

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the Matter of an
Application for Permit Modification by:

United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

DEP File No. 0510003-007 AC (PSD-FL-217B)
Clewiston Facility, Boiler No. 4
Hours of Operation
Hendry County

Enclosed is the Final Permit Number 0510003-007 AC for a modification of the U.S. Sugar Corporation. existing air construction permit for Boiler No.4 at the Clewiston facility in Hendry County. The request is to clarify the condition on their existing permit that limits usage of the No. 4 Boiler to 160 days per season and 3849 hours per year.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation

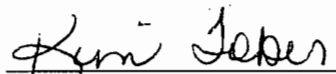
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT MODIFICATION (including the FINAL permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4-8-99 to the person(s) listed:

Murray T. Brinson, USSC*
David Buff, PE, Golder Associates
Phil Barbaccia, DEP SD
James E. Stormer, PBCHD

Clerk Stamp

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


(Clerk)

4-8-99
(Date)

FINAL DETERMINATION

United States Sugar Corporation.
Permit Modification of Boiler No. 4

Clewiston, Hendry County, Florida

DEP File No. 0510003-007 AC and PSD-FL-217(B)

An Intent to Issue an air construction permit modification of Boiler No.4 at the U.S Sugar Corp. facility was distributed on March 19, 1999. This facility is located at W.C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida.

The Public Notice of Intent to Issue Air Construction Permit was published in The Clewiston News on March 24, 1999. No comments were received as a result of the public notice.

The final action of the Department will be to issue the permit as noticed.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

April 8, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Sr. Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: DEP File No. 0510003-007 AC (PSD-FL-217B)
Clewiston Facility, Boiler No. 4
Hours of Operation

Dear Mr. Brinson:

The Department reviewed your request dated March 18, 1999 that the permit condition governing the operating days and hours of the No. 4 Boiler be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions the referenced permit. The Department agrees as long as the unit operates only during the recognized South Florida sugar season (which straddles two calendar years) as indicated in all relevant applications, permits, and reports to-date. The referenced permit for the No. 4 Boiler is hereby changed as follows:

SPECIFIC CONDITION NO. 4

Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per year and only during season.

Note that it is possible, as a result of this change, that the unit might actually operate less than the allowable hours in a calendar year if there is an early end to one season and a late start to the next season. The result is that in the long run the two methods are probably equivalent.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of 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 of Appeal must be filed within (thirty) days after this Notice is filed with the Clerk of the Department.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes
THRU: Clair Fancy *CAF*
FROM: Teresa Heron *TH*
DATE: April 7, 1999
SUBJECT: U.S. Sugar Corporation
Boiler No. 4 Permit Modification
DEP File 0510003-007 AC (PSD-FL-217B)

KT

Attached is a construction permit modification for Boiler No.4 at the U.S. Sugar Corporation's Clewiston facility in Hendry County. This permit modification addresses revisions to Permit PSD-FL-217 (AC26-248809) that limits usage of the No.4 Boiler to 160 days per season and 3840 hours per year.

U.S. Sugar Corporation requested a clarification of a condition in its existing construction permit that limits usage of the No. 4 Boiler to 160 days per season and 3840 hours per year. The Company requests that this condition be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions in its permit. The Department agrees as long as the unit operates only during the recognized sugar season (which straddles two calendar years) as indicated in all relevant applications, permits, and reports to-date. It is possible, as a result of this change, that the unit might actually operate less in a calendar year if there is an early end to one season and a late start to the next season. The result is that in the long run the two methods are probably equivalent.

The change will not result in actual emissions increases and will not cause or contribute to a violation of ambient air quality standards.

We recommend your approval and signature.

AAL/th

Attachments

Z 333 618 094

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sender	
Murray Brunson	
Street & Number	
U.S. Sugar	
Post Office, State, & ZIP Code	
Clewiston FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	4-8-99
0510003-007-AC	
050-FI-217 B	

PS Form 3800, April 1995

Fold at line over top of envelope to

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Murray S. Brunson, Sr. V.P.
U.S. Sugar Corp.
PO Box 1207
Clewiston, FL
33440-1207

4a. Article Number

Z 333 618 094

4b. Service Type

- Registered
- Certified
- Express Mail
- Insured
- Return Receipt for Merchandise
- COD

7. Date of Delivery

4-12-99 JG

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X *Murray Brunson*

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

UNITED STATES SUGAR CORPORATION

Post Office Box 1207 • Clewiston, Florida 33440-1207
Telephone 941/983-8121

*off
pn
April 6*

March 25, 1999

RECEIVED

MAR 29 1999

**BUREAU OF
AIR REGULATION**

CERTIFIED MAIL NO. Z 726 637 266

Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: United States Sugar Corporation, Clewiston Facility, Boiler No. 4
DEP File No. 0510003-007 AC (PSD-FL-217B)
Hours of Operation

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

Gentlemen:

We are enclosing the Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Construction Permit Modification" was duly published in the legal section of the March 24, 1999 issue of the Clewiston News.

Sincerely,

UNITED STATES SUGAR CORPORATION


Donald Griffin
Project Manager, Specialty Sugar

MTB:jt
Enclosure

cc: David Knowles, P.E., South Florida District, FDEP
David Buff, Golder Associates
Murray T. Brinson, USSC
W. A. Raiola, USSC
Lisa Gefen, 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 Kerry R. Faunce, who on oath says he is the Publisher of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement, being a notice

in the matter of intent

_____ in the
_____ court, was published in

said newspaper in the issues of _____

March 24, 1999

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

Kerry R. Faunce

Sworn to and subscribed before me this 25th day

of March, A.D. 19 99.

Bk Christiansen

Notary Public



US Sugar PSD-FL-217b

**PUBLIC NOTICE OF INTENT TO ISSUE AIR
CONSTRUCTION PERMIT MODIFICATION**
STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL
PROTECTION

DEP File No. AC26-248809 (PSD-FL-217)
U.S. Sugar Corporation Clewiston Facility
Hendry County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to U.S. Sugar Corporation, for the No. 4 Boiler at its Clewiston Facility in Hendry County, Florida. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are: U.S. Sugar Corporation, Post Office Box 1207, Clewiston, Florida 33440-1207.

U.S. Sugar Corporation requested a clarification of a condition in its existing construction permit that limits usage of the No. 4 Boiler to 180 days per season and 3840 hours per year. The Company requests that this condition be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions in its permit. The Department agrees as long as the unit operates only during the recognized sugar season (which straddles two calendar years) as indicated in all relevant applications, permits, and reports to date. It is possible, as a result of this change, that the unit might actually operate less in a calendar year if there is an early end to one season and a late start to the next season. The results is that in the long run the two methods are probably equivalent.

The Department has determined that the change will not result in actual emissions increases and will not cause or contribute to a violation of ambient air quality standards.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with 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 Construction Permit Modification." Written comments should be provided to the Department 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 Section 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 Section 120.569 and 120.57 of the Florida Statutes. 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 the notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida

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 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, as well as the rules and statutes which entitle the petitioner to relief; (f) A demand for relief.

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.

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:

Dept. of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 488-0114
Fax: (850) 922-6979
Palm Beach Co. Health Department
901 Evernia Street
Post Office Box 29
West Palm Beach, Florida 33401
Telephone: (561) 355-3070
Fax: (813) 464-4420
Dept. of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902-2549
Telephone: (941) 332-6969

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call (850) 488-0114, for additional information.

CN 99-143
March 24, 1999



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

March 19, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Sr. Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: DEP File No. 0510003-007 AC (PSD-FL-217B)
Clewiston Facility, Boiler No. 4
Hours of Operation

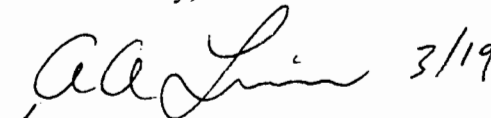
Dear Mr. Brinson:

Enclosed is one copy of the Draft Air Construction Permit Modification for Boiler No. 4 at the U. S. Sugar Facility, Clewiston, Hendry County. The Department's Intent to Issue Air Construction Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" must be published as soon as possible in a newspaper of general circulation in the area affected. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time 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, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Teresa Heron at 850/921-9529.

Sincerely,


for C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/aal

Enclosures

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0510003-007 AC (PSD-FL-217B)
U.S. Sugar Corporation Clewiston Facility
Hendry County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to U.S. Sugar Corporation, for the No. 4 Boiler at its Clewiston Facility in Hendry County, Florida. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are: U. S. Sugar Corporation, Post Office Box 1207, Clewiston, Florida 33440-1207.

U.S. Sugar Corporation requested a clarification of a condition in its existing construction permit that limits usage of the No. 4 Boiler to 160 days per season and 3840 hours per year. The Company requests that this condition be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions in its permit. The Department agrees as long as the unit operates only during the recognized sugar season (which straddles two calendar years) as indicated in all relevant applications, permits, and reports to-date. It is possible, as a result of this change, that the unit might actually operate less in a calendar year if there is an early end to one season and a late start to the next season. The result is that in the long run the two methods are probably equivalent.

The Department has determined that the change will not result in actual emissions increases and will not cause or contribute to a violation of ambient air quality standards.

The Department will issue the FINAL permit modification 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 Construction Permit Modification." 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 of the Florida Statutes. 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) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

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

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:

Dept. of Environmental Protection	Palm Beach Co. Health Department	Dept. of Environmental Protection
Bureau of Air Regulation	901 Evernia Street	South District Office
111 S. Magnolia Drive, Suite 4	Post Office Box 29	2295 Victoria Avenue, Suite 364
Tallahassee, Florida, 32301	West Palm Beach, Florida 33401	Fort Myers, Florida 33902-2549
Telephone: 850/488-0114	Telephone: 561/355-3070	Telephone: (941)332-6975
Fax: 850/922-6979	Fax: 813/464-4420	Fax: (941)332-6969

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

In the Matter of an
Application for Permit by:

Mr. Murray T. Brinson
Sr. Vice President Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

DEP File No. 0510003-007 AC (PSD-FL-217B)
Clewiston Boiler No. 4
Hours of Operation
Hendry County

INTENT TO ISSUE PERMIT MODIFICATIONS

The Department of Environmental Protection (Department) gives notice of its intent to issue permit modifications (copy of DRAFT Permit Modifications attached) for the proposed project, detailed in the application specified above, for the reasons stated below.

The applicant, United States Sugar Corporation, applied on March 18, 1999 to modify the air permit condition related to days during which Boiler No. 4 may be operated at the company's Clewiston facility in Hendry County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a modification of the air construction permits is required to implement the requested change.

The Department intends to issue these modifications based on the belief that reasonable assurances have been provided to indicate that the change will not adversely impact air quality, and 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 Permit Modifications." The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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 (Telephone: 850/488-0114; Fax 850/ 922-6979). The Department suggests that you publish the notice within thirty days of receipt of this letter. 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 or other authorization. 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) & (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 Permit Modifications." 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 of the Florida Statutes. 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 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) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

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, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

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

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

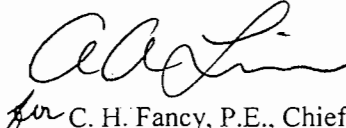
In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal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

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

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

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

Executed in Tallahassee, Florida.

 3/19
for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

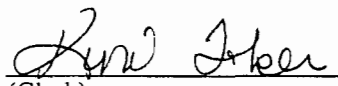
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATIONS (including the PUBLIC NOTICE, and the DRAFT Permit Modifications) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-22-99 to the person(s) listed:

Murray T. Brinson, USSC*
David Buff, PE, Golder Associates
Phil Barbaccia, DEP SD
James E. Stormer, PBCHD

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.

 3-22-99
(Clerk) (Date)

April XX, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Sr. Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: DEP File No. 0510003-007 AC (PSD-FL-217B)
Clewiston Facility, Boiler No. 4
Hours of Operation

Dear Mr. Brinson:

The Department reviewed your request dated March 18, 1999 that the permit condition governing the operating days and hours of the No. 4 Boiler be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions the referenced permit. The Department agrees as long as the unit operates only during the recognized South Florida sugar season (which straddles two calendar years) as indicated in all relevant applications, permits, and reports to-date. The referenced permit for the No. 4 Boiler is hereby changed as follows:

SPECIFIC CONDITION NO. 4

Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per year and only during season.

Note that it is possible, as a result of this change, that the unit might actually operate less than the allowable hours in a calendar year if there is an early end to one season and a late start to the next season. The result is that in the long run the two methods are probably equivalent.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of 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 of Appeal must be filed within (thirty) days after this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT MODIFICATION (including the FINAL permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Murray T. Brinson, USSC*
Don Griffin, USSC
David Buff, PE, Golder Associates
Phil Barbaccia, DEP SD
James E. Stormer, PBCHD

Clerk Stamp

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

(Clerk)

(Date)

DRAFT 1/19/99

Z 333 618 086

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to <i>Murray Brunson</i>	
Street & Number <i>US Sugar</i>	
Post Office, State, & ZIP Code <i>Clewiston, FL</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>3-22-99</i>
<i>0510003-007-AC</i> <i>P50-FL-217 B</i>	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Murray J. Brunson
US Sugar Corp
P O BOX 1207
Clewiston, FL
33440-1207

4a. Article Number
Z 333 618 086

- 4b. Service Type
- Registered
 - Express Mail
 - Return Receipt for Merchandise
 - Certified
 - Insured
 - COD

7. Date of Delivery
3-24-99 R31

5. Received By: (Print Name)

8. Addressee's Address (Only if Requested and fee is paid)

6. Signature: (Addressee or Agent)
X Andrea Sales

Thank you for using Return Receipt Service.

RECEIVED

MAR 19 1999

BUREAU OF AIR REGULATION



Golder Associates Inc.

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

March 18, 1999

9937515-0100

Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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

RE: UNITED STATES SUGAR CORPORATION - CLEWISTON BOILER NO. 4
AC26-248809; PSD-FL-217

0510003-007-AC

Dear Mr. Linero:

United States Sugar Corporation (U. S. Sugar) and Golder Associates has received the Department's letter dated March 12, 1999 regarding Specific Condition No. 4 of the above referenced permit. Specific Condition (S.C.) No. 4 of this permit currently reads as follows:

- 4. Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per season.

As we also discussed during our telephone conversations yesterday and today, the wording of this condition remains ambiguous in that operating days per season and hours per year have different meanings and are determined on a different basis. U.S. Sugar has no intention of operating Boiler No. 4 outside of the sugar processing season. However, the sugar processing season could in some seasons last for more than 160 days. In order to remove the ambiguity of this condition, and make it consistent with the specific conditions of the permit which limit annual emissions in tons per year "during any calendar year", it is requested that Specific Condition No. 4 be reworded as follows:

- 4. Boiler No. 4 is limited to 160 days operation per calendar year (3,840 hr/yr). Boiler No. 4 shall only be operated during the sugar processing season.

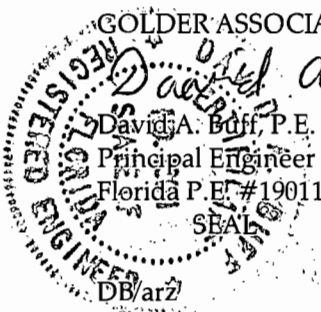
It is believed that this request can be processed as an administrative permit correction. A processing fee of \$250 is enclosed. If you have any questions concerning this request, please call. It is requested that an amendment letter be issued as soon as possible. Your cooperation is greatly appreciated.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

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



cc: D. Griffin
P. Briggs
L. Gefen

P:\99\9937\9937515a\02\#02-ltr.doc

IF IMAGE SAFE logo in light gray tone is not present on back of document - Do not cash.

22101

GOLDER ASSOCIATES GAINESVILLE
3730 SHAMBLEE TUCKER ROAD
ATLANTA, GA 30341

Mar 18 1999 \$

63-2/630
00320

PAY
TO THE
ORDER OF

Florida Dept. of Environmental Regulation \$ 250.⁰⁰/₁₀₀
two hundred - fifty & ⁰⁰/₁₀₀ DOLLARS

Security features
are included
Details on back.

FIRST
UNION

First Union National Bank
Gainesville, Florida
24 Hour Information Service
1-800-735-1012

FOR Appl. fee 993-7515

Robert Moloney MP

CLARKE AMERICAN BA

GUARDIAN & SAFETY

INTEROFFICE MEMORANDUM

Date: 17-Mar-1999 09:38pm
From: Dave Buff
DBuff@GOLDER.com@PMDf@EPIC66
Dept:
Tel No:

Subject: U.S Sugar Clewiston Boiler #4

I am drafting an amendment letter requesting S.C #4 of the permit be revised to state:

"Boiler No. 4 is limited to 160 days operation per calendar year (3,840 hr/yr). Boiler No. 4 shall only be operated during the sugar processing season".

As we discussed, this change is for clarification purposes only.

However, I would prefer to get a clarification letter from FDEP in lieu of a permit change since this would be faster and simpler, and a public notice would not be required. Timing is critical here.

If a permit amendment is going to be required, I believe that this would qualify as an administrative permit correction (as described under 62-210.360), and therefore would not require a public notice.

I wanted to get your concurrence on this before sending the letter. If a public notice would be required, then timing is a concern. Please let me know your thoughts ASAP. Thanks, Dave



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 12, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Senior Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: Permit No. AC 26-248809 (PSD-FL-217)
Clewiston Facility, Boiler No. 4
David Buff's letter dated February 12, 1999

Dear Mr. Brinson:

We are in receipt of Mr. David Buff's request for interpretation of Specific Condition No. 4 of the above-mentioned permit. This condition reads: *Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per season.* The Department has reviewed the request and concludes that it actually "says" that the unit may not operate more than 160 days during the season as long as it does not operate more than 3840 hours in a calendar year and that it may operate 3,840 hours per year as long as it does not operate more than 160 days in a sugar season.

A review of the draft permit shows that the condition was drafted as: *Boiler No. 4 is limited to 160 days (3,840 hr/yr) per season (October to May).* This at least makes it clearer that the *intent* is that the unit will be used during the season only. The specific months were deleted as explained in the Final Determination: *The applicant requested that the months boiler No. 4 may operate be deleted from the permit. This request is acceptable. The hours per year operation and the tons per year listed elsewhere in the permit have been retained.* It is understandable that the precise month that the season starts and ends might vary.

Previous correspondence in the files dating back to the mid-1980's makes it clear that the unit is to be operated only during the season. This point is further clarified in the Request for Extension of Time in which to File Petition for an Administrative Hearing dated August 17, 1996 from Bryan Cave LLP: *As this seasonally-operated boiler will not resume operation until mid-October, grant of this extension will have no impact on ambient air quality.*

If you have any questions regarding this matter, please call me at 850/921-9523 or Teresa Heron at 850/921-9529.

Sincerely,

A. A. Linero, P.E. Administrator
New Source Review Section

D. Griffin, U.S. Sugar
David A. Buff, P.E.
Phil Barbaccia, DEP SD

P 263 585 194

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Mr. Murray T. Brinson/Sr. Vice-Pres., Sugar Processing	
Street & Number United States Sugar Corp./P.O.Box 1207	
Post Office, State, & ZIP Code Clewiston, FL 33440-1207	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Box # 4 3-12-99 DSD-FI-217	

PS Form 3800, April 1995

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Murray T. Brinson
Sr. Vice-Pres., Sugar Processing
United States Sugar Corp.
P. O. Box 1207
Clewiston, FL 33440-1207

4a. Article Number

P 263-585-194

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

3-18-99

5. Received By: (Print Name)

8. Signature: (Addressee or Agent)

X Andrea Salis

8. Addressee's Address (Only if requested and fee is paid)

Is your RETR...

Thank you for using Return Receipt Service.

March 12, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Senior Vice-President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Re: Permit No. AC 26-248809 (PSD-FL-217)
Clewiston Facility, Boiler No. 4
David Buff's letter dated February 12, 1999

Dear Mr. Brinson:

We are in receipt of Mr. David Buff's request for interpretation of Specific Condition No. 4 of the above-mentioned permit. This condition reads: *Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per season.* The Department has reviewed the request and concludes that it actually "says" that the unit may not operate more than 160 days during the season as long as it does not operate more than 3840 hours in a calendar year and that it may operate 3,840 hours per year as long as it does not operate more than 160 days in a sugar season.

A review of the draft permit shows that the condition was drafted as: *Boiler No. 4 is limited to 160 days (3,840 hr/yr) per season (October to May).* This at least makes it clearer that the *intent* is that the unit will be used during the season only. The specific months were deleted as explained in the Final Determination: *The applicant requested that the months boiler No. 4 may operate be deleted from the permit. This request is acceptable. The hours per year operation and the tons per year listed elsewhere in the permit have been retained.* It is understandable that the precise month that the season starts and ends might vary.

Previous correspondence in the files dating back to the mid-1980's makes it clear that the unit is to be operated only during the season. This point is further clarified in the Request for Extension of Time in which to File Petition for an Administrative Hearing dated August 17, 1996 from Bryan Cave LLP: *As this seasonally-operated boiler will not resume operation until mid-October, grant of this extension will have no impact on ambient air quality.*

If you have any questions regarding this matter, please call me at 850/921-9523 or Teresa Heron at 850/921-9529.

Sincerely,

A. A. Linero, P.E. Administrator
New Source Review Section

D. Griffin, U.S. Sugar
David A. Buff, P.E.
Phil Barbaccia, DEP SD

Golder Associates Inc.

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



February 12, 1999

9937515-0100

BUREAU OF
AIR REGULATION
FEB 15 1999

RECEIVED

Division of Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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

RE: UNITED STATES SUGAR CORPORATION
CLEWISTON BOILER NO. 4
AC26-248809; PSD-FL-217

Dear Mr. Linero:

In follow up to our discussion today, this request is being submitted on behalf of United States Sugar Corporation (U. S. Sugar). On August 9, 1995, U. S. Sugar Corporation (U.S. Sugar) was issued a PSD permit in order to adjust the allowable carbon monoxide (CO) emissions. Specific Condition (S.C.) No. 4 of this permit reads as follows:

4. Boiler No. 4 is limited to 160 days (3,840 hr/yr) operation per season.

The wording of this condition is ambiguous in that operating days per season and hours per year have different meanings and are determined on a different basis. The sugar cane processing season typically runs from November through March, so that two calendar years are spanned.

