating budget (i.e., whether the costs are reasonably reflective of the costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source)	2. 100% of costs are being paid out of the operating budget. No portion of the costs will be capitalized.

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
Vice President, Sugar Processing Operations
United States Sugar Corporation - Clewiston Sugar Mill
111 Ponce DeLeon Avenue
Clewiston, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Honda Hammond B. Date of Delivery 12-15-03

C. Signature
x Honda Hammond ☒ Agent ☐ Addressee

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

2. Article Number *(Copy from service label)*
7000 2870 0000 7028 3574

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

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

7000 2870 0000 7028 3574

O F F I C I A L U S E

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

Postmark Here

Sent To
William A. Raiola
Street, Apt. No.; or PO Box No.
111 Ponce DeLeon Ave.
City, State, ZIP+ 4
Clewiston, FL 33440

PS Form 3800, May 2000 See Reverse for Instructions

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

December 5, 2003

CERTIFIED MAIL

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: Unites States Sugar Corporation, Clewiston Sugar Mill and Refinery
Boilers 1 and 2 – Replacement of Forced Draft Fans
Air Permit No. 0510003-022-AC

Dear Mr. Raiola:

On December 4, 2003, the Department received a letter from Golder Associates Inc. requesting approval for the replacement of forced draft fans (80,000 cfm, each) for Boilers 1 and 2 and the replacement of the over-fire air fan (20,250 cfm) for Boiler 2. The request included the equipment specifications and approximate costs. The replacements will be with like-kind components that will not increase the original capacities of the boilers.

In June of this year, the Department issued Permit No. 0510003-022-AC to perform maintenance activities on these units, including the replacement of the over-fire air fan for Boiler 2. Although not specifically proposed in the original project, the Department agrees that replacement of forced draft fans for Boiler 1 and 2 is within the scope of work authorized by Air Permit No. 0510003-022-AC. Therefore, the Department does not believe it is necessary to modify the permit to perform this work. As specified by this permit, please identify these replacements in the required summary reports. If you have any questions regarding this matter, please contact Jeff Koerner at 850/921-9536.

Sincerely,

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

cc: Mr. Don Griffin, U.S. Sugar Corp.
Mr. Peter Briggs, U.S. Sugar Corp.
Mr. David Buff, Golder Associates Inc.
Mr. Ron Blackburn, SD Office

Golder Associates Inc.

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

December 2, 2003

0037653

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

Attention: Mr. A. A. Linero, P. E., New Source Review Section

SUBJECT: UNITED STATES SUGAR CORPORATION, CLEWISTON MILL
BOILER NOS. 1 AND 2 REPAIRS DURING 2003 OFF-SEASON

Dear Mr. Linero:

United States Sugar Corporation (USSC) was issued air construction permit No. 0510003-022-AC for its Clewiston Sugar Mill and Refinery on June 3, 2003. This permit authorized USSC to repair and replace components of the existing boilers at the Clewiston Mill. The permit also describes the specific repairs and replacements that are authorized for each boiler.

USSC is currently planning an additional repair/replacement activity that is not specifically described in permit No. 0510003-022-AC. USSC is planning to replace the existing forced-draft (FD) fans on Boiler Nos. 1 and 2. The existing FD fans are rated at 80,600 cfm (see attached specification sheet). The replacement fans, to be provided by H. Clay Moore & Associates, will also be rated at 80,600 cfm (also see attached specification sheets for new fans).

USSC is also planning to replace the existing overfire air fan on Boiler No. 2. The new fan will also be a like-kind replacement. The specification sheet for the new fan is attached. As shown, the new fan will be rated for 20,250 cfm.

The purpose of this letter is to apply for approval of these like-kind replacements at the Clewiston Mill under construction permit No. 0510003-022-AC. These replacements are planned to be conducted during the 2003 off-season.

Attached is the Professional Engineer signature page to support this request. Please call me at (352)336-5600 if you have any questions or comments, or need additional information. Thank you for your consideration of this matter.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

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

DB/nav

Attachments

cc: Don Griffin
Peter Briggs
Bubba Wade

X:\2000\0037\0037653 US Sugar\4\4.1\120203\L120203.doc

4. Professional Engineer Statement:

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

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

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

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

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [**X**], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

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

STATE OF FLORIDA PROFESSIONAL ENGINEER

Signature: David A. Buff

Date: 12/02/03

(seal)

* Attach any exception to certification statement.

RECEIVED

DEC 04 2003

BUREAU OF AIR REGULATION

ATTACHMENT A

SPECIFICATIONS FOR EXISTING FD FANS
ON BOILER NOS. 1 AND 2

AMERICAN-Standard
INDUSTRIAL DIVISION • DETROIT 32, MICHIGAN
AMERICAN-STANDARD PRODUCTS (CANADA) LIMITED
TORONTO, ONTARIO • CANADIAN SIROCCO PRODUCTS

PERFORMANCE DATA

PREPARED FOR U.S. SUGAR CORPORATION E.D. FAN Boilers 1&2

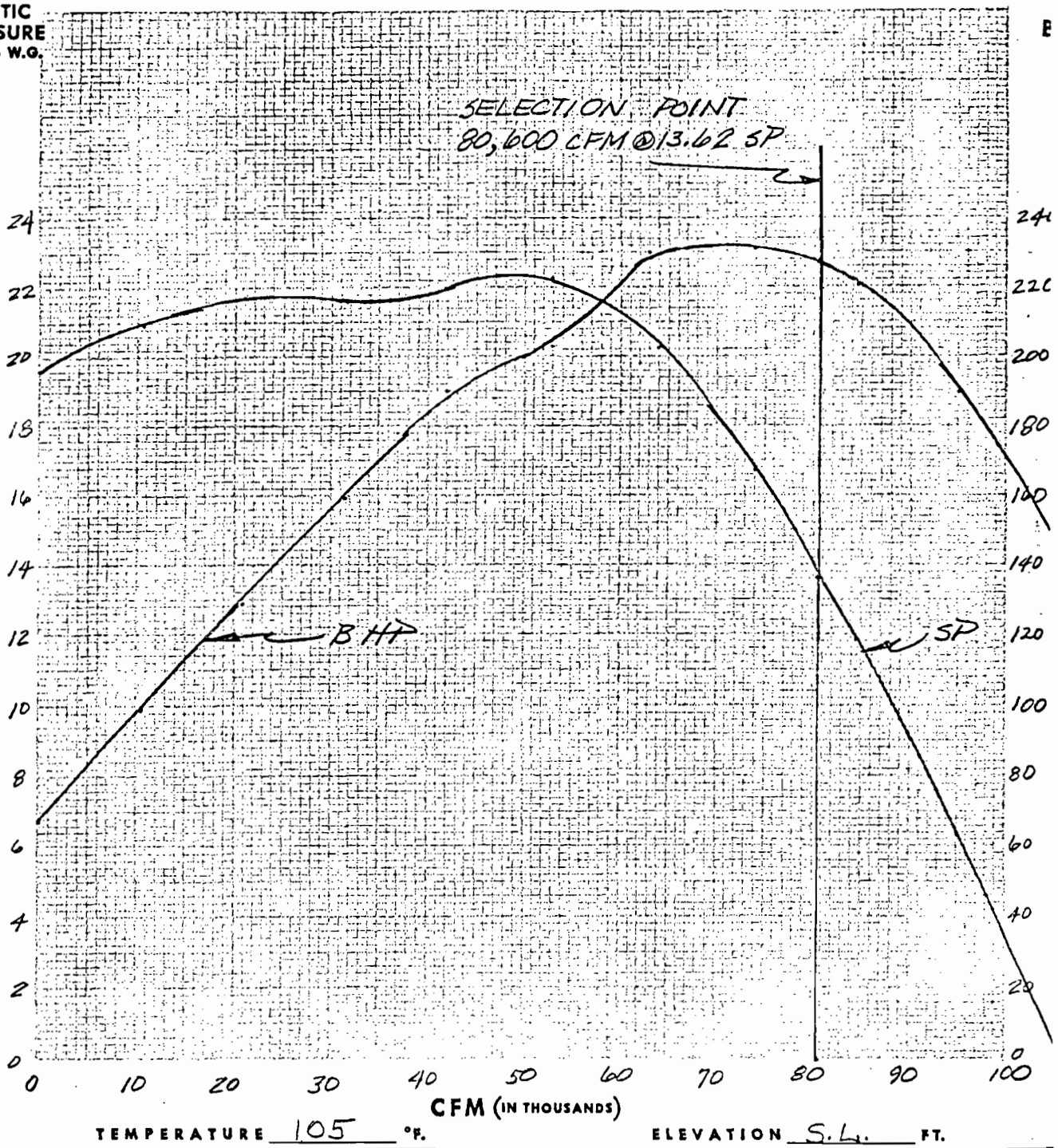
JOB 1968 BOILER ADDITION — CLEWISTON

EQUIPMENT #445 AF 2062 FD FAN

PURCHASER'S ORDER 73861 OUR ORDER 3-80460 RD TAD No. ED_3-624-T13

MEMO No. 137-67 OFFICE MIAMI DATE 6/6/68 BY WGH

UNLESS OTHERWISE INDICATED, CURVES ARE BASED ON CONSTANT SPEED 1760 RPM



TEMPERATURE 105 °F. ELEVATION S.L. FT.