The tons per year (TPY) emission limits set forth in the PSD permit all distinctly specify "during any calendar year" (see attached copy of permit, S.C. 14, 16 and 17). Since the annual emission limits are specified in terms of calendar year, the appropriate interpretation of S.C. 4 is that the 3,840 hr/yr limit is on a calendar year basis. To do otherwise would result in a disconnect between the allowable operating hours and the TPY limits. In addition, all reporting that is currently done to the Florida DEP, i.e., annual air operating reports and annual Title V fee form, is done on a calendar year basis.

In conclusion, the operating hours limitation in S.C. 4 of the PSD permit is interpreted as being on a calendar year basis. We would appreciate a letter confirming this conclusion for our files, in case this question arises in the future.

If you have any questions concerning this information, please call. A reply within 15 days of receipt of this letter is requested. Your cooperation is greatly appreciated.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

David A. Buff, P.E.
Principal Engineer

DB/tla

cc: D. Griffin
P. Briggs
L. Gefen

JADP\PROJECTS\99\937515a\#011tr.doc

cc: J. Heron, BAR



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

January 15, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: U. S. Sugar Corporation, Clewiston Boiler No. 4
AC 26-248009, PSD-FL-217

Dear Mr. Buff:

The Department has reviewed the January 9, 1997, proposed Operation and Maintenance (O&M) plan to control carbon monoxide, nitrogen oxides, and volatile organic compound emissions from the referenced boiler. EPA's Compliance Assurance Monitoring (CAM) regulation may require additional monitoring of this boiler that was not addressed in the O&M plan.

The Department is approving your January 1997 O&M plan for boiler No. 4 with the additional condition that U. S. Sugar record the periodic oxygen readings on the operator's log and implement any part of the CAM plan that applies to good combustion practices for this boiler.

If you have any questions on this matter, please contact Willard Hanks at 904/488-1344.

Sincerely,

A. A. Linero, P.E. Administrator
New Source Review Section

AAL/wh/t

cc: Mr. David Knowles, SD
Mr. Don Griffin, U. S. Sugar

P 265 659 147

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	
David Buff	
Street Number	
Golden Assoc	
Post Office, State, & ZIP Code	
Gainesville FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-15-97
PSO-FI-217 CB #4	

PS Form 3800, April 1995

Is your RETURN ADDRESS complete on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
David A. Buff PE
Golden Assoc.
6241 NW 23rd St - Suite 500
Gainesville, FL
32653-1500

4a. Article Number
P265 659 147

4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery
1/21/97

5. Received By: (Print Name)

Malard

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

X

Thank you for using Return Receipt Service.

Golder Associates Inc.

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



January 9, 1997

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
JAN 13 1997
BUREAU OF
AIR REGULATION

RE: U.S. Sugar Corporation
Clewiston Boiler No. 4
DEP File No. AC26-248809; PSD-FL-217
Update of Operation and Maintenance Plan

Dear Mr. Linero:

I have received the Department's letter dated November 20, 1996, regarding the Operation and Maintenance (O&M) Plan for Boiler 4 at U.S. Sugar Corporation's Clewiston sugar mill. In the letter, the Department discusses the relationship between excess air and CO/VOC emissions. The Department points to data from U.S. Sugar and other companies which indicates that sufficient excess air minimizes CO/VOC emissions without necessarily increasing emissions of other pollutants. The Department believes that the best way to insure that CO and VOC emissions are minimized is to operate under sufficient excess air conditions. Concern is expressed that no instrumentation is proposed by U.S. Sugar to insure that the boiler is operated whenever feasible under conditions of sufficient excess air.

In response to the Department's concerns, U.S. Sugar agrees to install an oxygen analyzer on Boiler No. 4. The instrument readout will be located in the boiler room. The boiler operators will periodically observe the oxygen analyzer readings and use the analyzer as a guide in insuring that the boiler is operated whenever feasible under conditions of sufficient excess air. An updated O&M plan which incorporates appropriate wording to implement the additional oxygen monitoring recommended by the Department is attached.

After careful review of the current construction permit for Boiler No. 4, as well as all past construction and operating permits, it is our conclusion that an O&M plan for particulate matter (PM) is not required. There is no specific condition of the current permit which requires that an O&M plan for the scrubber be submitted. Specific Conditions 6, 7, and 8, however, address requirements for operation of the scrubber, and sets limits on pH and pressure drop. These conditions ensure that the scrubber is adequately maintained and operated. Therefore, we have deleted the scrubber operation from the O&M plan.

16101A/14

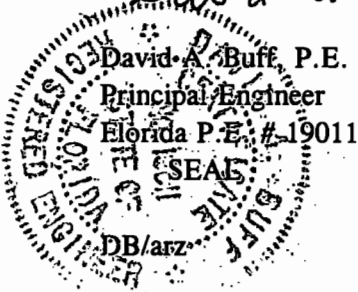
A.A. Linero
Page 3
January 9, 1997

In addition, Specific Condition 19 of the permit provides that an O&M plan that optimizes nitrogen oxides (NO_x) emissions may be submitted in lieu of performing annual compliance testing for NO_x. U.S. Sugar desires to submit an O&M plan for NO_x in lieu of annual compliance testing. Therefore, NO_x emissions have been addressed in the O&M plan.

If you have any comments or questions concerning this updated O&M Plan, please call or write.

Sincerely,

David a. Buff



Enclosures

cc: Murray Brinson
Don Griffin
Lisa Gefen
Peter Oppenheimer
David Knowles
File (2)

16101A/14

**UNITED STATES SUGAR CORPORATION
CLEWISTON MILL**

**OPERATION AND MAINTENANCE PLAN FOR
CO, VOC and NO_x EMISSIONS FROM BOILER NO. 4**

(January 1997)

PURPOSE OF O&M PLAN

An air construction permit was issued by the Florida Department of Environmental Protection (FDEP) for Clewiston Boiler No. 4 on August 8, 1995 (AC26-248809; PSD-FL-217). Specific Condition 17 of this permit requires that the emissions of carbon monoxide (CO) and volatile organic compounds (VOC) be maintained at the lowest possible level through the implementation of an Operation & Maintenance (O&M) plan that has been approved by the FDEP. In addition, Specific Condition 19 allows the substitution of an O&M plan that optimizes emissions of nitrogen oxides (NO_x) in lieu of annual compliance testing. The O&M plan presents operating procedures and guidelines for the minimization of CO and VOC emissions, and for the optimization of NO_x emissions, consistent with good combustion practices.

PREPARATION FOR OPERATIONS

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Operational sight glasses are maintained on the scrubber so accurate water level readings can be obtained at all times to ensure that the water level is maintained at the level necessary to allow optimum scrubber efficiency.

10. Prior to each harvest season, all instruments for boiler operation and control are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

BOILER OPERATION AND CONTROLS

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions of CO and VOC, and so as to optimize stack emissions of NO_x. This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

CO AND VOC CONTROLS

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

- A. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion.
- B. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
- C. Bagasse moisture content will be maintained at or below 55%.
- D. A flue gas oxygen meter will be installed on the boiler in order to measure flue gas oxygen concentration. The instrument readout will be located in the boiler control room to provide real time data to the boiler operator. The boiler operators will be instructed in the use of the flue gas oxygen meter for combustion control, and in the procedures necessary to maintain sufficient excess air levels. The boiler operators will periodically observe the oxygen meter and, to the extent practical, maintain sufficient excess air in the boiler, consistent with good combustion practices and meeting of steam demands.

NO_x CONTROLS

NO_x emissions are to be optimized by the proper application of Good Combustion Practices (GCP). However, in general the application of GCP to minimize CO and VOC emissions will result in increased NO_x emissions. This is because factors which promote good combustion and result in lower CO and VOC emissions, such as higher excess air and higher combustion temperatures, result in higher NO_x emissions. This is the nature of the combustion process. It is

also recognized that NO_x emissions from bagasse-fired boilers are low, and that the primary concern related to stack emissions is in the minimization of CO and VOC emissions to the extent practical. Therefore, GCP to optimize NO_x emissions is considered to be the same practices used to minimize CO and VOC emissions, as described above.

MISCELLANEOUS

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule.
 - A. Fans
 - B. Pumps
 - C. Casing
 - D. Ducting
 - E. Scrubber
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)
5. Boiler stack emissions compliance testing is conducted once per harvest season and is to be completed prior to March 1.

REVISED 1/97

cc: W. Hanks, BAK



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 20, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff, P.E.
KBN Engineering and Applied Sciences
6241 Northwest 23rd Street, Suite 500
Gainesville, Florida

Re: U. S. Sugar Corp., Clewiston Boiler 4
AC 26-248809, PSD-FL-217

Dear Mr. Buff:

The Department has reviewed the proposed updated Operation and Maintenance (O&M) plan submitted in May, 1996. The purpose of the updated O&M plan is to insure that Good Combustion Practices (GCP) are followed. This is required by the recent Best Available Control Technology determination made for the subject unit.

The update to the O&M plan is necessary to minimize the very large apparent increase in carbon monoxide emissions resulting from corrections to both the emissions estimating and testing procedures for bagasse boilers. Instead of requiring pollution control equipment, the Department accepted U.S. Sugar's BACT proposal of GCP and required that the O&M plan be updated accordingly to indicate precisely how CO emissions would be minimized.

Based on our review of data provided by U.S. Sugar and other companies, we have determined that the optimum control is achieved by running the units with sufficient excess air to minimize CO emissions. We found that it is possible to do so without necessarily increasing emissions of other pollutants such as nitrogen oxides (NOx). Operating under excess air conditions is the best way to insure that carbon monoxide and volatile organic compounds (VOC) emissions are minimized without directly having to control these pollutants.

The O&M plan submitted does not mention any instrumentation to insure the unit is operated whenever feasible under conditions of sufficient excess air. A process monitor for excess air (such as for oxygen or carbon dioxide) will suffice without the need to install expensive air pollution monitoring equipment. We recommend that you update the O&M plan accordingly. We do not believe that these recommended efforts to provide the minimum process instrumentation consistent with the BACT Determination will conflict with the CAM rule.

Sincerely,

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/aal/l

cc: David Knowles, SD
Don Griffin, U.S. Sugar

P 339 251 181

US Postal Service

Receipt for Certified Mail

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David Buff	
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KBN Engineering + A.S.	
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Postmark or Date	11-20-96

PS Form 3800, April 1995

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- SEND:**
- Complete items 1 and/or 2 for additional services.
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- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 David A. Buff, P.E.
 KBN Engineering + A.S.
 6241 NW 23rd St, Suite 500
 Gainesville, FL 32653-1500

4a. Article Number
 P 339 251 181

4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 11-22-96

5. Signature (Addressee)
 David A. Buff

6. Signature (Agent)
 [Signature]

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



November 22, 1996

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

date?
COPY FOR
BOILER NO. 4
FILE

Re: US Sugar Corporation
Clewiston Boiler No. 7
DEP File No. AC26-238006; PSD-FL-208
Boiler Operation and Maintenance Plan

Dear Mr. Linero:

The purpose of this letter is to submit for approval an Operation & Maintenance (O&M) plan to minimize CO and VOC emissions from United States Sugar Corporation's Clewiston Boiler No. 7. The O&M plan is required by Specific Condition 22 of the above referenced air construction permit. US Sugar will implement the O&M plan for VOC and CO emissions upon approval by the Department. If you have any comments or questions concerning this proposed O&M plan, or desire additional information, please contact me directly.

Sincerely,

David A. Buff

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

cc: W. Hanks, BAR

DB/arz

cc: Murray Brinson
Don Griffin
Lisa Gefen
Peter Oppenheimer
David Knowles

16101A/11

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Washington, DC 20036
202-462-1100 FAX 202-462-2270

**UNITED STATES SUGAR CORPORATION
CLEWISTON MILL BOILER NO. 7
OPERATION AND MAINTENANCE GUIDELINES
FOR
CO AND VOC EMISSIONS**

PURPOSE OF O&M PLAN

An air construction permit was issued by the Florida Department of Environmental Protection (FDEP) for Clewiston Boiler No. 7 on January 31, 1995 (AC26-238006; PSD-FL-208). Specific Condition No. 22 of this permit requires that carbon monoxide (CO) and volatile organic compound (VOC) emissions from Boiler No. 7 be maintained at the lowest possible level through implementation of an Operation and Maintenance (O&M) plan that has been approved by the Department. The O&M plan presents operating procedures and guidelines for the minimization of CO and VOC emissions, consistent with good combustion practices and the pollution control equipment installed on the boiler.

PREPARATION FOR OPERATION

1. The boiler, air ductwork, and air heaters will be properly cleaned, inspected and repaired during routine boiler maintenance.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for proper mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. The settings of the combustion controls and linkages to fuel feeders, forced draft fan, and overfire air fan will be checked during routine boiler maintenance.
9. All instruments for boiler operation and control will be inspected, repaired and calibrated as required during routine boiler maintenance. These activities will be recorded by the instrument shop in its repair log.

BOILER OPERATION AND CONTROLS

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler operations so as to minimize emissions of CO and VOC. This instructional program is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions of CO and VOC.

CO AND VOC CONTROLS

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

Startup Procedures

1. During startup of the boiler, the fuel feed and combustion air are gradually increased. Care is taken not to overload the fuel bed, until a clean, brisk fire is obtained over the entire grate area. If excessive smoking is observed during the start-up period, the amount of fuel being fed to the grates is reduced until the condition is corrected.
2. After a good burning fuel bed is established over the entire grate, the fuel bed is checked for proper distribution by observing through the observation sight glasses in the side walls.
3. During the start-up period, all of the stoker control components are normally operated on manual, and the maximum stoker operation is limited to about 40% of rated capacity.
4. All fuel feed and air control linkages are adjusted prior to switching the stoker over to the automatic control mode. During this adjustment, the settings are made at minimum fuel feed, maximum fuel feed, and several points between.

Normal Operation

1. Reasonably clean settling chambers are maintained in the furnace, breaching and heat traps, where cinders can accumulate.
2. The combustion control system is kept in proper adjustment and working freely.
3. The fans and fan blades are periodically cleaned, and any blades that may have become loose or damaged are repaired.
4. The grates are examined periodically to be certain that all air holes are open.
5. The fuel and air are maintained in proper proportion to the extent practicable so that fuel burns cleanly and the amount of smoke is minimized.
6. Ash present in the ash pits is removed as necessary in order to minimize any furnace draft upsets.

7. At one week intervals, or as operating experience indicates, the stoker and forced draft fan are stopped to clean out the siftings chamber(s).
8. After the siftings chambers have been cleaned, all access doors and ash pit doors are tightly closed and sealed to minimize air leakage.
9. At regular intervals, checks are made to identify air leaks at all air swept fuel distributor spout joints and between spout and mounting plate. If any leaks are detected, the joint is repaired with furnace cement as necessary.
10. At regular intervals, checks are made for air leaks between the air supply duct, damper housing and fuel distributor spouts. If any leaks are detected, the leaks are repaired with furnace cement.
11. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
12. Once per day, on the day shift, the boiler is given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule:
 - A. Fans
 - B. Pumps
 - C. Casing
 - D. Ducting
 - E. Electrostatic precipitator
13. On every shift, burners are inspected and cleaned if dirty.
14. On every shift, precautions are taken as necessary to control visible emissions of fugitive particulate matter (dust, bagasse, etc.)
15. The boiler operator will maintain steam rate at the desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in the highest possible excess air) in order to promote good combustion.
16. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
17. Bagasse moisture content will be maintained at or below 55%.

Shutdown of Boiler

1. When the furnace has cooled, the interior components of the stoker are inspected, and any slag or other obstructions to the air openings of the grates, rear tuyeres and apron tuyeres are removed.
2. Any slag formation on the front wall is removed and refractory under apron tuyeres are checked.
3. The boiler is inspected to identify any air leaks that may have developed between the grates and the walls of the boiler. Repair as needed.
4. The internal lower surfaces (removable wear liner) of the air swept fuel distributor spouts are inspected to determine wear rates. This will determine need for replacement during a scheduled outage.



September 12, 1996

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
SEP 16 1996
BUREAU OF
AIR REGULATION

Re: U. S. Sugar Corporation
Clewiston Boiler No. 4, DEP File No. AC26-248809; PSD-FL-217

Dear Mr. Linero:

To follow up on my conversation with Willard Hanks last week, I would like to present additional information related to the updated Operation & Maintenance (O&M) Plan for Boiler No. 4 at U.S. Sugar's Clewiston mill. The updated O&M plan was submitted to the Department for approval in May 1996. Mr. Hanks had inquired as to whether U.S. Sugar was ever required to install, or has ever installed, an oxygen meter on Boiler No. 4. Boiler No. 4 currently does not have an oxygen meter, nor has U.S. Sugar ever installed an oxygen meter on the boiler. Our review of the initial construction permit (AC26-80930, issued January 11, 1985) and initial operating permit (AO26-115292, issued May 19, 1986) for Boiler No. 4 revealed that the boiler was not required to have an oxygen meter installed. Accordingly, such instrumentation has never been installed on the boiler.

Based on this information, it is requested that the Department approve the updated O&M plan presented to the Department by letter dated May 16, 1996. This updated plan takes advantage of the existing instrumentation and practices employed on Boiler No. 4, as required by the Department's letter to U.S. Sugar dated January 31, 1996.

It is noted that additional monitoring, recordkeeping and/or reporting regarding CO emissions from Boiler No. 4 may be required once EPA finalizes the compliance assurance monitoring (CAM) rule currently under development. Promulgation of this rule is expected no later than July 1997, based on the notice which appeared in the August 13, 1996, Federal Register. To avoid duplicative and unnecessary monitoring, or monitoring that may be inconsistent with the CAM rule, it is recommended that the Department await promulgation of the CAM rule before considering any additional measures.

U.S. Sugar will implement the additional O&M measures for CO and VOC emissions contained in the May 1996 plan upon approval by the Department. If you have any comments or questions concerning this information, or the proposed measures to expand the updated O&M Plan in the areas of CO and VOC control, please contact me.

Sincerely,

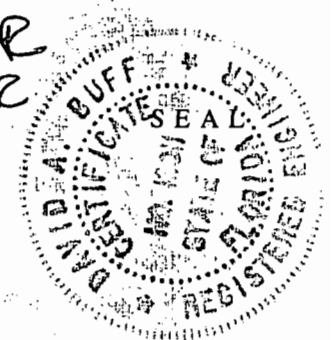
David A. Buff

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

*cc: Willard Hanks, BAR
Marty Costello, BAR*

DB/arz

cc: Murray Brinson
Don Griffin
Lisa Gefen
Peter Oppenheimer
David Knowles
File (2)



16101A/9

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AFFILIATED OFFICE IN BEIJING

ROBERT F. VAN VOORHEES

DIRECT DIAL NUMBER

(202) 508-6014

May 20, 1996

RECEIVED

MAY 21 1996

BUREAU OF
AIR REGULATION

Mr. A. A. Linero, P.E.
Administrator
New Source Review Section
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 33440

Re: DEP File No. AC26-248809/PSD-FL-217
PSD Construction Permit Modification
Clewiston Boiler No. 4
United States Sugar Corporation

Dear Mr. Linero:

On behalf of U.S. Sugar Corporation, we would like to thank the Department for issuing a PSD construction permit modification for Clewiston Boiler No. 4 that successfully resolves all outstanding issues to the mutual satisfaction of DEP and U.S. Sugar. We appreciate the substantial time that you and your staff have devoted to evaluating and responding to our comments. In particular, we would like to recognize the efforts of Mr. Willard Hanks.

In its notice of INTENT TO ISSUE PERMIT AMENDMENT, dated May 1, 1996, the Department reserved its position that burning fuel at a rate in excess of permit limits is not authorized by Rule 62-210.700, F.A.C. We fully understand the Department's position and believe that the Department understands the view that we have previously advanced. It is also our understanding that the Department's position has not been incorporated into the PSD permit modification for Boiler No. 4.

At present, we have no reason to believe that U.S. Sugar will ever need to avail itself of the provisions contained in Rule 62-210.700, F.A.C., for Boiler No. 4. Accordingly, we see no need to press this issue to resolution at this time. In the event that these provisions do become pertinent, we trust that the Department will concur that our disagreement with the

BRYAN CAVE LLP

Mr. A. A. Linero, P.E.
May 20, 1996
Page 2

Department over the applicability of this provision has been preserved for resolution at such later time.

One final housekeeping note: proposed specific condition 1 requires Boilers No. 1, 2, 3, and 4 to comply with the stack sampling facility requirements of Rule 62-297.345, F.A.C. This rule was repealed as of March 13, 1996. The relevant requirements have been moved to Rule 62-297.310(6)(g)1.a.-c., F.A.C.

Thank you again for working with us to issue a PSD construction permit modification to Boiler No. 4.

Very truly yours,



Robert F. Van Voorhees

cc: David Knowles, DEP
Lisa Gefen, U.S. Sugar
Peter Briggs, U.S. Sugar
Don Griffin, U.S. Sugar
David Buff, KBN

140773.01

cc: W. Hanks
C. Holladay



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 1, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
President of Sugar Processing
U.S. Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

RE: Amendment of Permit No. AC 26-24880⁹/~~8~~/PSD-FL-217
Clewiston Mill Boiler No. 4

In response to Bryan Cave LLP April 5, 1996 letter on resolving the outstanding issues on the carbon monoxide emission limit for boiler No. 4 at your sugar mill in Clewiston, Henry County, Florida, the Department is amending the reference permit as follows:

FROM:

Permit Expiration Date - June 1, 1996

Specific Conditions

1. Stack sampling facilities for Boiler No. 4 shall be in accordance with the requirements of Rule 62-297.345, F.A.C.
11. During any 24-hour period, not more than 40,800 gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant.
12. During any 3-hour period, not more than 6,300 gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant.
17. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the Department's Bureau of Air Regulation (BAR). The permittee

Mr. Murray T. Brinson
Page Two
May 1, 1996

shall update and resubmit the Operation and Maintenance plan for Boiler No. 4 with detailed information on minimizing carbon monoxide emissions prior to June 1, 1996. The Department will incorporate the plan into the air operation permit for this facility. Emissions of carbon monoxide (1-hour average) shall be minimized through Good Combustion Practice (GCP) and shall not exceed 6.5 lbs/MMBtu, 5,052 lbs/hr, and 8,818 tons during any calendar year, (based on a 6-hr average of 706.6 MMBtu/hr heat input). During the 1995-1996 sugar cane season, the permittee shall conduct a minimum of three tests for CO on this unit using EPA Method 10 (Rule 62-297.401(10), F.A.C.), while employing GCP as described in the Operation and Maintenance plan. The Department may revise the carbon monoxide emission standard and the permit if the tests show lower carbon monoxide emissions can be achieved by this boiler. Emissions of volatile organic compounds shall not exceed 1.7 lbs/ton of wet bagasse as determined by EPA Method 25 or 25A in conjunction with EPA Method 18. These test methods are described in 40 CFR 60, Appendix A. Compliance tests for VOC will not be required if the visible emissions from Boiler No. 4 are below 20 percent opacity and acceptable emission factors have been established for this pollutant.

21. Compliance tests for all emission standards listed in Specific Conditions Nos. 14, 15, and 17 for Boiler No. 4 shall be conducted once each Federal fiscal year and reported to the Department's South District office within 45 days of completion of the last test run. During the 1995-1996 sugar cane season, the permittee shall make a minimum of three tests for carbon monoxide on Boiler No. 4 using EPA Method 10 (Rule 62-297.401(10), F.A.C.) while employing Good Combustion Practices as described in the Operation and Maintenance plan. The Department shall revise the carbon monoxide emission standard and this permit if the tests show lower carbon monoxide emissions can be achieved by this boiler.

TO:

Permit Expiration Date - August 15, 1996

Specific Conditions

1. Stack sampling facilities for Boiler Nos. 1, 2, 3, and 4 shall be in accordance with the requirements of Rule 62-297.345, F.A.C.

11. During any 24-hour period, not more than 88,800 gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant. Boiler Nos. 1, 2, and 3 shall be equipped with stacks having a minimum height of 165 feet.

Mr. Murray T. Brinson
Page Three
May 1, 1996

12. During any 3-hour period, not more than **16,200** gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant.

17. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the Department's Bureau of Air Regulation (BAR). The permittee shall update and resubmit the Operation and Maintenance plan for Boiler No. 4 with detailed information on minimizing carbon monoxide emissions prior to **August 15, 1996**. The Department will incorporate the plan into the air operation permit for this facility. Emissions of carbon monoxide (1-hour average) shall be minimized through Good Combustion Practice (GCP) and shall not exceed 6.5 lbs/MMBtu, 5,052 lbs/hr, and 8,818 tons during any calendar year, (based on a 6-hr average of 706.6 MMBtu/hr heat input). Emissions of volatile organic compounds shall not exceed 1.7 lbs/ton of wet bagasse as determined by EPA Method 25 or 25A in conjunction with EPA Method 18. These test methods are described in 40 CFR 60, Appendix A. Compliance tests for VOC will not be required if the visible emissions from Boiler No. 4 are below 20 percent opacity and acceptable emission factors have been established for this pollutant.

21. Compliance tests for all emission standards listed in Specific Conditions Nos. 14, 15, and 17 for Boiler No. 4 shall be conducted once each Federal fiscal year and reported to the Department's South District office within 45 days of completion of the last test run. The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a permit amendment is required for the proposed change.

The Department will issue the permit amendment with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, 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 Blvd., Mail Station 35, Tallahassee, Florida 32399-3000. Petitions filed by the permit

Mr. Murray T. Brinson
Page Four
May 1, 1996

applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.


If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-2.010, F.A.C.

Mr. Murray T. Brinson
Page Five
May 1, 1996

As indicated in the Department's letter dated October 26, 1995 burning fuel at a rate that is in excess of the permit limits is not authorized by Rule 62-210.700, F.A.C.

A copy of this letter must be filed with the referenced permit and shall become a condition to that permit.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**


Howard L. Rhodes, Director
Division of Air Resources
Management

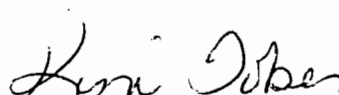
Attachment: Bryan Cave LLP April 5, 1996 letter

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that all copies of this INTENT TO ISSUE PERMIT AMENDMENT all copies were mailed by certified mail before the close of business on 5-3-96 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 5/3/96
Clerk Date

Copies furnished to:

David Knowles, SD
Jewell Harper, EPA
David Buff, KBN

Joe Kahn, SED
John Bunyak, NPS

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
 - 2. Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:
 Murray J. Brunson
 U.S. Sugar Corp
 PO Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 Z 127 633 204

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
 [Signature]

Thank you for using Return Receipt Service.

Z 127 633 204



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Murray Brunson	
Street and no. U.S. Sugar Corp	
P.O. Box, State and ZIP Code Clewiston, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	5-3-96

PS Form 3800, March 1993

BEST AVAILABLE COPY

BRYAN CAVE LLP

700 THIRTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-3960

(202) 508-6000

FACSIMILE: (202) 508-6200

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KANSAS CITY, MISSOURI
OVERLAND PARK, KANSAS
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SANTA MONICA, CALIFORNIA
IRVINE, CALIFORNIA

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RIYADH, SAUDI ARABIA
KUWAIT CITY, KUWAIT
DUBAI, UNITED ARAB EMIRATES
HONG KONG
AFFILIATED OFFICE IN BEIJING

ROBERT F. VAN VOORHEES

DIRECT DIAL NUMBER

(202) 508-6014

April 5, 1996

RECEIVED

APR 08 1996

BUREAU OF
AIR REGULATION

BY FEDERAL EXPRESS

Mr. A. A. Linero, P.E.
Administrator
New Source Review Section
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 33440

Re: DEP File No. AC26-248809/PSD-FL-217
PSD Construction Permit Modification
Clewiston Boiler No. 4
United States Sugar Corporation

Dear Mr. Linero:

This letter addresses all outstanding issues pertaining to the proposed PSD permit modification for U.S. Sugar Corporation's Clewiston Boiler No. 4 and provides information necessary for the Department to issue the final permit modification.

As requested by the Department in its letter of October 26, 1995, U.S. Sugar conducted an SO₂ impact assessment to determine the optimum quantity of No. 6 fuel oil that could be burned at the Clewiston Mill without causing or contributing to a violation of the 3-hour and 24-hour ambient air quality standards. As a result of the impact assessment prepared by KBN Engineering and Applied Sciences, Inc. (copy enclosed), U.S. Sugar proposes to increase the facility-wide No. 6 fuel oil burning rates at the Clewiston Mill to 16,200 gallons for any 3-hour period and 88,800 gallons for any 24-hour period. We also request that the Department modify the operation permits for Clewiston Boilers Nos. 1, 2, and 3 to make clear that these increased fuel oil burning rates apply facility-wide.

We understand that the final BACT CO emissions limit of 6.5 lbs/MMBtu will not be subject to revision based on future testing, as currently required by specific conditions 17 and 21. In a telephone conversation with Peter Oppenheimer on November 6, 1995, Jefferson W. Braswell of the Department's Office of General Counsel stated that the Department had accepted 6.5 lbs/MMBtu as

BRYAN CAVE LLP

Mr. A. A. Linero
April 6, 1996
Page 2

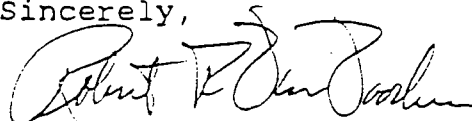
a final BACT CO limit. We request that specific conditions 17 and 21 be modified accordingly as stated in attachment A to KBN's letter of October 19, 1995 (copy enclosed).

Although the Department stated in its letter of October 26, 1995 that the fuel burning rate is a separate issue from excess emissions, we retain our view that Rule 62-200.710, F.A.C. applies to the fuel consumption limit contained in specific condition 12.

Two further housekeeping matters: First, U.S. Sugar has decided to increase the stack heights for Boiler Nos. 1, 2, and 3 to 165 feet, 15 feet higher than the minimum height required by specific condition 4 of the construction permit for Clewiston Boiler No. 7. As a result, stack heights of 165 feet were used for the modeling analysis in the SO₂ impact assessment. Second, the construction permit modification for Boiler No. 4 expires on June 1, 1996. To avoid issuance of a non-Title V operation permit during the period between June 1, 1996 and the Title V permit application deadline of June 15, 1996, we request that the expiration date of the construction permit modification be extended to August 15, 1996 in accordance with DEP's Memorandum of May 24, 1995 entitled "Guidance for Extending the Expiration Date of Construction Permits for Title V Sources" (DARM-PER/V-08).

We trust you agree that this letter resolves all outstanding issues, and we look forward to the expeditious issuance of a final PSD construction permit modification for Clewiston Boiler No. 4. If you have any questions or need additional information, please do not hesitate to call me.

Sincerely,



Robert F. Van Voorhees

Enclosures

cc: Jeff Braswell, DEP OGC (w/o enclosure)
David Knowles, DEP South District
Lisa Gefen, U.S. Sugar (w/o enclosure)
Peter Briggs, U.S. Sugar (w/o enclosure)
Don Griffin, U.S. Sugar
David Buff, KBN (w/o enclosure)

131576.01

cc: EPA
NPS



RECEIVED

MAY 07 1996

BUREAU OF
AIR REGULATION

May 6, 1996

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

MAY 07 1996

BUREAU OF
AIR REGULATION

RECEIVED

MAY 07 1996

BUREAU OF
AIR REGULATION

Re: U. S. Sugar Corporation
Clewiston Boiler No. 4
DEP File No. AC26-248809; PSD-FL-217

Dear Mr. Linero:

The purpose of this letter is to respond to the Department's letter to U.S. Sugar dated January 31, 1996 (attached), regarding the above referenced source and to supplement the updated Operation & Maintenance (O&M) Plan, dated January 16, 1996, that DEP has concluded is acceptable for the operation of the scrubber and the control of particulate matter (PM) emissions. In its letter, the Department requested that the source-specific Operation and Maintenance plan for Boiler 4 to be expanded in the area of carbon monoxide (CO) and volatile organic compounds (VOC) control while taking advantage of existing instruments and operation practices. The Department requests that the plan specify what parameters will be monitored, the operational ranges of these parameters, and the circumstances when it may be necessary to depart from these ranges. Specifying these parameters will provide reasonable assurance that Good Combustion Practices (GCP) are being employed.

In order to respond to the Department's request, KBN conducted an on-site survey and review of Boiler No. 4 to identify the existing instruments and operation practices being employed. The following parameters were identified as presently being measured on Boiler No. 4:

Steam rate
Steam pressure
Steam temperature
Air flow (as a percent of maximum air flow)
Scrubber pressure drop
Scrubber water flow rate
Scrubber pH
Visible emission (by means of television camera and video monitor)

Based on discussions with the boiler operator at U. S. Sugar, GCP for Boiler No. 4 is implemented according to the following existing operating practices:

1. Maintain steam rate at desired rate by controlling feed of bagasse fuel into the boiler.
2. The boiler operator relies on the TV camera and monitor to visually confirm that good combustion is taking place. Although this is a subjective judgement, operator experience results in a very consistent

16101A/7

KBN ENGINEERING AND APPLIED SCIENCES, INC.

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Gainesville, Florida 32653-1500
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5405 West Cypress Street,
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1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407-994-9910
FAX 407-994-9393

7785 Baymeadows Way,
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Jacksonville, Florida 32256
904-739-5600 FAX 904-739-7777

1616 'P' Street N.W., Suite 350
Washington, D.C. 20036
202-462-1100
FAX 202-462-2270



means of determining combustion conditions. If poor combustion conditions occur, it is reflected in the visible plume from the boiler. Under such conditions, the visible plume becomes darker than normal. If an abnormal plume is observed, the operator immediately takes corrective action to remedy the situation. Possible corrective actions include reducing fuel feed to the boiler.

Other than steam rate and the visible opacity of the plume, none of the parameters currently monitored for Boiler No. 4 relate directly to combustion. Therefore, based on the existing instrumentation and boiler operation, the following practices are proposed to provide reasonable assurance that GCP are being employed on Boiler No. 4:

1. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in the highest possible excess air) in order to promote good combustion.
2. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events into the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.

I have included a revised O&M plan which incorporates appropriate wording to implement the proposed measures. U.S. Sugar will implement these additional O&M measures for VOC and CO emission upon approval by the Department. If you have any comments or questions concerning this information, or the proposed measures to expand the updated O&M Plan in the areas of CO and VOC control, please call or write.

Sincerely,

David A. Buff

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

DB/mk

Enclosures

cc: Murray Brinson
Don Griffin
Lisa Gefen
Peter Oppenheimer
David Knowles
File (2)

*cc: Hawks, BAR
EPA
NPS*



UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
OPERATION AND MAINTENANCE GUIDELINES
FOR
BOILER NO. 4 AND EMISSIONS CONTROLS
(Revised May 1996)

PREPARATION FOR OPERATIONS

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Operational sight glasses are maintained on the scrubber so accurate water level readings can be obtained at all times to ensure that the water level is maintained at the level necessary to allow optimum scrubber efficiency.
10. Prior to each harvest season, all instruments for boiler operation and control are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

BOILER OPERATION AND CONTROLS

This manual is to be used as a maintenance and operations log for the boiler and scrubber for the purpose of monitoring and periodically recording certain specific parameters as set forth by the Florida Department of Environmental Protection in Permit No. AC26-248809/PSD-FL-217 and in these operation and maintenance guidelines.

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators, and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions, including carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO₂), sulfur dioxide (SO₂) and volatile organic compounds (VOCs). This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

SCRUBBER (PARTICULATE CONTROL)

The boiler is equipped with one Joy-type turbulaire water impingement scrubber with water spray nozzles operating in an internal atmosphere of negative draft gas flow. The normal operating control parameters for the scrubber should be maintained and the pressure drop should be operated at 90% or above (and not less than 75%) of that used in the most recent compliance test for particulate matter emissions.

1. The static pressure drop of the scrubber is monitored in inches of water, using provided manometers, and is logged once per shift (every 8 hours). Readings are also reported on the appropriate daily report, which is signed and filed in the superintendents office. (All instruments are checked and cleaned before readings are taken, and any problems are reported to the supervisor and corrected.)
2. The scrubber is equipped with quick disconnect couplings on the nozzles.
 - A. All scrubber nozzles are visually checked for plugging and the water flow is verified once per week.
 - B. Any plugged or defective nozzles are cleaned or replaced within 24 hours of discovery.
 - C. Nozzle conditions, (plugged, clean or replaced) and time of inspection are logged by location.
3. The scrubber has a primary and a secondary water pumping system. Both systems are monitored at least once per day and any unusual findings are logged and problems are corrected.
4. Scrubber water supply strainers are backwashed twice per shift and the time and any observations are logged.

5. Once per shift, near mid-shift, scrubber water supply requirements are verified, and the scrubber water supply pressure and flow are recorded in a log book which is kept in the Boiler Room Office.
6. All scrubber equipment (water control instruments, circulating pumps, monitoring gauges, piping and valves, etc.) are properly maintained and inspected each shift. Times, dates and any unusual observations are logged.
7. The "pH" level of the scrubber discharge effluent is checked twice per shift by the water plant operator. Findings are recorded on the daily report and filed on a daily basis.
8. Records of the scrubber pressure drop readings and of the "pH" measurement of the scrubber discharge effluent will be retained for 5 years.

CO AND VOC CONTROLS

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

- A. The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in the highest possible excess air) in order to promote good combustion.
- B. The boiler operator will periodically (at least once per hour) view the stack video monitor to visually confirm that good combustion is taking place. (Individual stack plumes are monitored continuously through a closed circuit television system.) If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken. These records will be kept for a period of at least two years.
- C. Bagasse moisture content will be maintained at or below 55%.

MISCELLANEOUS

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule.
 - A. Fans
 - B. Pumps
 - C. Casing

- D. Ducting
 - E. Scrubber
3. On every shift burners are inspected and cleaned if dirty.
 4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)
 5. Boiler stack emissions compliance testing is conducted once per harvest season and is to be completed prior to March 1.

REVISED 5/96

BRYAN CAVE LLP

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KANSAS CITY, MISSOURI
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DUBAI, UNITED ARAB EMIRATES
HONG KONG
AFFILIATED OFFICE IN BEIJING

ROBERT F. VAN VOORHEES
DIRECT DIAL NUMBER
(202) 508-6014

April 5, 1996

RECEIVED

APR 08 1996
BUREAU OF
AIR REGULATION

BY FEDERAL EXPRESS

Mr. A. A. Linero, P.E.
Administrator
New Source Review Section
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 33440

**Re: DEP File No. AC26-248809/PSD-FL-217
PSD Construction Permit Modification
Clewiston Boiler No. 4
United States Sugar Corporation**

Dear Mr. Linero:

This letter addresses all outstanding issues pertaining to the proposed PSD permit modification for U.S. Sugar Corporation's Clewiston Boiler No. 4 and provides information necessary for the Department to issue the final permit modification.

As requested by the Department in its letter of October 26, 1995, U.S. Sugar conducted an SO₂ impact assessment to determine the optimum quantity of No. 6 fuel oil that could be burned at the Clewiston Mill without causing or contributing to a violation of the 3-hour and 24-hour ambient air quality standards. As a result of the impact assessment prepared by KBN Engineering and Applied Sciences, Inc. (copy enclosed), U.S. Sugar proposes to increase the facility-wide No. 6 fuel oil burning rates at the Clewiston Mill to 16,200 gallons for any 3-hour period and 88,800 gallons for any 24-hour period. We also request that the Department modify the operation permits for Clewiston Boilers Nos. 1, 2, and 3 to make clear that these increased fuel oil burning rates apply facility-wide.

We understand that the final BACT CO emissions limit of 6.5 lbs/MMBtu will not be subject to revision based on future testing, as currently required by specific conditions 17 and 21. In a telephone conversation with Peter Oppenheimer on November 6, 1995, Jefferson W. Braswell of the Department's Office of General Counsel stated that the Department had accepted 6.5 lbs/MMBtu as

BRYAN CAVE LLP

Mr. A. A. Linero
April 6, 1996
Page 2

a final BACT CO limit. We request that specific conditions 17 and 21 be modified accordingly as stated in attachment A to KBN's letter of October 19, 1995 (copy enclosed).

Although the Department stated in its letter of October 26, 1995 that the fuel burning rate is a separate issue from excess emissions, we retain our view that Rule 62-200.710, F.A.C. applies to the fuel consumption limit contained in specific condition 12.

Two further housekeeping matters: First, U.S. Sugar has decided to increase the stack heights for Boiler Nos. 1, 2, and 3 to 165 feet, 15 feet higher than the minimum height required by specific condition 4 of the construction permit for Clewiston Boiler No. 7. As a result, stack heights of 165 feet were used for the modeling analysis in the SO₂ impact assessment. Second, the construction permit modification for Boiler No. 4 expires on June 1, 1996. To avoid issuance of a non-Title V operation permit during the period between June 1, 1996 and the Title V permit application deadline of June 15, 1996, we request that the expiration date of the construction permit modification be extended to August 15, 1996 in accordance with DEP's Memorandum of May 24, 1995 entitled "Guidance for Extending the Expiration Date of Construction Permits for Title V Sources" (DARM-PER/V-08).

We trust you agree that this letter resolves all outstanding issues, and we look forward to the expeditious issuance of a final PSD construction permit modification for Clewiston Boiler No. 4. If you have any questions or need additional information, please do not hesitate to call me.

Sincerely,



Robert F. Van Voorhees

Enclosures

cc: Jeff Braswell, DEP OGC (w/o enclosure)
David Knowles, DEP South District
Lisa Gefen, U.S. Sugar (w/o enclosure)
Peter Briggs, U.S. Sugar (w/o enclosure)
Don Griffin, U.S. Sugar
David Buff, KBN (w/o enclosure)

131576.01

cc: EPA
NPS

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED
JAN 26 1996
BUREAU OF
AIR REGULATION

U.S. SUGAR CORPORATION,
CLEWISTON MILL BOILER NO. 4,
DEP File No. AC26-248809 (PSD-FL-217),

Petitioner,

vs.

OGC CASE NO. 95-2012

FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

**ORDER GRANTING REQUEST FOR THIRD EXTENSION
OF TIME TO FILE PETITION FOR HEARING**

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner U.S. SUGAR CORPORATION to grant an extension of time to file a petition for an administrative hearing on Permit No. AC26-248809 (PSD-FL-217). See Exhibit 1.

Counsel for Petitioner has discussed this request with counsel for the Respondent State of Florida Department of Environmental Protection, which has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until April 12, 1996, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 21st day of January, 1996 in
Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


KENNETH J. PLANTE
General Counsel

Douglas Building
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (904) 488-9314

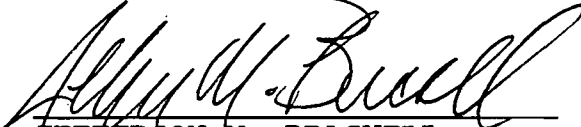
CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

Peter H. Oppenheimer, Esquire
BRYAN CAVE
700 Thirteenth Street, N.W.
Suite 700
Washington, D.C. 20005-3960

on this 25th day of January, 1996.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


JEFFERSON M. BRASWELL
Assistant General Counsel
Florida Bar No. 800996

3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (904) 488-9730

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

U.S. SUGAR CORPORATION
CLEWISTON MILL BOILER NO. 4,
DEP File No. AC 26-248809 (PSD-FL-217)
Hendry County

Petitioner,

vs.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

REQUEST FOR THIRD EXTENSION
OF TIME TO FILE PETITION FOR HEARING

On August 11, 1995, U.S. Sugar Corporation (U.S. Sugar) received by certified mail the Department of Environmental Protection's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809.

On August 17, 1995, U.S. Sugar filed, and the Department subsequently granted, a request for an extension of time to and including October 13, 1995 in which to file a petition for administrative hearing.

On October 10, 1995, U.S. Sugar filed, and the Department subsequently granted, a request for an extension of time to an including January 12, 1996 in which to file a petition for administrative hearing.