FORM Rev

ATTACHMENT B

SPECIFICATIONS FOR NEW FD FANS
ON BOILER NOS. 1 AND 2

James A. Woods
C. Richard Hach

Marc G. Deane
Samuel S. Harman
J. Floyd Harris
C. Clay Milner
Krista D. Paseur
Dirk W. Servine
Ray E. Woods

Robert W. Sexton

H. CLAY MOORE & ASSOCIATES INC.

Equipment for Power & Industry
8215 Roswell Road Bldg 700 / Atlanta, GA 30350
Phone (770) 393-8336 / Fax (770) 393-2733
E-mail: rsexton@hclaymoore.com

Date: October 20, 2003

To: Bret Nesbitt
U.S. Sugar
P.O. Drawer 1207
Clewiston, FL 33440
Fax (863) 902-2730

Replaces boiler 1 & 2 FD fan

SUBJECT: American Standard Fan Replacement

Dear Mr. Nesbitt:

We are pleased to quote the following replacement fan which exactly duplicates the performance of your existing Forced Draft fan. The price includes bolt-on Radial Inlet dampers which are designed for superb control and low maintenance because there is no center hub to disturb the vortex pattern and the bearings, control ring, and linkage are all outside the gas stream.

Size 805 Type L-39 Fan
Scope is per the attached and includes a shop run test and balance.
Price: $37,025 net

We can supply a set of ¼" thick **AR400 Full Blade Liners** with this fan for an additional $2,632 net. We can also supply a **250 HP 1800 RPM Motor** for an additional $15,037 net. Prices are quoted f.o.b. our factory, freight collect, and are firm for acceptance within thirty (30) days from the date of our proposal. Terms of payment are net thirty (30) days and we exclude any sales/use taxes. Howden Buffalo standard terms and conditions apply. Approval drawings will be available 4 weeks after receipt of your hard copy purchase order to **Howden Buffalo Inc** % H. Clay Moore & Associates at the above Atlanta address. Shipment will occur approximately 15 weeks after release for fabrication.

Regards,
Howden Buffalo Inc

Robert W. Sexton
Project Manager

Howden Buffalo
Custom Fan
Submittal Data Sheet

H. CLAY MOORE and ASSOC.
Equipment for Power and Industry
8215 Roswell Rd 700
Atlanta, GA 30350

To:	U.S. Sugar P.O. Drawer 1207 Clewiston, FL 33440	**Date** **Quote #** **Job Name** **Inquiry #**	20-Oct-03
Attn:	Bret Nesbitt		

Number of Fans	1	**Design Temperature**	105°F
Service	Forced Draft	**Shaft Diam in Wheel**	7.7500" (A576 Gr 1045)
Size and Type	805 L-39	**Housing Thickness**	0.1875" (A36)
Blade Type	Solid Airfoil (A588 Gr A)	**Box Thickness**	
Wheel Diameter	38.50"	**Bearing Size/Type**	3.1875" Fafnir SAOL
SW or DW	DWDI	**WR2 (#FT2)**	1,255
Arrangement	7	**Tip Speed (FPM)**	17,991
Drive	Direct Coupled	**Evase to (Sq Ft)**	