Counsel for the Petitioner is writing to request a third extension of time to and including Friday, April 12, 1996

in which to file a petition for administrative proceeding regarding the construction permit modification. This request is made pursuant to Rule 62-103.070, F.A.C. As good cause for granting the requested extension of time for filing, U.S. Sugar would show the following:

1. U.S. Sugar has been working with the Department to resolve its concerns regarding the CO testing requirement for the 1995-1996 sugar cane season imposed by specific conditions 17 and 21, and to reach an understanding that the limit of 6.5 lbs of CO/MMBtu will not be subject to adjustment. Although an understanding has been reached on this point, it has not yet been formalized.
2. The Department has agreed to increase the fuel oil consumption limit contained in specific condition 12 based on a modeling assessment conducted by KBN Engineering and Applied Sciences, Inc. Although the necessary modeling has been completed, KBN has not yet submitted its report to the Department. As soon as this is done, U.S. Sugar and the Department can agree upon an appropriate fuel oil consumption limit.
3. This extension will terminate as soon as these issues are resolved to the mutual satisfaction of the Department and U.S. Sugar.
4. This request is filed as a protective measure to avoid waiver of U.S. Sugar's rights to challenge or request an administrative hearing on any provision of the

proposed permit. Grant of this request will allow the parties the opportunity to discuss and resolve these issues so that the Department can then issue a final amended construction permit modification that achieves a mutually acceptable resolution of U.S. Sugar's concerns without the need for initiation of formal administrative proceedings.

We advised the Department's assistant general counsel, Jefferson M. Braswell, Esq., of this request on January 1, 1996. Accordingly, Counsel for the Petitioner respectfully requests that an extension of time be granted for the filing of a petition for administrative proceedings in regard of the Department's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809, to and including Friday, April 12, 1996.

If the requested extension of time is not granted for any reason, then this pleading shall constitute a petition filed pursuant to Rule 62-103.155, F.A.C. for an administrative hearing on specific permit conditions numbers 12, 17 and 21 of the construction permit modification for Clewiston Mill Boiler No. 4.

BRYAN CAVE



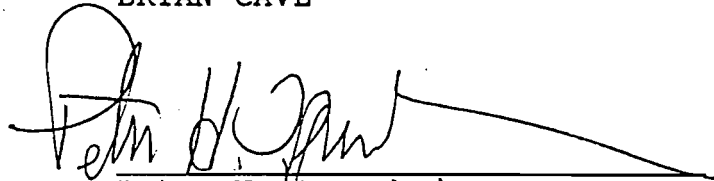
PETER H. OPPENHEIMER
COUNSEL FOR U.S. SUGAR CORPORATION

700 13th Street, N.W., Suite 700
Washington, D.C. 20005-3960
Telephone: (202) 508-6067

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Federal Express overnight delivery to Jefferson M. Braswell, Esquire, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, on this 3 day of January, 1996.

BRYAN CAVE



Peter H. Oppenheimer, Esq.

UNITED STATES SUGAR CORPORATION

Post Office Box 1207 • Clewiston, Florida 33440-1207
Telephone 941/983-8121

February 15, 1996

RECEIVED
FEB 18 1996
BUREAU OF
AIR REGULATION

Mr. A. A. Linero, P.E.
Administrator
Florida Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399-2400

RE: United States Sugar Corp.
Clewiston Boiler No. 4
DEP File No. AC26-248809/PSD FL-217

Dear Mr. Linero:

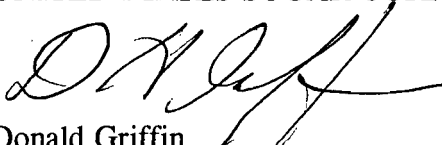
We have reviewed the Department's letter, dated January 31, 1996, with its suggestions for expanding the CO and VOC control portions of our recently updated Operation and Maintenance (O&M) Plan for Clewiston Boiler No. 4.

In light of the Department's letter, we are re-evaluating the updated O&M Plan to see how best to expand it while taking advantage of existing instruments and operation practices.

As soon as we have completed this process, we will apprise the Department. In the meantime, if you have any questions, please do not hesitate to contact me.

Very truly yours,

UNITED STATES SUGAR CORPORATION


Donald Griffin
Project Manager, Specialty Sugar

DG:jt

cc: Mr. M. T. Brinson
Mr. W. A. Raiola
Mr. Peter Oppenheimer
Mr. David Buff

cc: W. Hanks, BAR
D. Knowles, SFD

BEST AVAILABLE COPY



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

January 31, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Donald Griffin, Project Manager
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440-1207

Dear Mr. Griffin:

Re: U. S. Sugar Corp.
Clewiston Boiler No. 4
DEP File No. AC 26-248809 - PSD-FL-217

The Department has reviewed your updated Operation and Maintenance (O&M) plan dated January 16, 1996, for the No. 4 bagasse/fuel oil-fired boiler at the Clewiston sugar mill. We have concluded it is acceptable for the operation of the scrubber and the control of particulate matter emissions.

However, the plan needs to be expanded in the area of carbon monoxide (CO) and volatile organic compounds (VOC) control. The plan should specify what parameters (oxygen, carbon monoxide, and/or carbon dioxide concentration(s)) will be monitored, the operational ranges of these parameters, and when it may be necessary to depart from those ranges in order to provide reasonable assurance that Good Combustion Practices (GCP) are being employed. Such an O&M plan needs to be source-specific to take advantage of the existing instruments and operation practices.

Please expand on the CO and VOC part of your O&M plan. We look forward to reviewing your amendment to this plan. If you have any questions, please call Willard Hanks at (904)488-1344.

Sincerely,

A handwritten signature in black ink, appearing to read "A. A. Linero" with a date "1/31" written to the right.

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/wh/t

cc: David Knowles, SD
David Buff, KBN

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
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I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Donald Griffin Proj. Tkg.
 U.S. Sugar Corp.
 P.O. Box 1207
 Clewiston, FL
 33440-1207

4a. Article Number
 Z 127 633 157

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 2-2-94

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 127 633 157



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Donald Griffin	
Street and No. U.S. Sugar Corp	
P.O., State and ZIP Code Clewiston, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-31-96
AC26-248809	
PSD-F127	

PS Form 3800, March 1993

UNITED STATES SUGAR CORPORATION

Post Office Box 1207 • Clewiston, Florida 33440-1207
Telephone 941/983-8121

Willard Hanks

RECEIVED
JAN 22 1996
BUREAU OF
AIR REGULATION
January 16, 1996

Ms. ~~Theresa~~ Heron
Florida Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399-2400

RE: United States Sugar Corp.
Clewiston Boiler No. 4
DEP File No. AC26-248809/PSD FL-217

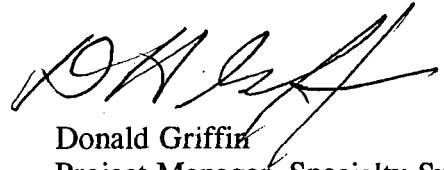
Dear Ms. Heron:

Enclosed please find a copy of the Operation and Maintenance Plan for Clewiston Boiler No. 4 as required by Specific Condition No. 17 of the Construction Permit.

If you have any questions, please call.

Very truly yours,

UNITED STATES SUGAR CORPORATION



Donald Griffin
Project Manager, Specialty Sugar

DG:jt
Enclosures: 1

cc: Mr. M. T. Brinson
Mr. W. A. Raiola
Mr. Robert Van Voorhees
Mr. David Buff

*cc: SF District
EPA
NPS*

UNITED STATES SUGAR CORPORATION
CLEWISTON MILL
OPERATION AND MAINTENANCE GUIDELINES
FOR
BOILER NO. 4 AND EMISSIONS CONTROLS

PREPARATION FOR OPERATIONS

1. Prior to each harvest season, the boiler proper, its air duct work, air heaters and scrubber are properly cleaned, inspected and repaired.
2. All refractory and boiler casing will be inspected and repaired where needed.
3. Outside of boiler tubes will have loose scale removed and boiler will be cleaned of loose scale, sand and other debris.
4. Boiler grates will be inspected and cleaned as well as being checked for mechanical operation.
5. All fans and fan drives will be inspected and repaired as needed.
6. All pumps and pump drives will be inspected and repaired as needed.
7. All oil burners will be cleaned and inspected as well as related oil piping, atomizing steam and air registers.
8. Prior to each harvest season, the skirt level of the scrubber is identified and marked on the outside so that a permanent reference is available.
9. Operational sight glasses are maintained on the scrubber so accurate water level readings can be obtained at all times to ensure that the water level is maintained at the level necessary to allow optimum scrubber efficiency.

10. Prior to each harvest season, all instruments for boiler operation and control are inspected, repaired and calibrated as required. This is recorded by the instrument shop in its repair log.

BOILER OPERATION AND CONTROLS

This manual is to be used as a maintenance and operations log for the boiler and scrubber for the purpose of monitoring and periodically recording certain specific parameters as set forth by the Florida Department of Environmental Protection in Permit No. AC26-248809 and in these operation and maintenance guidelines.

The senior most experienced boiler supervisor instructs other boiler room supervisors, boiler operators and other appropriate personnel in proper boiler and scrubber operations so as to minimize stack emissions, including carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO₂), sulfur dioxide (SO₂) and volatile organic compounds (VOCs). This instructional program is presented prior to each harvest season and is included in the orientation and training provided to new boiler room employees. The training will impress upon supervisors and operators the importance of proper boiler operation in order to minimize emissions.

SCRUBBER (PARTICULATE CONTROL)

The boiler is equipped with one Joy type turbulaire water impingement scrubber with water spray nozzles operating in an internal atmosphere of negative draft gas flow. The normal operating control parameters for the scrubber should be maintained and the pressure drop should be operated at 90% or above (and not less than 75%) of that used in the most recent compliance test for particulate matter emissions.

1. The static pressure drop of the scrubber is monitored in inches of water, using provided manometers, and is logged once per shift (every 8 hours). Readings are also reported on the appropriate daily report, which is signed and filed in the superintendents office. (All instruments are

checked and cleaned before readings are taken, and any problems are reported to the supervisor and corrected.)

2. The scrubber is equipped with quick disconnect couplings on the nozzles.
 - A. All scrubber nozzles are visually checked for plugging and the water flow is verified once per week.
 - B. Any plugged or defective nozzles are cleaned or replaced within 24 hours of discovery.
 - C. Nozzle conditions, (plugged, clean or replaced) and time of inspection are logged by location.
3. The scrubber has a primary and a secondary water pumping system. Both systems are monitored at least once per day and any unusual findings are logged and problems are corrected.
4. Scrubber water supply strainers are backwashed twice per shift and the time and any observations are logged.
5. Once per shift, near mid-shift, scrubber water supply requirements are verified, and the scrubber water supply pressure and flow are recorded in a log book which is kept in the Boiler Room Office.
6. All scrubber equipment (water control instruments, circulating pumps, monitoring gauges, piping and valves, etc.) are properly maintained and inspected each shift. Times, dates and any unusual observations are logged.
7. The "pH" level of the scrubber discharge effluent is checked twice per shift by the water plant operator. Findings are recorded on the daily report and filed on a daily basis.
8. Records of the scrubber pressure drop readings and of the "pH" measurement of the scrubber discharge effluent will be retained for 5 years.

CO AND VOC CONTROLS

CO emissions are to be minimized by the proper application of Good Combustion Practices (GCP), maintenance of bagasse moisture content below 55% and vigilant observation of stack video monitors. Individual stack plumes are monitored continuously through a closed circuit television system. Operating parameters are adjusted as necessary to maintain control of visible emissions.

MISCELLANEOUS

1. Several times per shift, the boiler grates and feeders are examined for proper distribution and any necessary operational changes are made. Any unusual observations are logged once per shift.
2. Once per day, on the day shift, the boiler will be given a walk-around inspection with the following items being checked and repaired as needed and in coordination with the production schedule.
 - A. Fans
 - B. Pumps
 - C. Casing
 - D. Ducting
 - E. Scrubber
3. On every shift burners are inspected and cleaned if dirty.
4. On every shift, precautions will be taken as necessary to control visible emissions of fugitive matter (dust and bagasse, etc.)
5. Boiler stack emissions compliance testing is conducted once per harvest season and is to be completed prior to March 1.

REVISED 1/96

0129462.02



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 26, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff
KBN Engineering and Applied Sciences, Inc.
6241 N.W. 23rd Street, Suite 500
Gainesville, Florida 32653

Dear Mr. Buff:

Re: U. S. Sugar Corporation
Clewiston Boiler No. 4

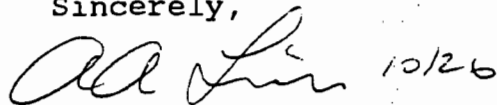
The Bureau has reviewed the attachments to Bryan Cave LLP's October 6, 1995, letter concerning the ambient air impact of the sulfur dioxide emissions from the referenced facility. Mr. Oppenheimer, Bryan Cave LLP, said we should contact you if there were additional questions on this matter.

Our position remains that the fuel burning rate is a separate issue from excess emissions. A permittee cannot burn fuel at a rate greater than is allowed by the permit.

The Department will consider modifying permit No. AC 26-248808/PSD-FL-217 to allow a higher fuel burning rate for these boilers if requested to do so by the permittee. To support such a request, the permittee must supply the maximum fuel burning rate for the time periods and modeling results for the scenario that would produce the maximum ambient air impact. For U. S. Sugar's Clewiston mill, the fuel oil to all but Boiler No. 7 could contain up to 2.5 percent sulfur. The modeling results in the attachments did not use the maximum sulfur content of the fuel oil or the proposed maximum fuel oil burning rate. Please revise the calculations to show the maximum sulfur dioxide concentration in the ambient air for the 3 and 24-hour periods based on this scenario.

If you have any questions on this matter, please call Willard Hanks at (904) 488-1344.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. A. Linero", followed by the date "10/26".

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/wh/h

cc: Jeff Braswell, OGC
David Knowles, SFD
Peter Oppenheimer, Bryan Cave LLP

Fold at line over top of

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SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 David A. Buff, PE
 KBN Eng. + Applied Sciences
 6241 NW 23rd St, 5th Fl
 Gainesville, FL 32653-1500

4a. Article Number
 Z 127 632 560

4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 10-30-95

5. Signature (Addressee)
 [Signature]

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
 [Signature]

PS Form 3811, December 1991 U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 127 632 560



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

To	David Buff
Street and No.	KBN
City, State and ZIP Code	Gainesville, FL
Postage	\$
Certification Fee	US Sugar Corp
Special Delivery Fee	New Borden #4
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	10-27-95



October 19, 1995

Mr. Jefferson Braswell
 Office of General Counsel
 Florida Department of Environmental Protection
 2600 Blair Stone Road
 Twin Towers Office Building
 Tallahassee, FL 32399-2400

RECEIVED
 OCT 23 1995
 BUREAU OF
 AIR REGULATION

Re: DEP File No. AC26-248808/PSD-FL-217
 PSD Construction Permit Modification
 Clewiston Boiler No. 4
 U.S. Sugar Corporation

Dear Mr. Braswell:

On behalf of U.S. Sugar Corporation (U.S. Sugar), this letter responds to the concerns you raised in your September 27, 1995, telephone conversation with Peter Oppenheimer of Bryan Cave, LLP, with respect to the validity of the CO emissions tests performed by U.S. Sugar for Clewiston Boiler No. 4.

Between February 20, 1990, and March 4, 1994, U.S. Sugar conducted 65 CO emissions test runs on Boiler No. 4 (see attached Table 1). The CO emissions ranged from 1.53 lb/MMBtu to 17.49 lb/MMBtu. These tests were performed to establish an appropriate permitted CO emission limit for this boiler using EPA Method 10. Based on these tests, along with CO emissions data for other similar bagasse-fired boilers, the Department established BACT as Good Combustion Practices (GCP) with emissions not to exceed 6.5 lb CO/MMBtu. This conclusion is set forth in the Department's Technical Evaluation and Preliminary Determination for Clewiston Boiler No. 4 dated February 7, 1995. On page 3 of this determination, the Department states "it has no information to suggest that this boiler is designed significantly differently from other bagasse boilers that were given this standard."

The CO emissions database for Clewiston Boiler No. 4 was developed while the boiler was operated according to GCP. This is demonstrated by examining the results of annual PM and visible emission compliance tests conducted on the same day as many of the CO emissions tests. The results of annual PM and visible emission compliance tests and CO emissions tests performed concurrently are summarized in Table 2. The permitted PM emission limit is 0.15 lb/MMBtu, and the permitted visible emission limit is 20 percent opacity. Compliance with the PM and visible emission limits indicates that the boiler is employing GCP. Since all of the CO tests summarized in Table 2 were performed concurrently with the PM and visible emission testing and under similar boiler operating parameters, it follows that the CO tests were also performed while employing GCP.

Rule 62-297.340, F.A.C. and Specific Condition 9 of Boiler No. 4's previous operating permit (AO26-144701) require U.S. Sugar to notify the Department 15 days prior to any formal compliance test to allow witnessing. The required notice was given, and, to the best of our knowledge, the Department was present during the operation of Boiler No. 4 for the sixteen CO emission test runs which were conducted concurrently with six formal PM compliance tests (see Table 2). Since PM compliance test results witnessed

15006A/10

KBN ENGINEERING AND APPLIED SCIENCES, INC.

6241 Northwest 33rd Street,
 Suite 500
 Gainesville, Florida 32603-1500
 904-336-6600 FAX 904-336-6833

6425 Alachua Avenue Street,
 Suite 215
 Tallahassee, Florida 32307
 904-287-1111 FAX 904-287-1114

1801 Clint Moore Road, Suite 105
 Boca Raton, Florida 33487
 407-994-9910
 FAX 407-994-9391

7750 Baymeadows Way,
 Suite 105
 Jacksonville, Florida 32256
 904-784-1700 FAX 904-736-7777

1117 P Street N.W., Suite 350
 Arlington, D.C. 22204
 202-462-1111
 FAX 202-462-1127



by DEP demonstrate that Boiler No. 4 complied with its PM emission limit of 0.15 lb/MMBtu and visible emission limit of 20 percent opacity, and compliance with the PM and visible emission limits demonstrates that GCP were being employed, the Department has witnessed CO emission tests when the boiler was employing GCP.

Emissions results of the sixteen CO test runs conducted while the Department was observing operation of Boiler No. 4 range from 2.24 lb/MMBtu to 14.90 lb/MMBtu, with an average of 6.16 lb/MMBtu. These tests runs, which include approximately 20 percent of the 65 CO tests relied upon by the Department in establishing the BACT limit, are statistically representative of the larger database (i.e., essentially same range and same average CO emission rate).

There is no reason to believe that a lower CO emissions limit is warranted for Clewiston Boiler No. 4 in light of the validity and reliability of the existing CO emissions database and U.S. Sugar's extensive experience operating and maintaining the boiler. Accordingly, U.S. Sugar requests that the Department delete the language contained in Specific Conditions 17 and 21 that allows DEP to revise the BACT-determined CO limit of 6.5 lb/MMBtu. Appropriate language to accomplish this revision is provided in Attachment A.

Thank you for your consideration of his matter. Do not hesitate to contact me if you have any questions.

Sincerely,

David A. Buff

David A. Buff, P.E.
Florida P.E. #19011

S E A L

DB/arz

cc: A. A. Linero, DEP
Willard Hanks, DEP
David Knowles, DEP South District
Peter Briggs, U.S. Sugar
Don Griffin, U.S. Sugar
Peter Oppenheimer, Bryan Cave
File (2)

EPA

NPS

D. Buff, KBN

J. Brown, BAR

Table 1. Summary of CO Emission Tests Performed on Clewiston Boiler No. 4 Using EPA Method 10

Unit	Boiler Type	Date	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate (a) (TPH wet)	CO Emissions			CO Emissions Compliance Average (lb/MMBtu)
						lb/hr	lb/MMBtu	lb/ton,wet	
Boiler 4	Traveling Gate	02/20/90	308,636	691.7	96.07	1,940	2.79	20.19	2.75
Boiler 4	Traveling Gate	02/20/90	306,666	690.3	95.87	1,520	2.24	15.85	
Boiler 4	Traveling Gate	02/20/90	310,298	698.8	97.06	2,240	3.23	23.08	
Boiler 4	Traveling Gate	02/15/91	289,091	624.9	86.79	4,760	7.62	54.84	5.27
Boiler 4	Traveling Gate	02/15/91	291,200	629.5	87.43	2,710	4.30	31.00	
Boiler 4	Traveling Gate	02/15/91					3.90		
Boiler 4	Traveling Gate	02/18/91	288,358	622.8	86.50	2,430	3.90	28.09	3.78
Boiler 4	Traveling Gate	02/18/91	285,224	616.4	85.61	2,640	4.28	30.84	
Boiler 4	Traveling Gate	02/18/91	302,647	653.3	90.74	2,060	3.16	22.70	
Boiler 4	Traveling Gate	02/19/91	290,769	627.9	87.21	4,430	7.05	50.80	5.43
Boiler 4	Traveling Gate	02/19/91	294,583	637.1	88.49	3,400	5.33	38.42	
Boiler 4	Traveling Gate	02/19/91	293,382	633.5	87.99	2,480	3.92	28.19	
Boiler 4	Traveling Gate	02/22/91	300,000	647.9	89.99	4,900	7.56	54.45	11.23
Boiler 4	Traveling Gate	02/22/91	293,382	634.2	88.08	9,450	14.90	107.28	
Boiler 4	Traveling Gate	01/07/92	293,425	613.6	85.22	3,200	5.22	37.55	7.91
Boiler 4	Traveling Gate	01/07/92	282,800	591.3	82.12	6,270	10.60	76.35	
Boiler 4	Traveling Gate	01/08/92	299,178	623.2	86.56	2,030	3.26	23.45	4.66
Boiler 4	Traveling Gate	01/08/92	297,973	621.5	86.32	3,160	5.09	36.61	
Boiler 4	Traveling Gate	01/08/92	300,811	627.4	87.14	3,540	5.64	40.62	
Boiler 4	Traveling Gate	01/09/92	302,055	630.0	87.50	2,770	4.40	31.66	4.40
Boiler 4	Traveling Gate	01/09/92	295,135	615.8	85.53	2,710	4.40	31.69	
Boiler 4	Traveling Gate	01/13/93	279,114	594.46	82.56	4,460	7.50	54.02	8.03
Boiler 4	Traveling Gate	01/13/93	280,000	609.43	84.64	5,240	8.59	61.91	
Boiler 4	Traveling Gate	01/13/93	280,986	602.13	83.63	4,810	7.99	57.52	
Boiler 4	Traveling Gate	01/14/93	271,463	588.53	81.74	8,830	15.00	108.03	11.48
Boiler 4	Traveling Gate	01/14/93	292,297	632.11	87.79	5,030	7.95	57.29	
Boiler 4	Traveling Gate	02/02/93	286,364	624.01	86.67	4,490	7.19	51.81	7.94
Boiler 4	Traveling Gate	02/02/93	281,918	614.84	85.39	4,130	6.71	48.36	
Boiler 4	Traveling Gate	02/02/93	291,667	633.45	87.98	6,280	9.92	71.38	
Boiler 4	Traveling Gate	02/04/93	295,135	635.29	88.23	4,310	6.78	48.85	7.64
Boiler 4	Traveling Gate	02/04/93	286,662	616.39	85.61	5,630	9.13	65.76	
Boiler 4	Traveling Gate	02/04/93	294,000	633.92	88.04	4,440	7.01	50.43	
Boiler 4	Traveling Gate	01/13/94	290,132	628.52	87.29	3,490	5.55	39.98	7.37
Boiler 4	Traveling Gate	01/13/94	283,500	614.06	85.29	3,230	5.26	37.87	
Boiler 4	Traveling Gate	01/13/94	283,784	615.24	85.45	6,960	11.31	81.45	
Boiler 4	Traveling Gate	01/14/94	294,583	639.11	88.77	3,310	5.18	37.29	9.59
Boiler 4	Traveling Gate	01/14/94	290,548	629.38	87.41	3,850	6.11	44.04	
Boiler 4	Traveling Gate	01/14/94	293,425	635.50	88.26	11,110	17.49	125.87	
Boiler 4	Traveling Gate	02/01/94	272,113	592.17	82.25	1,090	1.84	13.25	5.22
Boiler 4	Traveling Gate	02/01/94	271,250	595.17	82.66	5,110	8.59	61.82	
Boiler 4	Traveling Gate	02/07/94	269,434	587.52	81.60	2,730	4.65	33.46	7.53

Table 1. Summary of CO Emission Tests Performed on Clewiston Boiler No. 4 Using EPA Method 10

Unit	Boiler Type	Date	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate (a) (TPH wet)	CO Emissions			CO Emissions Compliance Average (lb/MMBtu)
						lb/hr	lb/MMBtu	lb/ton,wet	
Boiler 4	Traveling Gate	02/07/94	274,909	599.46	83.26	3,280	5.47	39.40	
Boiler 4	Traveling Gate	02/07/94	266,538	582.08	80.84	7,580	13.03	93.76	
Boiler 4	Traveling Gate	02/07/94	268,333	586.88	81.51	4,090	6.97	50.18	
Boiler 4	Traveling Gate	02/09/94	283,994	620.29	86.15	4,340	6.99	50.38	6.99
Boiler 4	Traveling Gate	02/11/94	285,000	622.97	86.52	3,600	5.78	41.61	4.43
Boiler 4	Traveling Gate	02/11/94	267,273	580.67	80.65	890	1.53	11.04	
Boiler 4	Traveling Gate	02/11/94	288,358	625.28	86.84	4,930	7.89	56.77	
Boiler 4	Traveling Gate	02/11/94	294,000	644.24	89.48	1,620	2.51	18.11	
Boiler 4	Traveling Gate	02/17/94	280,000	608.74	84.55	5,760	9.47	68.13	6.95
Boiler 4	Traveling Gate	02/17/94	268,500	584.52	81.18	2,840	4.86	34.98	
Boiler 4	Traveling Gate	02/17/94	285,600	623.65	86.62	4,170	6.68	48.14	
Boiler 4	Traveling Gate	02/17/94	289,800	631.71	87.74	4,280	6.78	48.78	
Boiler 4	Traveling Gate	02/22/94	285,600	625.33	86.85	4,680	7.48	53.89	7.70
Boiler 4	Traveling Gate	02/22/94	289,800	633.82	88.03	4,680	7.38	53.16	
Boiler 4	Traveling Gate	02/22/94	282,692	616.86	85.68	4,680	7.58	54.63	
Boiler 4	Traveling Gate	02/22/94	268,800	585.45	81.31	4,680	7.99	57.56	
Boiler 4	Traveling Gate	02/22/94	266,667	580.29	80.60	4,680	8.06	58.07	
Boiler 4	Traveling Gate	02/23/94	283,043	616.93	85.68	2,460	3.99	28.71	5.48
Boiler 4	Traveling Gate	02/23/94	290,769	633.14	87.94	3,840	6.07	43.67	
Boiler 4	Traveling Gate	02/23/94	284,308	617.98	85.83	3,950	6.39	46.02	
Boiler 4	Traveling Gate	03/04/94	289,655	636.45	88.40	1,920	3.02	21.72	3.99
Boiler 4	Traveling Gate	03/04/94	278,793	614.71	85.38	1,440	2.34	16.87	
Boiler 4	Traveling Gate	03/04/94	271,552	598.50	83.13	2,520	4.21	30.32	
Boiler 4	Traveling Gate	03/04/94	283,889	625.69	86.90	3,990	6.38	45.91	
						Max. =	17.49	125.87	11.48
						Avg. =	6.48	46.97	6.63
						Min =	1.53	11.04	2.75

Note: lb/hr = pounds per hour.
 lb/MMBtu = pounds per million British thermal units.
 lb/ton = pounds per ton.
 MMBtu/hr = million British thermal units per hour.
 NA = not available.
 TPH = tons per hour.

(a) Calculated from reported heat input rate, assumed 3,600 Btu/lb average heat content for wet bagasse.

Table 2. Summary of Concurrent PM and CO Emission Tests Performed on U.S. Sugar Corporation Clewiston Boiler No. 4

Unit	Boiler Type	Date	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate (a) (TPH wet)	PM Emissions (lb/MMBtu)	PM Emissions Compliance Test Average (lb/MMBtu)	Visible Emission Test Results(b) (% opacity)	CO Emissions			CO Emissions Compliance Test Average (lb/MMBtu)
									lb/hr	lb/MMBtu	lb/ton,wet	
Boiler 4	Traveling Gate	02/20/90	308,636	691.7	96.07	0.132	0.122	-	1,940	2.79	20.19	2.75
Boiler 4	Traveling Gate	02/20/90	306,666	690.3	95.88	0.130			1,520	2.24	15.85	
Boiler 4	Traveling Gate	02/20/90	310,298	698.8	97.06	0.103			2,240	3.23	23.08	
Boiler 4	Traveling Gate	02/22/91	300,000	647.9	89.99	0.124	0.131	15.00	4,900	7.56	54.45	11.23
Boiler 4	Traveling Gate	02/22/91	293,382	634.2	88.08	0.131			9,450	14.90	107.28	
Boiler 4	Traveling Gate	02/22/91	293,382	634.2	88.08	0.137						
Boiler 4	Traveling Gate	01/09/92	302,055	630.0	87.50	0.093	0.096	14.79	2,770	4.40	31.66	4.40
Boiler 4	Traveling Gate	01/09/92	295,135	615.8	85.53	0.128			2,710	4.40	31.69	
Boiler 4	Traveling Gate	01/09/92	295,135	615.8	85.53	0.066						
Boiler 4	Traveling Gate	02/04/93	295,135	635.3	88.24	0.124	0.122	18.96	4,310	6.78	48.85	7.64
Boiler 4	Traveling Gate	02/04/93	286,662	616.4	85.61	0.141			5,630	9.13	65.76	
Boiler 4	Traveling Gate	02/04/93	294,000	633.9	88.04	0.101			4,440	7.01	50.43	
Boiler 4	Traveling Gate	02/23/94	283,043	616.9	85.68	0.152	0.133	5.21	2,460	3.99	28.71	5.48
Boiler 4	Traveling Gate	02/23/94	290,769	633.1	87.93	0.116			3,840	6.07	43.67	
Boiler 4	Traveling Gate	02/23/94	284,308	618.0	85.83	0.132			3,950	6.39	46.02	
Boiler 4	Traveling Gate	12/30/94	288,750	626.8	87.06	0.142	0.125	15.00	4,890	7.81	56.17	6.55
Boiler 4	Traveling Gate	12/30/94	280,986	609.4	84.64	0.115			3,250	5.33	38.40	
Boiler 4	Traveling Gate	12/30/94	281,918	614.3	85.32	0.119			4,000	6.51	46.88	
						Ma	0.152	0.133	18.96	Max. =	14.90	11.23
						Avg	0.121	0.121	11.49	Avg. =	6.16	6.34
						Min	0.066	0.096	5.21	Min. =	2.24	2.75

Note: lb/hr = pounds per hour.
 lb/MMBtu = pounds per million British thermal units.
 lb/ton = pounds per ton.
 MMBtu/hr = million British thermal units per hour.
 NA = not available.
 TPH = tons per hour.

(a) Calculated from reported heat input rate, assumed 3,600 Btu/lb average heat content for wet bagasse.
 (b) Average opacity for highest 6-minute period.

ATTACHMENT A

17. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the Department's Bureau of Air Regulation (BAR). The permittee shall update and resubmit the Operation and Maintenance plan for Boiler No. 4 with detailed information on minimizing carbon monoxide emissions prior to June 1, 1996. The Department will incorporate the plan into the air operation permit for this facility. Emissions of carbon monoxide (1-hour average) shall be minimized through Good Combustion Practice (GCP) and shall not exceed 6.5 lb/MMBtu, 5,502 lb/hr and 8,818 tons during any calendar year. ~~During the 1995-1996 sugar cane season, the permittee shall conduct a minimum of three tests for CO on this unit using EPA Method 10 (Rule 62-297.401(10), F.A.C.), while employing GCP as described in the Operation and Maintenance plan. The Department may revise the carbon monoxide emission standard and the permit if the tests show lower carbon monoxide emissions can be achieved by this boiler.~~ Emissions of volatile organic compounds shall not exceed 1.7 lb/ton of wet bagasse as determined by EPA Method 25 or 25A in conjunction with EPA Method 18. These test methods are described in 40 CFR 60, Appendix A. Compliance tests for these pollutants will not be required if the visible emissions from Boiler No. 4 are below 20 percent opacity and acceptable emission factors have been established for this pollutant.

21. Compliance tests for all emission standards listed in Specific Conditions No. 14, 15, and 17 for Boiler No. 4 shall be conducted once each Federal fiscal year and reported to the Department's South District office within 45 days of completion of the last test run. ~~During the 1995-1996 sugar cane season, the permittee shall make a minimum of three tests for carbon monoxide on Boiler No. 4 using EPA Method 10 (Rule 62-297.401(10), F.A.C.), while employing GCP as described in the Operation and Maintenance plan. The Department shall revise the carbon monoxide emission standard and this permit if the tests show lower carbon monoxide emissions can be achieved by this boiler.~~

BRYAN CAVE LLP

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IRVINE, CALIFORNIA

LONDON, ENGLAND
FRANKFURT AM MAIN, GERMANY
RIYADH, SAUDI ARABIA
KUWAIT CITY, KUWAIT
DUBAI, UNITED ARAB EMIRATES
HONG KONG
AFFILIATED OFFICE IN BEIJING

PETER H. OPPENHEIMER
DIRECT DIAL NUMBER
(202) 508-6067

October 10, 1995

VIA FEDERAL EXPRESS

Virginia B. Wetherell, Secretary
c/o Office of General Counsel
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

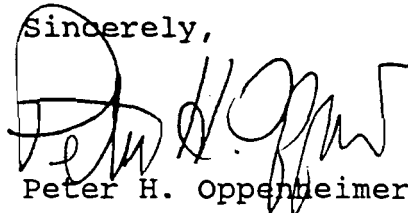
RECEIVED
OCT 16 1995
BUREAU OF
AIR REGULATION

Re: U.S. Sugar Corporation
Clewiston Boiler No. 4
DEP File No. AC 26-248809
Hendry County

Dear Secretary Wetherell:

Enclosed for filing in conjunction with the above-referenced case is a Request for Extension of Time in which to File Petition For Hearing.

Sincerely,



Peter H. Oppenheimer

Enclosures

cc: Kenneth J. Plante, Esq., General Counsel, DEP
Jefferson M. Braswell, Esq., Assistant General Counsel, DEP
Al Linero, DEP, Tallahassee
David Knowles, DEP, Fort Myers Office
Jewell Harper, U.S. EPA Region IV
John Bunyak, National Park Service
Peter B. Briggs, U.S. Sugar Corporation
Don Griffin, U.S. Sugar Corporation
David A. Buff, P.E., KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

U.S. SUGAR CORPORATION
CLEWISTON MILL BOILER NO. 4,
DEP File No. AC 26-248809 (PSD-FL-217)
Hendry County

Petitioner,

vs.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

REQUEST FOR SECOND EXTENSION
OF TIME TO FILE PETITION FOR HEARING

On August 11, 1995, U.S. Sugar Corporation (U.S. Sugar) received by certified mail the Department of Environmental Protection's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809.

On August 17, 1995, U.S. Sugar filed, and the Department subsequently granted, a request for an extension of time to and including October 13, 1995 in which to file a petition for administrative hearing.

Counsel for the Petitioner is writing to request a second extension of time to and including Friday, January 12, 1996 in which to file a petition for administrative proceeding regarding the construction permit modification. This request is made pursuant to Rule 62-103.070, F.A.C. As good cause for

granting the requested extension of time for filing, U.S. Sugar would show the following:

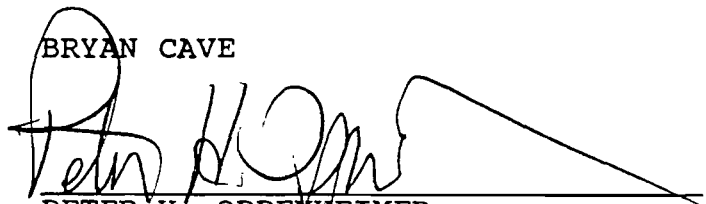
1. U.S. Sugar has been working with the Department to resolve its concerns regarding the CO testing requirement for the 1995-1996 sugar cane season imposed by specific conditions 17 and 21 and the provision for adjustment of the CO emission level. Having made a BACT determination, the Department may not reserve the authority to adjust the CO limit of 6.5 lbs/MMBtu established by that BACT determination (dated July 27, 1995).
2. It is important that specific condition 12 reflect its intent and function as an SO₂ emissions limitation, and correspondingly be amended to reflect the excess emissions language contained in Rule 62-210.700, F.A.C. U.S. Sugar and the Department have not yet reached an understanding on this point.
3. This extension will terminate as soon as these issues are resolved to the mutual satisfaction of the Department and U.S. Sugar.
4. This request is filed as a protective measure to avoid waiver of U.S. Sugar's rights to challenge or request an administrative hearing on any provision of the proposed permit. Grant of this request will allow the parties the opportunity to discuss and resolve these issues so that the Department can then issue a final amended construction permit modification that achieves

a mutually acceptable resolution of U.S. Sugar's concerns without the need for initiation of formal administrative proceedings.

We advised the Department's assistant general counsel, Jefferson M. Braswell, Esq., of this request on October 10, 1995. Accordingly, Counsel for the Petitioner respectfully requests that an extension of time be granted for the filing of a petition for administrative proceedings in regard of the Department's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809, to and including Friday, January 12, 1996.

If the requested extension of time is not granted for any reason, then this pleading shall constitute a petition filed pursuant to Rule 62-103.155, F.A.C. for an administrative hearing on specific permit conditions numbers 12, 17 and 21 of the construction permit modification for Clewiston Mill Boiler No. 4.

BRYAN CAVE



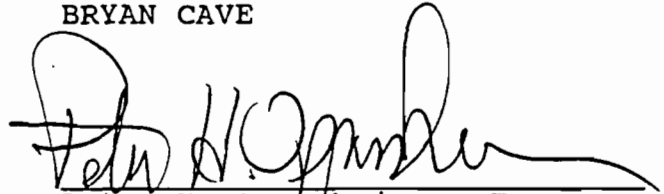
PETER H. OPPENHEIMER
COUNSEL FOR U.S. SUGAR CORPORATION

700 13th Street, N.W., Suite 700
Washington, D.C. 20005-3960
Telephone: (202) 508-6067

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Federal Express overnight delivery to Jefferson M. Braswell, Esquire, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, on this 10 day of October, 1995.

BRYAN CAVE



Peter H. Oppenheimer, Esq.

BRYAN CAVE LLP

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HONG KONG
AFFILIATED OFFICE IN BEIJING

RECEIVED
SEP 25 1995

Bureau of
Air Regulation

ROBERT F. VAN VOORHEES
DIRECT DIAL NUMBER
(202) 508-6014

September 20, 1995

BY FEDERAL EXPRESS

Mr. Jefferson Braswell
Florida Department of Env. Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, FL 32399-2400

Re: DEP File No. AC 26-248809/PSD-FL-217
PSD Construction Permit Modification
Clewiston Boiler No. 4
U.S. Sugar Corporation

Dear Mr. Braswell:

Enclosed is a copy of a letter, dated September 15, 1995, from U.S. Sugar Corporation's environmental consultant, KBN Engineering, to the Department's Mr. Willard Hanks, requesting a number of minor technical amendments to the Clewiston Boiler 4 Construction Permit Modification.

If convenient, we request that these proposed technical amendments be reviewed in conjunction with the administrative procedure initiated by our letter to the Department, dated August 31, 1995, seeking to resolve a number of legal concerns regarding the above-referenced Permit.

Please call me or Mr. David Buff of KBN Engineering (800/333-4526) if you have any questions about the proposed technical amendments or if you need any additional information. Thank you for your assistance.

Sincerely,


Robert F. Van Voorhees

Enclosure

BRYAN CAVE LLP

Mr. Jefferson Braswell
September 20, 1995
Page 2

cc: A. A. Linero, DEP
Willard Hanks, DEP
David Knowles, DEP South District
Peter Briggs, U.S. Sugar
Don Griffin, U.S. Sugar
David Buff, KBN

0118951.01

cc: NPS
EPA
a. Linero
S. Arif



September 15, 1995

Mr. Willard Hanks
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
SEP 19 1995
Bureau of
Air Regulation

Re: United States Sugar Corporation- Clewiston Boiler No. 4
AC26-248809; PSD-FL-217

Dear Mr. Hanks:

The Florida Department of Environmental Protection (FDEP) issued a final determination and prevention of significant deterioration (PSD) construction permit modification to U.S. Sugar Corporation for Boiler No. 4 on August 9, 1995. On behalf of U.S. Sugar Corporation, I am requesting several minor technical amendments to the construction permit modification. The requested amendments are as follows:

Specific Condition 5

In the table of operating parameters, under the column titled "Avg. time", the "Max." averaging time is not specified. Since this could be construed to be an instantaneous limit, it is requested that the "***" footnote be added to the column title, to clarify that this is the limit for a 1-hour averaging time. This was noted in the previous Boiler No. 4 permit (AC26-126965).

Specific Condition 17

Specific Condition 17 specifies that compliance tests for volatile organic compounds (VOC) will not be required if the visible emissions from Boiler No. 4 are less than 20 percent and acceptable emission factors have been established for VOC. U.S. Sugar conducted a VOC stack test on Boiler No. 4 in 1985, under its original construction permit. The VOC emissions from burning bagasse averaged 1.32 lb/ton wet bagasse during the test. The test result is below the current allowable limit of 1.7 lb/ton of wet bagasse. Therefore, this previous testing demonstrates the acceptability of the permitted emission factor for VOC, and additional testing should not be required. The 1985 stack test results are attached.

Specific Condition 24

This condition provides that the particulate matter (PM) compliance tests be calculated by utilizing the "F" factor, unless the permittee has provided a report demonstrating that an F factor is not valid for a bagasse boiler. In 1985, the sugar industry conducted a study concerning the F factor. The study was submitted to FDEP in 1986. This study found that the F factor was highly variable for bagasse, due to the variability of the fuel, and this variability precluded the establishment of an F factor for bagasse. A table from this report (Table 3-5), which summarizes the F factor result for 155 individual samples, is attached. As shown, the F factor (FD) ranged from 8,442 to 9,889 dscf/MMBtu. This data demonstrates that a single F factor could not be established for bagasse fuel.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

15006A/6

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In addition to the above amendment requests, we wish to clarify with FDEP that compliance testing for SO₂ is not required under the modified permit. Specific Condition 16 contains emission limits for SO₂, as well as the test methods and reporting requirements for any SO₂ compliance tests. However, Specific Condition 21 does not require SO₂ compliance tests. We believe that additional compliance testing for SO₂ is not necessary, in view of the low emission limit, and since compliance with the SO₂ limit has been previously demonstrated. U.S. Sugar conducted an SO₂ stack test in 1985 under its original construction permit (AC26-80930). The SO₂ emissions from burning bagasse averaged 0.0016 lb/MMBtu during the test (see attached test data). The test result is a factor of 100 below the allowable limit of 0.166 lb/MMBtu.

Please consider this amendment request and call if you have any questions. Thank you for your cooperation in this matter.

Sincerely,

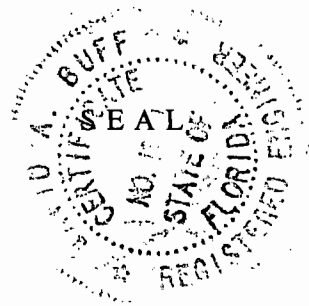
David A. Buff

David A. Buff, P.E.
Florida Registration 19011

DAB/lcb

cc: Don Griffin
Peter Briggs
Bob Van Vorhees
David Knowles
File (2)

*cc: W. Hanks, BAR
EPA
NPS
D. Buff, KBN
A. Limerio, BAR*



DESCRIPTIVE STATISTICS OF ULTIMATE ANALYSIS OF BAGASSE
 UNITS: ALL IN % EXCEPT BTU AND FD (DSCF/MILLION BTU)

PROCESSING SEASON	VARIABLE	MEAN	STANDARD DEVIATION	NUMBER OF OBSERVATIONS	MINIMUM VALUE	MAXIMUM VALUE
1978/79	ASH	1.08	0.937	56	0.20	5.40
	BTU	8133.21	147.526	56	7520.00	8365.00
	O2	44.13	0.810	56	41.88	47.18
	S	0.15	0.075	56	0.03	0.40
	N2	0.31	0.054	56	0.10	0.43
	H2	5.99	0.117	56	5.60	6.30
	FD	9297.45	183.272	56	8442.00	9664.00
	C	48.34	0.725	56	46.00	49.60
1984/85	ASH	1.71	1.387	67	0.65	8.58
	BTU	8187.51	113.827	67	7775.00	8585.00
	O2	43.32	1.066	67	37.45	44.67
	S	0.06	0.053	67	0.01	0.28
	N2	0.34	0.120	67	0.06	0.93
	H2	6.00	0.111	67	5.50	6.16
	FD	9321.21	120.907	67	8885.00	9516.00
	C	48.56	0.553	67	46.48	49.26
1985/86	ASH	1.49	0.742	32	0.66	3.82
	BTU	8093.39	172.536	32	7635.00	8345.00
	O2	43.52	0.577	32	42.55	44.76
	S	0.09	0.092	32	0.01	0.37
	N2	0.32	0.033	32	0.28	0.39
	H2	6.04	0.156	32	5.60	6.40
	FD	9433.19	214.515	32	8802.00	9889.00
	C	48.54	0.487	32	47.40	49.30
TOTAL	ASH	1.44	1.153	155	0.20	8.58
	BTU	8148.46	143.862	155	7520.00	8585.00
	O2	43.65	0.961	155	37.45	47.18
	S	0.10	0.080	155	0.01	0.40
	N2	0.33	0.087	155	0.06	0.93
	H2	6.01	0.124	155	5.50	6.40
	FD	9335.74	173.558	155	8442.00	9889.00
	C	48.48	0.614	155	46.00	49.60

Table 3-5. Descriptive Statistics of Ultimate Analysis of Bagasse.