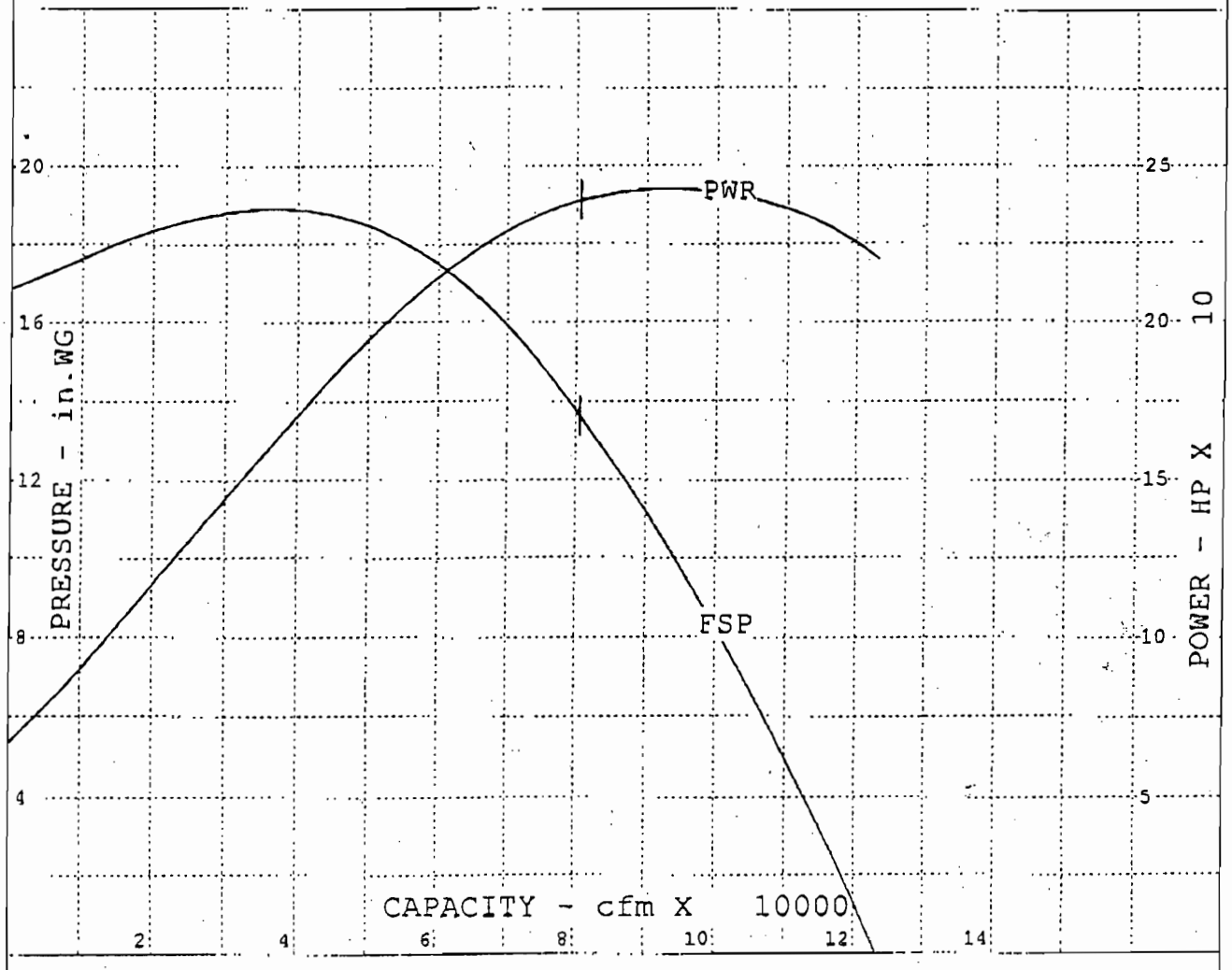
Included in Price
1) Falk 1090T10 Coupling
2) Coupling Guard
3) ACD Radial Vane Inlet Damper
4) Arrangement 7 Unitary Base
5)
6)
7)
8)
9)
10)
11)
12)
13)
14)
15)
16)
17)
18)
19)
20)
21)
22)
23)
24)
25)
26)

Volume (CFM)	80,600 (54,000)	**SP (inwg)**	13.62" (6.15")
Temperature (°F)	105°	**Density (lb/ft3)**	0.0702
Speed (RPM)	1,785 (1,185)	**BHP**	238.7 (72.4)
SE (%)	71.3% (71.6%)	**OV (fpm)**	6,861 (4,597)

HOWDEN BUFFALO INC
BUFFALO DIVISION

PERFORMANCE CURVE | No: | 10/3/2003

Buyer: U. S. Sugar
User: U.S. Sugar
Marks: FD Fan



FAN: ES No. 73015 Size 805 Type L-39 DWDI Diameter 38.50 VIV

Curve Name	Flow cfm	Press in.WG	Power HP	Dens lbs/ft3	Speed RPM	Temp deg.F	VIV Closed %	Acc. Loss in.WG	Eff %
	80600	13.62	238.74	0.0702	1795	105.00	0.00	0.00	71.37

C:\PROGRA-1\HOWDEN-1\Data\USSugar_Clewiston_100303_031AM_RWS_83350-FDFan.sc11

ATTACHMENT C

SPECIFICATIONS FOR NEW OVERFIRE AIR FAN ON BOILER NO. 2

Twin City Fan & Blower

A Twin City Fan Company

5959 Trenton Lane · Minneapolis, MN 55442-3238
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com

ISO 9001 CERTIFIED

United States Sugar Corp.
1731 South W.C. Owen Avenue
Clewiston, FL 33440

October 15, 2003
Page: 1

Job name: US SUGAR CORP.
Job ID: US SUGAR OFA FAN

Derek Embody & Company
Manufacturers' Representative
3820 Northdale Blvd., Suite 307A
Tampa, Florida 33624-1869
Ph. (813) 960-2270
Fax (813) 960-2298
e-mail: dsembody@aol.com

Dear Mr. Bret Nesbitt:

Replace boiler 2 OF Fans

Tag: Overfire Air Fan
Model: 929 RBW - Industrial Radial Backplate Wool Wheel Fan
Arrangement: 8 Class: 32
Performance: 20,250 CFM, 21 SP (in.wg), 0.036 (lb/ft³) Density
1772 RPM, 108.60 Oper. BHP, N/A Std. BHP
Quantity: 1