UNITED STATES SUGAR CORPORATION

BOILER No. 4 - CLEWISTON

STACK TESTS FOR PARTICULATE, SO₂, NO_x, CO AND VOC EMISSIONS

REPORT 859-S

DECEMBER 23, 1985

INTRODUCTION

The United States Sugar Corporation operates a raw sugar mill located near the intersection of W.C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida.

On December 23, 1985, tests for Carbon Monoxide, Oxides of Nitrogen, Particulate, Sulfur Dioxide and Total Gaseous Nonmethane Organic Emissions were performed on the exhaust stack servicing Boiler No. 4.

The tests were performed in order to comply with permit operating conditions set forth in Florida Department of Environmental Regulation Permit No. AC26-80930, and to determine compliance with Chapter 17-02 of the Florida Administrative Code.

A visible emission test was not performed because the plume from Boiler No. 4 was intermingled with the plumes from surrounding boilers, an accurate reading was not possible.

During the testing period, records of the boiler data were maintained by plant personnel, and are presented in the Appendix.

The tests were observed by Mr. Mirza Baig of the Florida Department of Environmental Regulation, Fort Myers office.

The results of these tests verify compliance with the Florida Department of Environmental Regulation Permit No. AC26-80930 and Chapter 17-02 of the Florida Administrative Code.

SOUTH FLORIDA ENVIRONMENTAL SERVICES, INC.

STACK TESTS FOR PARTICULATE, SO₂, NO_X, CO, AND VOC EMISSIONS

United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Clewiston Mill

Type Process - Sugar Manufacturing

Boiler No. 4

Abatement Device - Turbulaire Impingement Scrubber

Compliance Stack Test

Report 859-S

December 23, 1985

All testing and analysis was performed in accordance with the Florida Department of Environmental Regulation, Florida Administrative Code, Chapter 17-2.

I hereby certify that to my knowledge all data submitted in this report is true and correct.



William D. Arlington
Project Director

BEST AVAILABLE COPY

SUMMARY OF RESULTS
 UNITED STATES SUGAR CORPORATION
 BOILER NO. 4 - CLEWISTON

PARTICULATE

RUN	EMISSIONS LBS./HR.	ALLOWABLE LBS./HR.	EMISSIONS LBS./MM BTU	ALLOWABLE LBS./MM BTU	EMISSIONS F-FACTOR	LB./MM BTU BY ASME EFFICIENCY
1	71.36	84.21	.127	.150	.1605	.141
2	84.76	84.40	.151	.150	.1837	.163
3	87.86	79.85	.165	.150	.1919	.184
AVERAGE	81.33	82.82	.148	.150	.1787	.164

mm³/hr
 561.20
 563.67
 532.33
 552.47

SULFUR DIOXIDE

RUN	ACTUAL EMISSIONS LBS./MM BTU	ALLOWABLE RATE LBS./MM BTU	EMISSIONS F-FACTOR LB/MM BTU	LB/MM BTU BY ASME EFFICIENCY
1	.0022	.25	.00284	.00250
2	.0014	.25	.00179	.00164
3	.0014	.25	.00181	.00173
AVERAGE	.0016	.25	.00215	.00196

OXIDES OF NITROGEN

RUN	ACTUAL EMISSIONS LBS./HR.	ALLOWABLE RATE LBS./HR.
1	92.92	135.8
2	70.41	136.8
3	53.17	136.8
AVERAGE	73.83	135.8

*bagasse flow
 (lb/hr) **
 84.21
 84.40
 79.85

CARBON MONOXIDE

RUN	ACTUAL EMISSIONS LBS./MM BTU	ALLOWABLE RATE LBS./MM BTU
1	0	.25
2	0	.25
3	0	.25
AVERAGE	0	.25

VOLATILE ORGANIC COMPOUNDS

RUN	ACTUAL EMISSIONS LB./TON WET BAGASSE	ALLOWABLE RATE LB./TON WET BAGASSE
1	1.37	1.7
2	.93	1.7
3	1.66	1.7
AVERAGE	1.32	1.7

BRYAN CAVE LLP

700 THIRTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-3960
(202) 508-6000
FACSIMILE: (202) 508-6200

LONDON, ENGLAND
FRANKFURT AM MAIN, GERMANY
RIYADH, SAUDI ARABIA
KUWAIT CITY, KUWAIT
DUBAI, UNITED ARAB EMIRATES
HONG KONG
AFFILIATED OFFICE IN BEIJING

ST. LOUIS, MISSOURI
NEW YORK, NEW YORK
KANSAS CITY, MISSOURI
OVERLAND PARK, KANSAS
PHOENIX, ARIZONA
LOS ANGELES, CALIFORNIA
SANTA MONICA, CALIFORNIA
IRVINE, CALIFORNIA

PETER H. OPPENHEIMER
DIRECT DIAL NUMBER
(202) 508-6067

August 17, 1995

VIA FEDERAL EXPRESS

Virginia B. Wetherell, Secretary
c/o Office of General Counsel
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

AUG 21 1995

Bureau of
Air Regulation

Re: U.S. Sugar Corporation
Clewiston Boiler No. 4
DEP File No. AC 26-248809
Hendry County

Dear Secretary Wetherell:

Enclosed for filing in conjunction with the above-referenced case is a Request for Extension of Time in which to File Petition For Hearing.

Sincerely,



Peter H. Oppenheimer

Enclosures

- cc: Kenneth J. Plante, Esq., General Counsel, DEP
- Jefferson M. Braswell, Esq., Assistant General Counsel, DEP
- Al Linero, DEP, Tallahassee
- David Knowles, DEP, Fort Myers Office
- Jewell Harper, U.S. EPA Region IV
- John Bunyak, National Park Service
- Peter B. Briggs, U.S. Sugar Corporation
- Don Griffin, U.S. Sugar Corporation
- David A. Buff, P.E., KBN

0116259.01

cc: W. Hanks
A. Linero

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

U.S. SUGAR CORPORATION
CLEWISTON MILL BOILER NO. 4,
DEP File No. AC 26-248809 (PSD-FL-217)
Hendry County

Petitioner,

vs.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

**REQUEST FOR EXTENSION
OF TIME TO FILE PETITION FOR HEARING**

On August 11, 1995, U.S. Sugar Corporation (U.S. Sugar) received by certified mail the Department of Environmental Protection's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809.

Counsel for the Petitioner is writing to request an extension of time to and including Friday, October 13, 1995 in which to file a petition for administrative proceeding regarding the construction permit modification. This request is made pursuant to Florida Administrative Code Rule 62-103.070. As good cause for granting the requested extension of time for filing, U.S. Sugar would show the following:

1. U.S. Sugar has been working with the Department to resolve its concerns regarding the CO testing requirement for the 1995-1996 sugar cane season imposed

by specific conditions 17 and 21 and the provision for adjustment of the CO emission level. Having made a BACT determination, the Department may not reserve the authority to adjust the CO limit of 6.5 lbs/MMBtu established by that BACT determination (dated July 27, 1995).

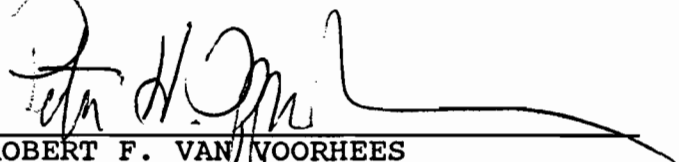
2. It is important that specific condition 12 reflect its intent and function as an SO₂ emissions limitation, and correspondingly be amended to reflect the excess emissions language contained in Rule 62-210.700, F.A.C. U.S. Sugar and the Department have not yet reached an understanding on this point.
3. As this seasonally-operated boiler will not resume operation until mid-October, grant of this extension will have no impact on ambient air quality.
4. This request is filed as a protective measure to avoid waiver of U.S. Sugar's rights to challenge or request an administrative hearing on any provision of the proposed permit. Grant of this request will allow the parties the opportunity to discuss and resolve these issues so that the Department can then issue a final amended construction permit modification that achieves a mutually acceptable resolution of U.S. Sugar's concerns without the need for initiation of formal administrative proceedings.

We advised the Department's assistant general counsel, Jefferson M. Braswell, Esq., of this request on August 14, 1995.

Accordingly, Counsel for the Petitioner respectfully requests that an extension of time be granted for the filing of a petition for administrative proceedings in regard of the Department's "NOTICE OF PERMIT" for Clewiston Mill Boiler No. 4, DEP File No. AC 26-248809, to and including Friday, October 13, 1995.

If the requested extension of time is not granted for any reason, then this pleading shall constitute a petition filed pursuant to Florida Administrative Code Rule 62-103.155 for an administrative hearing on specific permit conditions numbers 12, 17 and 21 of the construction permit modification for Clewiston Mill Boiler No. 4.

BRYAN CAVE



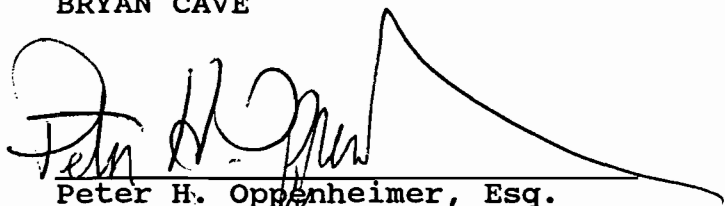
ROBERT F. VAN VOORHEES
PETER H. OPPENHEIMER
COUNSEL FOR U.S. SUGAR CORPORATION

700 13th Street, N.W., Suite 700
Washington, D.C. 20005-3960
Telephone: (202) 508-6067

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Federal Express overnight delivery to Jefferson M. Braswell, Esquire, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, on this 17 day of August, 1995.

BRYAN CAVE

A handwritten signature in black ink, appearing to read "Peter H. Oppenheimer", is written over a horizontal line. The signature is stylized and cursive.

Peter H. Oppenheimer, Esq.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

State of Florida
Department of Environmental Protection
Notice of Permit

In the matter of an
Application for Permit by:
Mr. Murray Brinson, Vice President
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

DEP File No. AC 26-248809
PSD-FL-217
Hendry County

Enclosed is Permit Number AC 26-248809 (PSD-FL-217) for the construction (modification of the permit) of the existing No. 4 boiler which is fired with bagasse and No. 6 residual fuel oil. This boiler is located at your sugar mill in Clewiston, Hendry County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 8-9-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

8-9-95
Date

Copies furnished to:

David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
David Buff, KBN
Robert Van Voorhees, Bryan Cave

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Murray Brunson, V.P.
 U.S. Sugar Corp.
 PO Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 Z 392 979 020

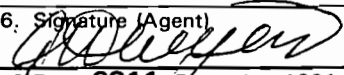
4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 8-11-95

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)


Thank you for using Return Receipt Service.

Z 392 979 020



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

To: Murray Brunson	
Street and No.: U.S. Sugar Corp	
City, State and ZIP Code: Clewiston, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	AR 36 348809 PSD-F1-317 8-9-95

Final Determination

United States Sugar Corporation
Hendry County
Clewiston, Florida

Boiler No. 4
Department Permit No. AC 26-248809
PSD-FL-217

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

July 27, 1995

Final Determination

U. S. Sugar Corporation
No. 4 Bagasse/No. 6 Residual Fuel Oil-Fired Boiler
Permit No. AC 26-248809 (PSD-FL-217)

A Technical Evaluation and Preliminary Determination, proposed Best Available Control Technology (BACT) determination, and draft construction permit for U. S. Sugar Corporation's existing Boiler No. 4 was distributed on February 9, 1995. The boiler is located at their sugar mill in Clewiston, Hendry County, Florida. The Notice of Intent to Issue was published in the legal section of the Clewiston News on March 1, 1995. Copies of the evaluation were available for public inspection at the Department's offices in Ft. Myers and Tallahassee.

The applicant's attorney submitted comments on the Department's Intent in a letter dated March 23, 1995. The comments addressed items in the Technical Evaluation and Preliminary determination, proposed BACT determination, and the draft permit. The Department's response to these comments follow.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The source was described by the Department as a bagasse/fuel oil-fired boiler. The applicant requested the source be described as a bagasse/No. 6 residual fuel oil-fired boiler. The Department accepts the applicant's recommendation and has revised the description of the boiler.

The applicant noted that they originally requested a carbon monoxide (CO) emissions limit of 9.0 lbs/MMBtu, not the 6.5 lbs/MMBtu stated in evaluation. The Department agrees with this statement.

The applicant commented that it was the permit for Boiler No. 4 that was being modified, not the boiler itself as implied by the language used in the evaluation. This is correct. There are no physical or operational changes being made to the boiler. Only the allowable CO emission limit and test method are being changed by this permit.

The applicant requested that the Department's statement that the CO emissions vary with boiler operation be deleted from the determination. It is known from principles of combustion that higher excess air or oxygen is associated with lower carbon monoxide emissions. The Department does not know the precise correlation between fuels/boiler operation and CO emissions for the subject boiler. We expect to learn more about the variation in CO emissions

after reviewing the applicant's Operation Plan and future CO emissions report for tests conducted while employing Good Combustion Practice (GCP).

The applicant noted that other bagasse boilers have been given a BACT emission limit of 6.5 lbs CO/MMBtu. This statement is true. The Department has made BACT determinations for bagasse boilers, on a case-by-case basis, of 3.5 and 6.5 lbs/MMBtu. For this boiler, the Department has determined that BACT will be the CO emission limit that can be achieved while employing GCP, not to exceed 6.5 lbs/MMBtu.

The applicant requested the EPA directed stack height language on page 5 of the evaluation be deleted. The 1995 EPA-FDEP Workplan requires this or similar statement in all PSD new source review permits.

The applicant stated the 1-hour ambient air background concentration was 7,400 ug/m³, not the 7,800 ug/m³ listed in the determination. The Department reported the CO concentration of 7,790 ug/m³ from page 6-22 of the application as 7,800 ug/m³ in the determination.

BACT DETERMINATION

The applicant noted that they originally requested a CO emissions limit of 9.0 lbs/MMBtu even though they later agreed to accept a limit of 6.5 lbs/MMBtu. The BACT determination is reworded to state the applicant's original request. The Department adopted a CO limit for this boiler as that which can be met with GCP, not to exceed 6.5 lbs/MMBtu.

The applicant noted that the fuel oil burned by this boiler is No. 6 residual fuel oil. The Department agrees with this comment and has amended the BACT to note the type oil burned in this boiler.

The applicant asked that all annual emission limits be specified as tons per federal fiscal year (TPFFY) instead of tons per year (TPY). The Department will note that the TPY standards in this permit shall be on a calendar year basis because the Title V processing fees and Annual Operation Reports are based on a calendar year.

PERMIT NO. AC 26-248809 (PSD-FL-217)

Because of the delay in issuing the permit, the proposed expiration date is extended to June 1, 1996. The applicant requested that other correspondence related to the processing of this application be made an attachment to the permit. The Department accepts this recommendation and have referenced the other documents in the list of attachments.

The applicant requested several editing changes to the General Conditions in the permit to reflect the current language in Rule 62-4.160, F.A.C. The Department accepts this recommendation and has made these changes.

Specific Condition No. 2. The applicant requested that this condition be expanded to clarify the scrubber monitoring requirements. The Department accepts this recommendation and has amended this condition.

Specific Condition No. 3. The applicant requested that this condition be reworded to clarify the Department's intent on restriction of the No. 6 residual oil burned at this facility. The Department has made the changes requested.

Specific Condition No. 4. The applicant requested that the months boiler No. 4 may operate be deleted from this permit. This request is acceptable. The hours per year operation and tons per year emissions listed elsewhere in the permit have been retained.

Specific Condition No. 5. The applicant requested the limit on steam pressure and steam temperature be deleted from the permit, steam pressure be expressed in PSIG, and the permit note that heat input be based on the boiler having a thermal efficiency of 55 percent. The Department is clarifying the limits on steam pressure and temperature, which is from a previous permit for this boiler (Specific Condition No. 1 of Permit No. AC 26-126965), and accepting the request to add the pressure units and assumed boiler thermal efficiency to this condition.

Specific Condition No. 7. The applicant asked that this condition, which sets minimum pressure drop for the No. 4 boiler scrubber, be deleted. The Department is retaining this condition which is from a previous permit for this boiler (Specific Condition No. 17 of permit No. AC 26-126965).

Specific Condition No. 8. Basically, the same as above.

Specific Condition No. 9. The applicant requested that this condition be reworded to clarify the restrictions on No. 6 fuel oil consumption at this facility. This request is acceptable to the Department and this condition has been amended.

Specific Condition No. 11. Basically, the same as above.

Specific Condition No. 12. At the applicant's request, this condition was reworded to clarify restrictions on No. 6 residual fuel oil consumption at the facility. There was also a request to incorporate language similar to Rule 62-210.700, F.A.C., in this condition. The referenced rule addresses excess emissions, not fuel

consumption. Although Rule 62-210.700, F.A.C., applies to this boiler (and other units of air pollution), it was not incorporated in this condition.

Specific Condition No. 13. At the applicant's request, this condition was reworded to note that it applied only to No. 6 residual fuel oil consumed at this facility and added several analytical methods that may be used for the analysis of sulfur in the oil.

Specific Condition No. 14. The applicant requested that the annual emission limits be on a ton per federal fiscal year basis. As described earlier, the tons per year limit are to be met on a calendar year basis. The applicant requested that the compliance test procedures be listed in this condition. This condition is in the Emission Limitation Section of the permit. The Department is leaving the compliance tests procedures under the Testing and Reporting section of the permit.

Specific Condition No. 16. The applicant asked that the sulfur dioxide emission standard of 0.87 lbs/MMBtu be removed from the permit, the annual emission limit be based on the federal fiscal year, and the requirement to calculate the emissions for information purposes only using the F factor be deleted from the permit. The Department will remove the lbs/MMBtu sulfur dioxide emission limit from the permit. The standard was not expressed in this unit in previous permits for Boiler No. 4. The annual emission limits are based on a calendar year basis. The F factor emission calculations, from Specific Condition No. 9 of permit No. AC 26-126965, is retained until the report on its use prepared by U. S. Sugar Corporation's consultant is accepted by the Department.

Specific Condition No. 17. The applicant requested additional time to submit an updated Operation and Maintenance Plan on minimizing CO emissions from Boiler No. 4, that the requirement to test the boiler while employing GCP as a basis for revising the BACT be deleted, that Method 25A in conjunction with Method 18 be allowed to measure the VOC emissions, and that the compliance tests for CO and VOC be waived if visible emissions were less than 20 percent opacity. The Department will allow the additional time to update the Operation and Maintenance plan, the use of the combined test methods for VOC, waive the VOC test if visible emissions are less than 20 percent opacity, but retain the CO testing requirements while Boiler No. 4 is being operated with GCP. Annual CO tests are required thereafter.

Specific Condition No. 18. The applicant requested this condition be reworded to note what action may reduce fugitive emissions. This request is acceptable to the Department.

Specific Condition No. 19. The applicant requested the TPY NOx

standard be deleted from this condition and the compliance test be waived on approval of an Operation and Maintenance plan that optimizes NOx emissions. The Department has replaced this condition with Specific Condition No. 15 of permit No. AC 26-126965, a previous permit for this boiler, whose requirements are similar to those requested by the applicant.

Specific Condition No. 21. The applicant requested this condition listing the testing requirements be deleted and replaced with current requirements from previous permits. The Department is rewording this condition to retain the current testing requirements and the new CO emissions test requirements added as a condition of this modification. The testing requirements of this permit will be annual PM, CO, and visible emissions tests provided an acceptable Operation and Maintenance plan has been provided to the Department, visible emissions are less than 20 percent opacity, and emissions factors have been established for the other regulated pollutants per Specific Condition No. 16 of permit No. AC 26-126965.

Specific Condition No. 22. The applicant requested that this condition, which lists the reference test methods, be deleted because it is redundant. Previous comments were to add the test methods in the condition listing the emission standards. The Department is retaining this condition under the Testing and Reporting section of the permit.

Specific Condition No. 23. The applicant requested that this condition be reworded to address situations where the particulate matter and visible emissions tests cannot be performed concurrently. The Department has revised this condition to address this situation.

Specific Condition No. 24. The applicant requested this condition, which specified the particulate matter test method, be deleted because an earlier request had asked it be put in the condition with the particulate matter standard. The Department is retaining this condition under the Testing and Reporting section of the permit.

Specific Condition No. 25. The applicant requested an alternate schedule be allowed to determine the thermal efficiency of Boiler No. 4. This condition is modified to approve the request.

Specific Condition No. 26. The applicant requested that the 15 days notice prior to compliance testing not be required in writing. The Department is deleting the requirement that the notification be in writing but cautions the applicant that failure to notify the Department of the scheduled compliance test may be grounds to reject the test results.

Specific Condition No. 27. The applicant requested that annual reporting of fuel oil consumption be deleted. This request is

denied. Specific Condition No. 17 of Permit No. AC 26-126965 requires this data be reported annually.