Accessories Included:
- Access Door - Bolted
- Drain - 3/4"
- Flange - Inlet, Punched
- Flange - Outlet, Punched
- Guard - Shaft & Bearing
- Damper - Outlet, Type II (Airfoil) Opposed Blade (301-600F)
- Split Housing - Pie Shaped
- High Temp Construction (301-500F)
- Shaft Seal - Std Type
- Special Width Construction
- Shaft Cooler
- Special Diameter
- Coupling 1090T
  - Shaft Diameter: 3.44
- Guard - Coupling
- Mount Coupling - Both Halves
- 200 HP, 1800 RPM, 460V, 3Ph, 60Hz, CHEM, Std.Eff., 447T
- Mount TCF Motor

** Revision # 1 to include BALDOR or US ELECTRIC 200 HP, 1800 RPM, 3/60/460v, MILL & CHEMICAL Duty motor factory supplied & mounted by TWIN CITY.

Selling Price Each: 23,497 00
Estimated Shipping Weight: 6,275 lb. Each

Total for all fans:
Extended Selling price FOB Factory (NOT including shipping charges): 23,497.00
Shipping and handling charges are Collect
Extended Estimated Shipping Weight: 6,275 lb.

1. Fan and accessories are as shown in the attached TCF print BC 142740 Rev. A, Item 1 as previously supplied in 1999. Previous motor was 200 HP, 445T frame furnished and mounted by US SUGAR.
2. Lead time is 6-7 WEEKS after receipt of your Purchase Order and release for fabrication.
3. Freight terms are COLLECT to US SUGAR or as requested. Any Purchase Order resulting from this proposal should be made out to DEREK EMBODY & COMPANY, 3820 Northdale Blvd., Suite 307A, Tampa, FL 33624-1869. US SUGAR Vendor # 00030277.

Twin City Fan & Blower

A Twin City Fan Company

5959 Trenton Lane · Minneapolis, MN 55442-3238
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com

ISO 9001 CERTIFIED

United States Sugar Corp.
1731 South W.C. Owen Avenue
Clewiston, FL 33440

Job name: US SUGAR CORP.
Job ID: US SUGAR OFA FAN

4. OPTIONAL DEDUCT for 150 HP motor instead of 200 HP motor = -$ 1,565.00 (445T FRAME)

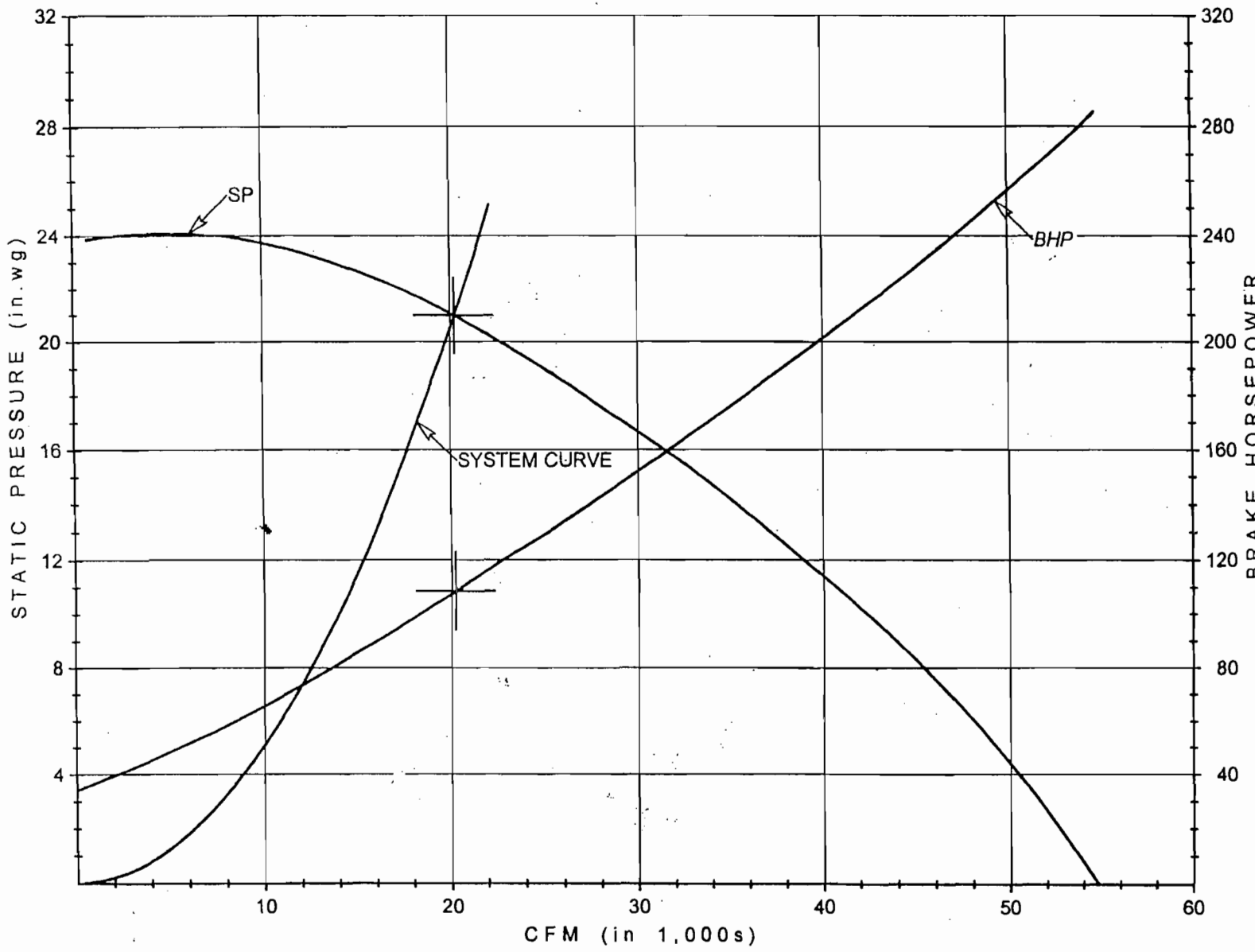
Derek S. Embody
Derek Embody & Company

DE
Derek Embody & Company
Manufacturers' Representative
3820 Northdale Blvd., Suite 307A
Tampa, Florida 33624-1869
Ph. (813) 960-2270
Fax (813) 960-2298
e-mail: dsembody@aol.com

118

Customer: US SUGAR CORP.	Fan Tag: Overfire Air Fan	CFM: 20,250
Job ID:	Model: 929 RBW	SP: 21 in.wg
Represented By: Derek Embody & Company (813) 960-2270		RPM: 1772
		BHP: 108.60
		Outlet Velocity: 6,619
		Density: 0.036

TWIN CITY FAN AND BLOWER PERFORMANCE CURVE



Corrected for:
Mild steel wheel
Compressibility
% width: 60%
% diameter: 104%

Inlet Sound Power

Octave	Level
1	125
2	128
3	123
4	113
5	106
6	100
7	94
8	88

in db re 10^{-12} watts

9/29/03 12:35 - #44

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
Vice President, Sugar Processing Operations
United States Sugar Corporation - Clewiston Sugar Mill
111 Ponce DeLeon Avenue
Clewiston, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) Yonda Hammond B. Date of Delivery 12-15-03

C. Signature
x Yonda Hammond ☑ Agent ☐ Addressee

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

2. Article Number (Copy from service label)
7000 2870 0000 7028 3574

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

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

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	**$**

Postmark Here

7000 2870 0000 7028 3574

Sent To
William A. Raiola

Street, Apt. No.; or PO Box No.
111 Ponce DeLeon Ave.

City, State, ZIP+4
Clewiston, FL 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

March 5, 2004

0337546-0100

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

Attention: Mr. Jeff Koerner, P. E., New Source Review Section

SUBJECT: UNITED STATES SUGAR CORPORATION CLEWISTON MILL
3-YEAR BOILER MAINTENANCE PROJECT
PERMIT NO. 0510003-022-AC

Dear Mr. Koerner:

The purpose of this correspondence is to update the list of maintenance and repair activities planned on the boilers for the 2004 off-season at the Clewiston Mill. Air construction Permit No. 0510003-022-AC was issued to United States Sugar Corporation (USSC) on June 3, 2003, and authorized the repair and replacement of components of the existing boilers at the Clewiston Mill.

Condition 4 of the Emissions Unit Specific Conditions requires USSC to submit a "Maintenance Summary Report" within 60 days of the beginning of each cane milling season. The condition requires that the permittee summarize the following information:

- a general description of the work performed on each boiler during the previous off season;
- a summary of the off season maintenance inspections; and
- a revised schedule of maintenance and repair activities for the next off season.

On October 28, 2003, USSC submitted the required report for the 2003-2004 cane milling season. The report included a schedule of maintenance and repair activities planned for the upcoming 2004 off-season. Since submission of this report, some of the planned maintenance activities have changed.

The purpose of this correspondence is to update the list of maintenance and repair activities planned for the 2004 off-season. The updated list is provided in the enclosed Attachment 1.

In accordance with the construction permit, the replacements U. S. Sugar is planning are all "functionally equivalent" to the existing components, and are intended to return the boilers to their current steam production capabilities. The maintenance activities will not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The repairs will not increase the emission rates of any boiler or the cane milling capacity of the plant. As such, we believe these repairs are authorized activities under the construction permit.