The applicant also requested that the operation permit for Boiler No. 4 be issued prior to the expiration date of this construction permit. The Bureau of Air Regulations recommends the South District office issue the operation permit for this boiler after incorporating the conditions of this construction permit.

The final action of the Department will be to issue the construction permit and the BACT determination as proposed in the Technical Evaluation and Preliminary Determination except for the changes noted above.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

Mr. Murray T. Brinson
Vice President of Sugar
Processing
U.S. Sugar Corporation
P. O. Drawer 1207
Clewiston, Florida 33440

APIS No: 52FTM26000309

Permit Number: AC26-248809/PSD-FL-217

Expiration Date: June 1, 1996

County: Hendry

Latitude/Longitude: 26°44'05"N

80°56'19"W

Project: Boiler No. 4 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-212, 62-275, 62-296, and 62-297, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and specifically described as follows:

Authorization to increase allowable carbon monoxide (CO) emissions from the existing Foster Wheeler Boiler No. 4 located at U.S. Sugar Corporation's sugar mill. This mill is located near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida. The UTM coordinates of this site are zone 17, 506.1 km E and 2956.9 km N.

The modification shall be in accordance with the application (cover letter dated April 7, 1994), and the additional information submitted in the U.S. Sugar Corporation's letters dated June 27, 1994, and September 8, 1994, except for the changes mentioned in the Technical Evaluation and Preliminary Determination and listed as Specific Conditions in this permit to construct/modify.

Attachments are listed below:

1. U.S. Sugar Corporation's application received April 8, 1994.
2. DEP's letter dated April 26, 1994.
3. U.S. Sugar Corporation's letter dated June 27, 1994.
4. DEP's letter dated July 19, 1994.
5. KBN's letter dated August 31, 1994.
6. U.S. Sugar Corporation's letter dated September 8, 1994.
7. U.S. Sugar's 90-day time limit waiver, dated November 30, 1994.
8. DEP's letter dated December 6, 1994.
9. KBN's letter dated December 8, 1994.
10. U.S. Sugar's 90-day time limit waiver, dated January 9, 1995.
11. KBN's letter dated January 11, 1995.
12. Bryan Cave's letter dated March 23, 1995.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

GENERAL CONDITIONS:

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

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

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

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

GENERAL CONDITIONS:

credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

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

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

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used;
 - the results of such analyses.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

SPECIFIC CONDITIONS:

Equipment Specification

1. Stack sampling facilities for Boiler No. 4 shall be in accordance with the requirements of Rule 62-297.345, F.A.C.
2. The scrubber control system for Boiler No. 4 shall be equipped with an instrument to measure the gas pressure drop.
3. All boilers at the plant that burn No. 6 residual fuel oil shall be equipped with integrated fuel oil flow meters or continuous recorders to measure the amount of No. 6 residual fuel oil consumed by the boilers. Boiler No. 4 shall not have more than two burners with two oil guns each (total of four oil guns). The maximum capacity of all four fuel oil guns shall not exceed the permitted fuel oil input rate.

Operation Limitations

4. Boiler No. 4 is limited to 160 days (3840 hrs/yr) operation per season.
5. Steam production, steam pressure, steam temperature, heat input, and bagasse consumption shall not exceed the following:

Steam** press.	Steam** temp. °F	Avg. time	Steam Prod. lbs/hr	Heat input* 10 ⁶ Btu/hr	Bagasse Consum. lbs/hr-wet
850 PSIG	900	Max.	346,231	777.2	215,889
		6-hr avg	314,757	706.6	196,264
600 PSIG	750	Max.	368,500	777.2	215,889
		6-hr avg	335,000	706.6	196,264

*Based upon 55% thermal efficiency while burning bagasse.

**1-hour average

6. Readings shall be taken and logged every 8 hours of the scrubber pressure drop and every 24 hours for the pH of the scrubber water for each day during which bagasse is burned in Boiler No. 4. During compliance testing, the scrubber parameters shall be measured and recorded at 15 minute intervals. These records shall be available for regulatory inspection for 5 years.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

SPECIFIC CONDITIONS:

7. The scrubber shall be operated at a pressure drop that is 90% or more of the average pressure drop that existed during a particulate matter test that demonstrated compliance.

8. The scrubber shall in no case be operated with a pressure drop less than 75% of the pressure drop that was determined concurrently with a stack test that demonstrated compliance for particulate matter.

9. The heat input from No. 6 residual fuel oil shall not exceed 225 million Btu per hour, which is approximately equivalent to 1,500 gallons per hour of No. 6 residual fuel oil. Fuel oil meter readings on boilers 1, 2, 3 and 4 shall be read and logged at least once every three hours, unless fuel oil consumption for these boilers is recorded continuously, and these records shall be kept for at least five years for Department inspection. Each meter shall be calibrated annually by a method approved by the Department.

10. During any 12-month period, the maximum quantity of No. 6 residual fuel oil burned in Boiler No. 4 shall not exceed 500,000 gallons.

11. During any 24-hour period, not more than 40,800 gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant.

12. During any 3-hour period, not more than 6,300 gallons of No. 6 residual fuel oil shall be burned in boilers 1, 2, 3 and 4 at the plant.

13. No. 6 residual fuel oil burned by this boiler will be replaced in the fuel oil storage tank with an equal amount of No. 6 residual fuel oil containing no more than 1.50 percent sulfur by weight. Compliance with this condition shall be determined from certified analysis of the replacement No. 6 residual fuel oil by ASTM Method D-129, D-1552, D-2622, or D-4294. Records of the quantity and analysis of No. 6 residual fuel oil consumed in Boiler No. 4 and invoices for the No. 6 residual fuel oil purchased shall be kept for a minimum of five years for regulatory agency inspection.

Emission Limitation

14. Particulate matter (PM) emissions from Boiler No. 4 shall not exceed 0.150 pounds per million Btu heat input (lbs/MMBtu) for

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

SPECIFIC CONDITIONS:

bagasse fuel or 0.10 lbs/MMBtu for No. 6 residual fuel oil. **Maximum PM emissions shall not exceed 116.6 lbs/hr and 223.8 tons during any calendar year.** In the event that both fuels are burned concurrently, the allowable PM emissions shall be prorated from the allowable standards for each fuel by their respective heat inputs. Compliance test procedures are listed in Specific Condition No. 24.

15. Visible emissions (VE) from Boiler No. 4 shall not exceed 20 percent opacity except for one two-minute period per hour during which the opacity shall not exceed 40 percent pursuant to Rule 62-296.405(1)(a), F.A.C. Compliance with the standard shall be determined by the EPA Method 9 as described in 40 CFR 60, Appendix A.

16. Sulfur dioxide emissions from Boiler No. 4, while burning a mixture of No. 6 residual fuel oil and bagasse, shall not exceed 680 lbs/hr. Sulfur dioxide emissions from Boiler No. 4, while burning 100 percent bagasse fuel, shall not exceed 0.166 lbs/MMBtu **and 129.0 lbs/hr. Total sulfur dioxide emissions from Boiler No. 4 during any calendar year shall not exceed 340 tons.** Sulfur dioxide emissions shall be determined by EPA Method 6 or 6C as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 4 is 55 percent.

17. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the Department's Bureau of Air Regulation (BAR). The permittee shall update and resubmit the Operation and Maintenance plan for Boiler No. 4 with detailed information on minimizing carbon monoxide emissions prior to June 1, 1996. The Department will incorporate the plan into the air operation permit for this facility. Emissions of carbon monoxide (1-hour average) shall be minimized through Good Combustion Practice (GCP) and shall not exceed **6.5 lbs/MMBtu, 5,052 lbs/hr, and 8,818 tons** during any calendar year, (based on a 6-hr average of 706.6 MMBtu/hr heat input). During the 1995-1996 sugar cane season, the permittee shall conduct a minimum of three tests for CO on this unit using EPA Method 10 (Rule 62-297.401(10), F.A.C.), while employing GCP as described in the Operation and Maintenance plan. The Department may revise the carbon monoxide emission standard and the permit if the tests show lower carbon monoxide emissions can be achieved by this boiler. Emissions of volatile organic compounds shall not exceed 1.7 lbs/ton of wet bagasse as determined by EPA Method 25 or 25A in conjunction with EPA Method 18. These test methods are described in 40 CFR 60, Appendix A. Compliance tests for VOC will not be required if the

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

SPECIFIC CONDITIONS:

visible emissions from Boiler No. 4 are below 20 percent opacity and acceptable emission factors have been established for this pollutant.

18. Pursuant to Rule 62-296.310(3), F.A.C., the permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from the bagasse storage and handling system without taking reasonable precautions to prevent such emissions. These precautions may include, but shall not be limited to the following: paving and maintenance of roads, parking areas and yards; application of water or chemicals to control unconfined emissions; application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar sources; removal of particulate matter from roads and other paved areas under the control of the permittee to prevent reentrainment, and from buildings or work areas to prevent particulate matter from becoming airborne; landscaping or planting of vegetation; use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; and, enclosure or covering of conveyer systems.

19. Nitrogen oxides emissions, expressed as NO₂, shall not exceed 192.4 lbs/hr (maximum) as determined by EPA Reference Method 7 or 7E in accordance with 40 CFR 60, Appendix A. After the initial compliance test, the company may substitute an Operation and Maintenance plan that optimizes nitrogen oxide emissions for the compliance tests specified in this specific condition if the initial Method 7 or 7E test shows compliance.

20. All references to the 40 CFR 60 requirements are of the July 1, 1993 version.

Testing and Reporting

21. Compliance tests for all emission standards listed in Specific Conditions Nos. 14, 15, and 17 for Boiler No. 4 shall be conducted once each Federal fiscal year and reported to the Department's South District office within 45 days of completion of the last test run. During the 1995-1996 sugar cane season, the permittee shall make a minimum of three tests for carbon monoxide on Boiler No. 4 using EPA Method 10 (Rule 62-297.401(10), F.A.C.) while employing Good Combustion Practices as described in the Operation and Maintenance plan. The Department shall revise the carbon monoxide emission standard and this permit if the tests show lower carbon monoxide emissions can be achieved by this boiler.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

SPECIFIC CONDITIONS:

22. Compliance with the emission standards shall be based on EPA Reference Methods 5, 6, 6C, 7, 7E, 9, 10, and 25 or 25A in conjunction with 18 as described in 40 CFR 60, Appendix A.

23. As a condition of this permit, PM emissions and visible emissions tests shall be conducted concurrently on the boiler. Under circumstances when this is not feasible, the company shall obtain approval from the South Florida District to conduct the tests at separate times. In such circumstances, the tests shall be conducted as close to each other as is feasible.

24. Compliance with the PM standards shall be determined by EPA Reference Methods 1, 2, 3, 4, and 5, as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 4 is 55 percent. For informational purposes only, the particulate matter emissions rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years) unless the permittee has provided a report demonstrating that an "F" factor is not valid for a bagasse boiler.

25. A test shall be conducted on Boiler No. 4 to determine its actual thermal efficiency in accordance with the ASME short-form procedure each time the operating permit for this boiler is renewed. The test shall be conducted while the tubes are clean and within 14 days of the compliance test unless an alternative schedule is approved by the Department. A current report on the thermal efficiency test must be included with the application to operate this boiler.

26. The South District office and, for the 1995-1996 sugar cane season, the Bureau of Air Regulation, shall be notified as least 15 days in advance of any emission test required by this permit. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then emission units may be tested at less than 90 percent of the maximum operating rate allowed by the permit. In this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

27. An annual operation report shall be submitted to the Department's South District office by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C. The report shall include the amount

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: June 1, 1996

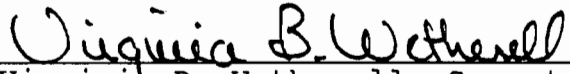
SPECIFIC CONDITIONS:

of No. 6 residual fuel oil burned by each emission unit at the plant in order to determine compliance with the limits on fuel oil usage in this permit, the sulfur content of the residual fuel oil purchased for the season, and a summary of the scrubber parameters listed in Specific Condition No. 2.

28. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

29. A timely application for a Title V operation permit must be submitted to the Department's South District Office by the date required in Rule 62-213.420, F.A.C.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**


Virginia B. Wetherell, Secretary
Department of Environmental
Protection

ATTACHMENTS AVAILABLE UPON REQUEST

Best Available Control Technology (BACT) Determination
United States Sugar Corporation
Clewiston Mill Boiler No. 4

AC 26-248809
PSD-FL-217

The United States Sugar Corporation (USSC) requested the carbon monoxide (CO) emission limit for Boiler No. 4 at the existing sugar mill in Clewiston, Hendry County, Florida, be increased from 0.25 lbs CO/MMBtu heat input to 9.0 lbs CO/MMBtu heat input. The emission limit adopted by the Department is based on actual EPA Method 10 test data on Boiler No. 4. The increase in allowable emission is not associated with any change in production or operation of the boiler. The emissions of all other air pollutants are not affected by this request.

The higher allowable emission rate requested will result in an increase in CO emissions above the significant emission rate of 100 TPY. This subjects the facility to the Prevention of Significant Deterioration (PSD) new source review regulations. These regulations require a BACT determination to be made for CO for the boiler.

Date of Receipt of a BACT Application:

June 29, 1994

Date Application Complete

September 8, 1994

BACT Requested by the Applicant:

The BACT determination requested by the applicant is summarized below:

Carbon Monoxide (CO): The requested emission limit is 9.0 lbs CO/MMBtu heat input. For the 706.6 MMBtu/hr bagasse/No. 6 residual fuel oil-fired boiler, this will result in 6,359 lbs CO/hr emissions. The heat input and CO emissions are 6-hour averages (permit No. AC 26-126965). For a 3,840 hour per year operation, this is equivalent to 12,209 tons CO emissions during a federal fiscal year. The CO emission limit of 9.0 lbs/MMBtu is to be achieved by Good Combustion Practice (GCP) of the boiler. Compliance is to be determined using EPA Reference Method 10 as described in 40 CFR 60, Appendix A.

BACT Determination Procedure:

In accordance with Rule 62-212.410, Florida Administrative Code, Best Available Control Technology Determination, Stationary Source-Preconstruction Review, this BACT determination is based on

the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of BACT pursuant to 40 CFR 52.21, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission unit in question the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Determined by the Department:

Carbon monoxide emissions from Boiler No. 4 shall be minimized through GCP. Until the minimum emission rate is established, carbon monoxide emissions shall not exceed 6.5 lbs/MMBtu and, based on a maximum allowable heat input of 777.2 MMBtu/hr, 5,052 lbs/hr, 1-hr max.. Carbon monoxide emissions during any consecutive 12-month period shall not exceed 8,818 tons (based on a maximum allowable 6-hr average of 706.6 MMBtu/hr heat input and 3840 hrs/yr operation). Compliance shall be determined using EPA Reference Method 10 as described in 40 CFR 60, Appendix A. These emission limits shall be achieved through GCP of the boiler.

BACT Determination Rationale:

The applicant submitted information indicating the high CO emissions from this boiler are due to the short residence time of the combustion gases in the furnace area. Based on limited emission data, they concluded that CO emissions averaged 6.7 lbs/MMBtu. The Department's proposed limit, not to exceed 6.5 lbs/MMBtu, is to be achieved through GCP.

The applicant investigated retrofitting a new bagasse feed/air distribution system (at the Department's request), retrofitting a flue gas recirculation system (FGR), use of a CO oxidation system, and drying the bagasse prior to burning (at the Department's request).

Boiler vendors stated that no decrease in CO emissions would be achieved through the use of a new feed/air distribution system. The high CO level for this boiler was due to the low residence time of the flue gases in the boiler. Higher residence times would allow for more complete combustion. Newer boilers have up to twice the volume of this existing boiler.

Retrofitting a flue gas recirculation (FGR) system to the existing boiler would be difficult and expensive (\$1,400,000 capital cost + \$1,000,000 annual operation cost). The CO reduction by a FGR system was unknown and potentially no reduction would be achieved. No bagasse boiler in Florida is using FGR.

Oxidation catalyst systems require elevated temperatures and low particulate matter loading. This boiler's flue gas temperature is too low and the particulate matter loading is too high to use an oxidation catalyst. No bagasse boiler in Florida uses an oxidation catalyst system.

Drying the bagasse prior to burning was considered unproven technology. No data was available to show a CO reduction from this approach.

The newer bagasse boilers with larger furnaces have lower CO emission rates. Expanding the volume of the existing boiler is not considered feasible. Through elimination of add-on controls, the Department is left with GCP as BACT to control CO from this existing boiler.

The Department believes that if this boiler is operated properly, it should be able to meet the CO limit given to similar boilers in the sugar industry. The BACT determination for Boiler No. 4 is

established as GCP with emissions not to exceed 6.5 lbs CO/MMBtu. The Department has no information to suggest that this boiler is designed significantly differently from the other bagasse boilers that were given this standard.

Conclusion

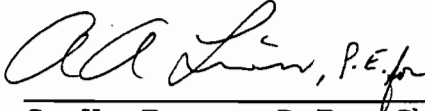
By employing Good Combustion Practice and meeting a carbon monoxide limitation of 6.5 lbs/MMBtu (or lower), the requirements of Best Available Control Technology and Prevention of Significant Deterioration will be met by the existing boiler.

Details of the Analysis May be Obtained by Contacting:

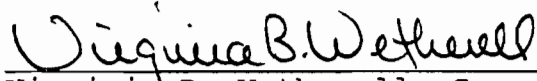
A. A. Linero, P.E., Administrator
Willard Hanks, Review Engineer
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

Approved by:



C. H. Fancy, P.E., Chief
Bureau of Air Regulation



Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

7/27, 1995
Date

8-7, 1995
Date

Florida Department of
Environmental Protection

Memorandum

TO: Virginia Wetherell
THROUGH: *AV* Dan Thompson *Kelly B. Guntz*
FROM: Howard L. Rhodes *HR*
DATE: July 28, 1995
SUBJECT: U.S. Sugar Corporation Boiler No. 4

Attached for your signature is a reissuance of the Best Available Control Technology Determination and air construction permit for U.S. Sugar Corporation Boiler No. 4 in Clewiston.

Reissuance of documents for this existing boiler became necessary following a requirement to use a much more sensitive carbon monoxide detection method.

Emissions of carbon monoxide will be minimized by employment of Good Combustion Practice (such as high excess air) rather than expensive add-on controls at this existing boiler. No violations of ambient air quality standards will occur. There were no adverse responses during the public notice period.

I recommend your approval and signature.

HLR/AL/t

attachments

BRYAN CAVE

ST. LOUIS, MISSOURI
LOS ANGELES, CALIFORNIA
NEW YORK, NEW YORK
PHOENIX, ARIZONA
KANSAS CITY, MISSOURI

700 THIRTEENTH STREET, N.W.
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OVERLAND PARK, KANSAS
LONDON, ENGLAND
RIYADH, SAUDI ARABIA
FRANKFURT AM MAIN, GERMANY

ROBERT F. VAN VOORHEES
DIRECT DIAL NUMBER
(202) 508-6014

March 23, 1995

BY FEDERAL EXPRESS

Mr. A. A. Linero, P.E.
Bureau of Air Regulation
Florida Department of
Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, FL 32399-2400

RECEIVED

MAR 24 1995

Bureau of
Air Regulation

**Re: Comments on Proposed PSD Construction Permit
Modification, Technical Evaluation and Preliminary
Determination, and BACT Determination for
United States Sugar Corp. -- Clewiston Boiler No. 4**

Dear Mr. Linero:

Thank you for providing us the opportunity to review the proposed PSD construction permit modification, Technical Evaluation and Preliminary Determination, and BACT Determination for U.S. Sugar Corporation's Clewiston Boiler No. 4 (AC26-248809). Enclosed for your consideration are comments on the proposed documents. We have requested a number of revisions and have tried in each case to explain the reasons for our comments.

Since the process to revise the CO emissions factor for Boiler No. 4 was first initiated, we understood that the purpose of modifying Boiler No. 4's construction permit was simply to have the permit reflect actual CO emissions and not to impose new requirements in other areas. The Department's description of the modification confirms this understanding. Our review of the proposed permit, however, disclosed several new requirements that appear to be unrelated to the change in permitted CO emissions or that otherwise seem to depart from our mutual understanding of the intent of the modification process. In some instances, language added by the Department to the proposed construction permit appears to have the effect of imposing new requirements, although this apparently was not the Department's intent. Consistent with our mutual understanding, we request that these new requirements be taken out of the final construction permit modification.

BRYAN CAVE

Mr. A. A. Linero, P.E.
March 23, 1995
Page 2

We also would like to suggest a different approach for the timing of the renewal and issuance of Boiler No. 4's current operation permit. U.S. Sugar timely submitted an application to renew the operation permit for Boiler No. 4 on December 15, 1992 and this application has been pending for several years. Due to the need to modify Boiler No. 4's construction permit to correct the CO emission factor, the Department has not yet taken final action on the renewal application. Pursuant to Rule 62-4.090, F.A.C., U.S. Sugar continues to operate Boiler No. 4 under the terms of Air Operation Permit No. A026-144701.

Instead of continuing to operate Boiler No. 4 under Air Operation Permit No. A026-144701 until 1996 as is presently contemplated by the proposed construction permit modification, U.S. Sugar requests that the Department issue a renewed operation permit immediately after finalizing the construction permit modification. By simply incorporating the requirements of the modified construction permit into the renewed operation permit, the Department will be able to expedite this process and take final action on the pending application.

We hope that adequate explanations have been provided for all of the comments presented. Please call me (202-508-6014) if you have any questions or need any clarification of the comments. We look forward to working with you to finalize this permit.