Please call me at (352)336-5600 or Don Griffin at (863)902-2711 if you have any questions or comments concerning this information, or need additional information. Thank you.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

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

DB/jej

Enclosures

cc: Don Griffin
Peter Briggs
R. Blackburn, DEP

Y:\Projects\2003\0337546 US Sugar Blr 7\4\4.1\L030504.doc

ATTACHMENT 1

CLEWISTON BOILER REPAIRS SUMMARY
2004 OFF-SEASON

Boiler 1

- Replace approximately 60% of main generating bank tubes, 14,040 sq feet of heating surface.
- Replace one superheater section, 2,855 sq feet of heating surface.
- Replace east and west and rear waterwall tubes and screenwall tubes, 1500 sq feet of heating surface.
- Replace 50% of air heater tubes, approximately 10,000 sq. feet of air heating surface.
- Replace forced draft fan (approved in DEP letter dated 12/05/2003).
- Stoker repairs.

Boiler 2

- Replace 100% of the boiler generating bank tubes, 23,400 sq feet.
- Replace rear and screenwall tubes, approximately 724 sq feet of heating surface.
- Replace 50% of air heater tubes, approximately 7,500 sq. feet of air heating surface.
- Replace forced draft fan and overfire air fan (approved in DEP letter dated 12/05/2003).
- Stoker repairs.

Boiler 4

- Replace one superheater section and penthouse at top of boiler, approximately 5,400 sq feet.
- Replace front and rear waterwall and screenwall tubes, approximately 3,600 sq feet of heating surface.
- Repair flue gas ductwork.
- Replace bagasse feeders.
- Stoker repairs.
- Repair or replace soot blowers.

Boiler 7

- Stoker repairs.
- Repair flue gas ductwork.

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. DAVID BUFF, P.E.
GOLDER ASSOCIATES, INC.
6241 NW 23 ST, STE 500
GAINESVILLE, FL 32653

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X M H Reinert ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* M H Reinert C. Date of Delivery 9/26/03

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

7001 0320 0001 3692 6907

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

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

OFFICIAL USE

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

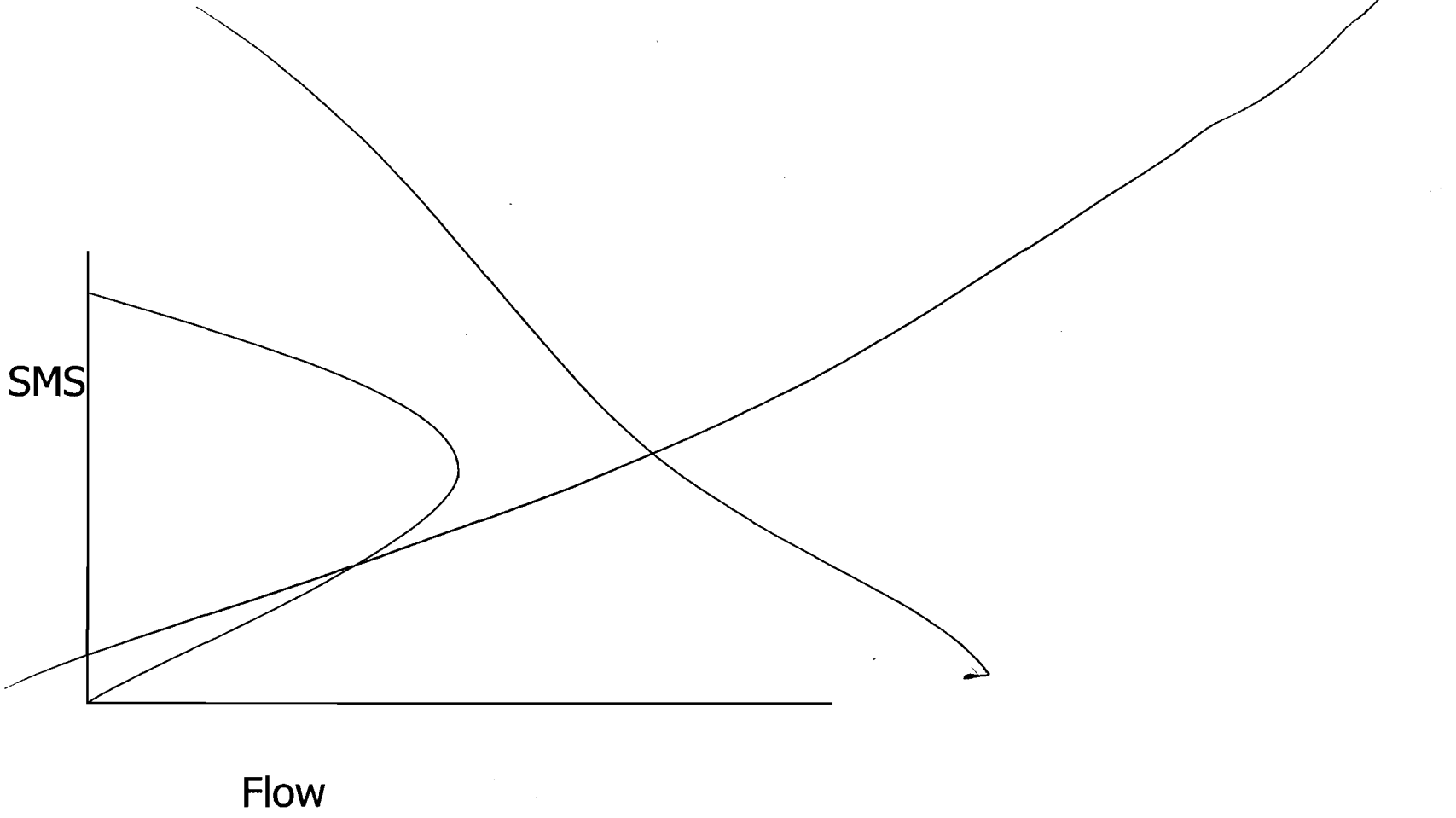
Postmark Here

Sent To MR. DAVID BUFF, P.E.
Street, Apt. No.; or PO Box No. GOLDER ASSOCIATES, INC.
City, State, ZIP+4 6241 NW 23 ST, STE 500
GAINESVILLE, FL 32653

7001 0320 0001 3692 6907

PS Form 3800, January 2001 See Reverse for Instructions

Flow – Space Mean Speed



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
Vice President of Sugar Processing Operations
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
111 Ponce DeLeon Avenue
Clewiston, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Juanita Taylor — B. Date of Delivery 5-5-03

C. Signature X Juanita Taylor ☐ Agent ☐ Addressee

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

7001 0320 0001 3692 6167

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

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

OFFICIAL USE

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

Postmark Here

Sent To: William A. Raiola
Street, Apt. No.; or PO Box No. 111 Ponce DeLeon Avenue
City, State, ZIP+4 Clewiston, FL 33440

7001 0320 0001 3692 6167

PS Form 3800, January 2001 See Reverse for Instructions

Flow-headway

$$q = \frac{1}{\text{average headway}} = \frac{1}{\bar{h}}$$

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0510003-022-AC

U.S. Sugar Corporation
Clewiston Sugar Mill and Refinery
Boiler Maintenance Project

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to U.S. Sugar Corporation (applicant) to perform repairs to boilers at the existing Clewiston Sugar Mill and Refinery located in Hendry County, Florida. The applicant's authorized representative is Mr. William A. Raiola, V.P. of Sugar Processing Operations. The applicant's mailing address is United States Sugar Corporation, Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

In recent years, the Clewiston sugar mill experienced a shift to processing more sugarcane harvested from sandy soils. Even after washing, the cane contains much higher levels of sand than is typical for the industry. The sand carries through the milling process to the bagasse fired in the boilers and creates a very abrasive flue gas, which has lead to premature tube and component wear. For the 2003-2005 cane milling off seasons, the draft permit authorizes a maintenance project to maintain the boilers at normal operational levels and reliability for the upcoming cane milling seasons. Repairs primarily involve component tube replacements, but also include stoker maintenance, and overfire/distributor air fan replacements. In performing the repairs, U.S. Sugar is prohibited from increasing the capacity of any boiler or changing the basic design parameters such as fuel firing rates or heat input rates. The draft permit requires summary reports on completed repairs, updated repair schedules, emissions tests, and tested capacities. For this project, the Department does not believe that the proposed repairs are physical changes that will result in the increase in actual emissions of any pollutant.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 South Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400
Telephone: (850)488-0114

Department of Environmental Protection
Air Resources Section
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3381
Telephone: (239)332-6975

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

376222-CN 5/8/03

CERTIFIED MAIL

UNITED STATES SUGAR CORPORATION
POST OFFICE DRAWER 1207
CLEWISTON, FLORIDA 33440

7001 1940 0006 6170 9247

CLEWISTON FLA. MAY 13'03

U.S.POSTAGE
PB METER
6882827
4.42

RETURN RECEIPT REQUESTED

Department of Environmental Protection
Bureau of Air Regulation
(111 South Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

32399+2400 01

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, FL 33440

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery 6/5/03

C. Signature
X [signature] ☐ Agent ☐ Addressee

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

7001 0320 0001 3692 5863

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

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

OFFICIAL USE

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

Postmark Here

Sent To
William A. Raiola
Street, Apt. No.; or PO Box No.
111 Ponce DeLeon Avenue
City, State, ZIP+4
Clewiston, FL 33440

7001 0320 0001 3692 5863

PS Form 3800, January 2001 See Reverse for Instructions

Car-Following Theories

- Theories describing how one vehicle follows another vehicle were developed primarily in the1950s and 1960s. Some of them are Pipes' theory and Forbe's theory.