Sincerely,



Robert F. Van Voorhees
Counsel to U.S. Sugar Corporation

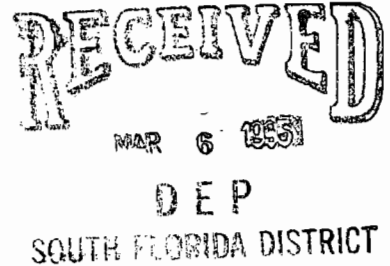
Enclosures

cc: Willard Hanks, DEP
David Knowles, DEP South District
Jewell Harper, EPA
John Bunyak, NPS
Peter Briggs, U.S. Sugar
Don Griffin, U.S. Sugar
David Buff, KBN

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121

March 3, 1995



Mr. David Knowles, P.E.
Engineer
Florida Department of Environmental Protection
South District
2295 Victoria Avenue - Suite 364
Fort Myers, Fl. 33901

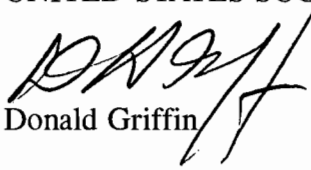
RE: U. S. Sugar Corporation
Clewiston Mill - Boiler No. 4
DEP File No. AC26-248809
PSD-FL-217 - Hendry County

Dear Mr. Knowles:

We are enclosing Affidavit of Publication certifying that the Notice of Intent to Issue Permit included with your notice dated February 7, 1995 was duly published in the legal section of the March 1, 1995 issue of the Clewiston News.

Very truly yours,

UNITED STATES SUGAR CORPORATION


Donald Griffin

DG:jt
Enclosure

cc: Mr. M. T. Brinson
Mr. Bert Starrett
Mr. Peter Briggs

cc: W. Hanks
C. Holladay
D. Knowles, S District
J. Banyak, NPS
J. Harper, EPA

The Clewiston News

Published Weekly Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida
County of Hendry

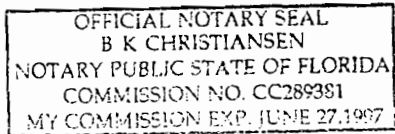
Before the undersigned authority, personally appeared Richard Hitt, who on oath says he is the Publisher of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement, being a

notice in the matter of intent in the court, was published in said newspaper in the issues of March 1, 1995

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

Sworn to and subscribed before me this 1st day of March, A.D. 19 95

[Signature of Notary Public] Notary Public



Lyons Printing

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT TO ISSUE PERMIT AC 26-248809 PSD-FL-217

The Department of Environmental Protection (Department) gives notice of its intent to issue a construction permit, No. AC 26-248809 / PSD-FL-217, to the United States Sugar Corporation for a modification / increase in the potential / allowable carbon monoxide (CO) emission limit for the existing bagasse / fuel oil fired Boiler No. 4. The boiler is located at the existing sugar mill in Clewiston, Hendry County, Florida. The permit will authorize an increase in the allowable emission rate of CO from 339.1 TPY to 8,818 TPY. The boiler's operation and allowable emissions of all other air pollutants are not changed by this permit. However, the increase in allowable CO emissions is above the significant emission rate and subjects the proposed modification to the Prevention of Significant Deterioration new sources review regulations. The allowable CO emissions are set by a determination of Best Available Control Technology. The maximum predicted CO concentrations from all sources, including the CO emission rate increase requested in the application are: 18,160 ug/m3, 1-hour average, or 45% of the 1-hour ambient air quality standard (AAQS) of 40,000 ug/m3; and, 8,940 ug/m3, 8-hour average, or 99% of the 8-hour AAQS of 10,000 ug/m3.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed

action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28.5.207, Florida Administrative Code.

The application 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 Tallahassee, Florida 32301 Department of Environmental Protection South District 2295 Victoria Avenue, Suite 364 Ft. Myers, Florida 33901

Any person may send written comments on the proposed action to Mr. A.A. Linero at the Department of Environmental Protection Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person (s). Such request must be submitted within 30 days of this notice.

al

BRYAN CAVE

ST. LOUIS, MISSOURI
LOS ANGELES, CALIFORNIA
NEW YORK, NEW YORK
PHOENIX, ARIZONA
KANSAS CITY, MISSOURI

700 THIRTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-3960
(202) 508-6000
FACSIMILE: (202) 508-6200

IRVINE, CALIFORNIA
SANTA MONICA, CALIFORNIA
OVERLAND PARK, KANSAS
LONDON, ENGLAND
RIYADH, SAUDI ARABIA
FRANKFURT AM MAIN, GERMANY

PETER H. OPPENHEIMER
DIRECT DIAL NUMBER
(202) 508-6067

RECEIVED
MAR 6 1995

Bureau of
Air Regulation

February 27, 1995

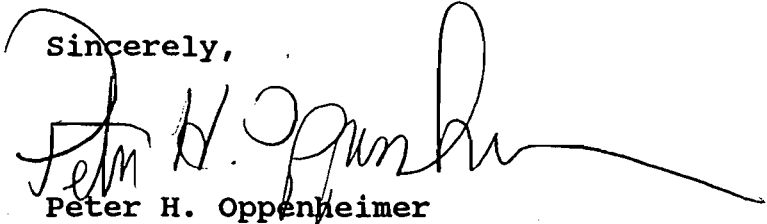
VIA FEDERAL EXPRESS

Virginia B. Wetherell, Secretary
c/o Office of General Counsel
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: U.S. Sugar Corporation
Clewiston Mill Boiler No. 4
Air Construction Permit No. AC26-248809
Hendry County

Dear Secretary Wetherell:

Enclosed for filing is a Request for an Extension of
Time to File a Petition For an Administrative Hearing with
respect to the above-reference permit.

Sincerely,

Peter H. Oppenheimer

Enclosure

cc: ✓ C. H. Fancy, P.E., Chief, BAR, DEP Tallahassee
Kenneth J. Plante, Esq., General Counsel, DEP
Jefferson M. Braswell, Esq., Assistant General Counsel, DEP
Willard Hanks, DEP, Tallahassee
David Knowles, DEP, South District
Peter B. Briggs, U.S. Sugar Corporation
Don Griffin, U.S. Sugar Corporation
David A. Buff, P.E., KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

U.S. SUGAR CORPORATION
CLEWISTON MILL BOILER NO. 4,
DEP PERMIT NO. AC26-248809 (PSD-FL-217)
HENDRY COUNTY

Petitioner,

vs.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

**REQUEST FOR EXTENSION
OF TIME TO FILE PETITION FOR HEARING**

On February 13, 1995, U.S. Sugar Corporation ("U.S. Sugar") received by certified mail the Department of Environmental Protection's "Intent To Issue" the above-referenced Construction Permit (the "proposed permit").

Counsel for the Petitioner is writing to request an extension of time to and including Friday, April 14, 1995 in which to file a petition for administrative proceeding regarding the proposed permit. This request is made pursuant to Florida Administrative Code Rule 62-103.070, which provides that a timely request for extension of time shall toll the running of the time period in which to file an appropriate petition. As good cause for granting the requested extension of time for filing, U.S. Sugar would show the following:

1. The proposed permit issued by the Department contains specific conditions and requirements not imposed on

this boiler by any prior operating or construction permit. For example, the proposed permit includes new operational limitations (specific condition 4), new scrubber control system operating requirements (specific conditions 6, 7 and 8), augmented particulate matter and sulfur dioxide emissions limitations (specific conditions 14 and 16), new unconfined particulate matter control requirements (specific condition 18), more stringent emission testing requirements (specific condition 23), and a number of other new or modified requirements.

2. U.S. Sugar has not yet had an opportunity to discuss these provisions with the Department and has had insufficient opportunity to assess the impact of these new requirements on its operations or to evaluate its ability to operate in compliance with the new requirements.
3. U.S. Sugar believes some of the specific conditions may benefit from revision or are in need of clarification. In addition, U.S. Sugar does not understand the factual basis for the imposition of some of the new requirements. We would like to obtain additional information from the Department in order to assess the factual support upon which the Department has relied. We hope to obtain this additional information and any necessary clarifications in discussions with the Department during the requested extension period. U.S.

Sugar has also been unable to find a regulatory basis for some of the new or modified requirements.

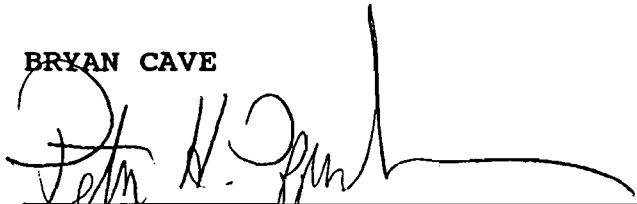
4. This request is filed as a protective measure to avoid waiver of U.S. Sugar's rights to challenge or request an administrative hearing on any provision of the proposed permit. Grant of this request will allow the parties an opportunity to complete discussion of the permit conditions of interest and achieve a mutually acceptable resolution of U.S. Sugar's concerns without the need for initiation of formal administrative proceedings.

We advised the Department's assistant general counsel, Jefferson M. Braswell, Esq., on Monday, February 27, 1995 of our intent to file this request. Accordingly, Counsel for the Petitioner respectfully requests that an extension of time be granted for the filing of a petition for administrative proceedings in regard of the Department's proposed agency action as embodied in its Intent to Issue Air Construction Permit No. AC26-248809 (PSD-FL-217) to and including Friday, April 14, 1995.

If the requested extension of time is not granted for any reason, then this pleading shall constitute a petition filed pursuant to Florida Administrative Code Rule 62-103.155 for an administrative hearing on each specific permit condition included in proposed Air Construction Permit No. AC26-248809 (PSD-FL-217) that was modified or not previously contained in either the Clewiston Boiler No. 4 operating permit (A026-144701), issued on

February 15, 1988, or in the construction permit (AC26-126965),
issued February 16, 1987.

BRYAN CAVE

A handwritten signature in black ink, appearing to read "Robert F. Van Voorhees", written over a horizontal line.

ROBERT F. VAN VOORHEES

PETER H. OPPENHEIMER

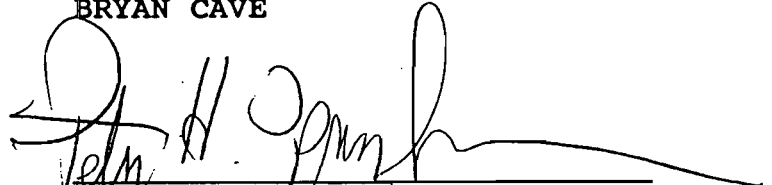
COUNSEL FOR U.S. SUGAR CORPORATION

700 13th Street, N.W., Suite 700
Washington, D.C. 20005-3960
Telephone: (202) 508-6067

CERTIFICATE OF SERVICE

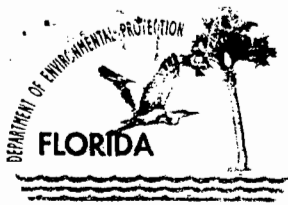
I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by certified U.S. mail, return receipt requested, to Jefferson M. Braswell, Esquire, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, on this 27 day of February, 1995.

BRYAN CAVE



Peter H. Oppenheimer, Esq.

BEST AVAILABLE COPY



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

February 7, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Vice President of Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Attached is a copy of the Technical Evaluation and Preliminary Determination, proposed BACT determination, and proposed permit to increase the allowable carbon monoxide emission limit for the Clewiston Mill Boiler No. 4.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. A. A. Linero of the Bureau of Air Regulation. If you have any questions regarding this matter, please call Willard Hanks at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/WH/t

Attachment

cc: David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
David Buff, P.E., KBN

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
 - 2. Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:
 Murray T. Brinson
 V.P. of Sugar Process.
 U.S. Sugar Corp.
 P.O. Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 Z 751 860 020

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 FEB 13 1995

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.

Z 751 860 020



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sent to Murray T. Brinson	
Street and No. U.S. Sugar	
P.O., State and ZIP Code Clewiston FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	AC 26-248809 PSD-FI-217 2-9-95

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

DEP File No. AC 26-248809
PSD-FL-217
Hendry County

Mr. Murray Brinson, Vice President
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

INTENT TO ISSUE

The Department of Environmental Protection (Department) hereby gives notice of its intent to issue a construction permit (copy attached) for the proposed project, as detailed in the application specified above, for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, United States Sugar Corporation, applied on June 29, 1994, for an air construction permit to modify/increase the allowable carbon monoxide (CO) emission limit for the existing bagasse/fuel oil fired Boiler No. 4. The boiler is located at the existing sugar mill in Clewiston, Hendry County, Florida. The modification will increase the allowable CO emission limit to reflect a more accurate test method implemented at the initiative of the Department. No increase in actual emissions is expected since the source must comply with a determination of Best Available Control Technology (BACT) of Good Combustion Practice, which was made in 1985.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed action.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "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. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and

provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S.. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

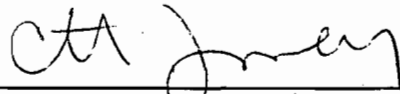
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the

Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 2/9/95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlotta J. Hayes
Clerk

2/9/95
Date

Copies furnished to:

cc: David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
David Buff, P.E., KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO ISSUE PERMIT

AC 26-248809

PSD-FL-217

The Department of Environmental Protection (Department) gives notice of its intent to issue a construction permit, No. AC 26-248809/PSD-FL-217, to the United States Sugar Corporation for a modification/increase in the potential/allowable carbon monoxide (CO) emission limit for the existing bagasse/fuel oil fired Boiler No. 4. The boiler is located at the existing sugar mill in Clewiston, Hendry County, Florida. The permit will authorize an increase in the allowable emission rate of CO from 339.1 TPY to 8,818 TPY. The boiler's operation and allowable emissions of all other air pollutants are not changed by this permit. However, the increase in allowable CO emissions is above the significant emission rate and subjects the proposed modification to the Prevention of Significant Deterioration new sources review regulations. The allowable CO emissions are set by a determination of Best Available Control Technology. The maximum predicted CO concentrations from all sources, including the CO emission rate increase requested in the application, are: 18,160 ug/m³, 1-hour average, or 45% of the 1-hour ambient air quality standard (AAQS) of 40,000 ug/m³; and, 8,940 ug/m³, 8-hour average, or 89% of the 8-hour AAQS of 10,000 ug/m³.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action

or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application 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
Tallahassee, Florida 32301

Department of Environmental Protection
South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901

Any person may send written comments on the proposed action to Mr. A. A. Linero at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person(s). Such request must be submitted within 30 days of this notice.

Technical Evaluation
and
Preliminary Determination

United States Sugar Corporation
Hendry County
Clewiston, Florida

Boiler No. 4
Department File No. AC 26-248809
PSD-FL-217

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

February 7, 1995

I. GENERAL INFORMATION

A. Applicant

United States Sugar Corporation
P. O. Drawer 1207
Clewiston, Florida 33440

B. Request

On June 29, 1994, U. S. Sugar Corporation submitted an application for an air construction permit to modify/increase the potential/allowable carbon monoxide (CO) emission limit for the existing bagasse/fuel oil fired Boiler No. 4. The boiler is located at the existing sugar mill in Clewiston, Hendry County, Florida. There will be no physical or operational change made to this boiler. The allowable emissions of all other air pollutants are not being changed. The UTM coordinates of this site are Zone 17, 506.1 km E and 2956.9 km N.

C. Emissions

The applicant requested that the allowable CO limit for Boiler No. 4 be increased from 0.25 lbs/MMBtu to 6.5 lbs/MMBtu heat input from bagasse. The purpose is to reflect a more accurate test method (EPA Method 10) implemented at the initiative of the Department. The previous test method (EPA Method 3) fails to detect carbon monoxide emissions up to an order of magnitude higher than the existing allowable emission rate. Based on a 6-hour average allowable heat input of 706.6 MMBtu/hr and a limit on operation time of 3840 hours per year operation, the allowable CO emissions requested would increase from 339.1 TPY to 8,818 TPY). There will be no increase in actual emissions since the applicant must comply with a Best Available Control Technology (BACT) determination of Good Combustion Practice made in 1985.

II. Rule Applicability

The proposed project, a modification to Boiler No. 4 at the existing sugar mill (SIC 2061), is subject to the preconstruction review requirements under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.).

The existing facility is located in Hendry County, which is an air quality area designated attainment for all criteria pollutants (Rule 62-275.400, F.A.C.).

The facility is major for the pollutants particulate matter, sulfur dioxide, nitrogen oxides, CO, and volatile organic compounds, because each of their emissions exceed 100 TPY (Rule 62-212.200, F.A.C.).

The proposed modification is subject to the Prevention of Significant Deterioration (PSD) regulations (Rule 62-212.400, F.A.C.) because the increase in the potential/allowable CO emissions is above the significant net emission rate (Rule 62-212.400(2)(d)4., F.A.C.). The modification is not subject to any new source performance standard in 40 CFR 60, because there is no physical or operational change being made to the boiler.

This modification is subject to the new source review requirements pursuant to Rule 62-212.400(5), F.A.C., which requires a Best Available Control Technology (BACT) determination for CO pursuant to Rule 62-212.410, F.A.C.

III. Technical Evaluation

The CO emission limit for bagasse fuel in Boilers No. 4 was originally based on the Standard Classification Code, 1-01-011-01, of 2 lbs of CO for each ton of bagasse burned. This is equivalent to approximately 0.25 lbs CO/MMBtu heat input. This bagasse fired boiler was subject to the PSD regulations and was given this standard. This standard was to be met through Good Combustion Practice.

Early emission test data for CO was based on EPA Method 3. Typical test results by this method showed that the CO concentration in the flue gas was undetectable. Much higher results were obtained when this boiler began measuring CO emissions with EPA Method 10 at the direction of the Department. The results ranged from 2 to 18 lbs CO/MMBtu. The CO emissions appear to vary with boiler operation. The permit for Boiler No. 4 is being revised, based on actual test data, to allow a maximum of 6.5 lbs CO/MMBtu. This emissions limit is to be achieved by Good Combustion Practice.

The applicant has submitted emission test data showing that the average CO emissions from Boiler No. 4 was 6.7 lbs/MMBtu. They requested a CO emission limit of 6.5 lbs/MMBtu. Similar bagasse boilers have already received the same CO emission limiting standard that was requested for Boiler No. 4. The Department believes that if this boiler is operated properly, it should be able to meet the limit. The BACT determination for this boiler for CO is the minimum CO emission rate achievable through Good Combustion Practice, not to exceed 6.5 lbs/MMBtu. At the maximum allowable heat input of 777.2 MMBtu/hr (1-hour max.), the allowable CO emission limit is 5,052 lbs/hr.

The other emission limits and boiler operation restrictions listed in the proposed permit are based on the previous construction and operation permits for Boiler No. 4.

IV.1. Air Quality Report

A. Introduction

The proposed project will emit CO in a PSD significant amount. The air quality impact analyses required by the PSD regulations for this pollutant include:

- * An analysis of existing air quality;
- * An Ambient Air Quality Standards (AAQS) analysis;
- * An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts; and,
- * A "Good Engineering Practice" (GEP) stack height determination.

The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The AAQS analysis depends on air quality dispersion modeling carried out in accordance with EPA guidelines.

Based on the required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS. However, the following EPA-directed stack height language is included: "In approving this permit, the Florida Department of Environmental Protection has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A discussion of the modeling methodology and required analyses follows.

B. Analysis of Existing Air Quality and Determination of Background Concentrations

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review. However, an exemption to the monitoring requirement can be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimus concentration. If preconstruction ambient air quality monitoring is required, this requirement may be met by using existing ambient monitoring data from a monitor in the vicinity of the project.

Even if preconstruction ambient monitoring is exempted, determination of background concentrations for PSD significant pollutants may be necessary for use in the AAQS analysis for each pollutant. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from previously existing representative monitoring data. These background ambient air quality concentrations are added to the pollutant impacts predicted by modeling and represent the air quality impacts of emission units not included in the modeling.

Table 1 shows that CO impacts from the project were predicted to be greater than the de minimus level. Therefore, preconstruction ambient air quality monitoring is required. However, there are existing ambient CO data available from a SLAMS monitor in West Palm Beach. Background CO concentrations for the 1-hour and 8-hour averaging times are based on data collected during 1987-1992 from this monitor, and were set equal to the highest, second-highest 1-hour and 8-hour CO concentrations observed during this time. These background values are 7800 ug/m³ and 4600 ug/m³ for the 1-hour and 8-hour averaging times, respectively.

C. Modeling Methodology

The EPA-approved Industrial Source Complex Short-Term (ISCST2) dispersion model was used to evaluate the pollutant emissions from the proposed modified facility and other existing major facilities. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area and volume emission units. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST2 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options in each modeling scenario. Direction-specific downwash parameters were used for all emission units for which downwash was considered.

Initially, for the significant impact analysis, concentrations were predicted at 900 receptors located in a radial grid centered on Boiler No. 4. Receptors were located in 25 concentric rings at distances ranging from 0.35 to 100 km away from the boiler. Each ring contained 36 receptors spaced at 10-degree intervals. For the full impact AAQS analysis, receptor grids were based on the size of the significant impact area for each pollutant. The radius of significant impact for CO was 30 km. The receptor grid for the AAQS analysis included 36 receptors per ring

(again spaced at 10-degree intervals) located at the following distances from the boiler: 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 10.0, 15.0, 20.0, 25.0, and 30.0 km.

Meteorological data used in the ISCST2 model to determine air quality impacts consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) station at West Palm Beach. The 5-year period of meteorological data was from 1985 through 1989. The NWS station at West Palm Beach, located approximately 100 km east of the Clewiston site, was selected for use in the study because it is the closest primary weather station to the study area and is most representative of the plant site. The surface observations included wind direction, wind speed, temperature, cloud cover and cloud ceiling.

Since five years of data were used and impacts for short-term averages only are necessary for CO emissions, the highest, second-highest predicted concentrations were compared with the appropriate CO AAQS. For determining the significant impact area, the highest predicted concentration was compared with the significant impact level.

D. Significant Impact Analysis

As stated in the section, above, the maximum air quality impact due to CO emissions from the proposed project is greater than the significant impact level. The radius of significant impact for CO is 30 km.

E. AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air is obtained by adding a "background" concentration to the maximum modeled concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. The results of the AAQS analysis for CO is summarized in Table 2. As shown in the table, emissions from the proposed project are not expected to cause or contribute to a violation of an AAQS.

IV.2. Additional Impact Analyses

A. Impacts on Soils, Vegetation, and Wildlife

The maximum ground-level concentrations predicted to occur for CO, as a result of the proposed project, including background concentrations and all other nearby emission units, will be below the associated AAQS. The AAQS are designed to protect both the

U.S. Sugar Clewiston Boiler No. 4
AC26-248809 (PSD-FL-217)

Table 1. Maximum Air Quality Impact for Comparison to the De Minimus Ambient Levels.

Pollutant	Avg. Time	Predicted Impact (ug/m ³)	De Minimus Level (ug/m ³)
CO	8-hour	2,319	575

Table 2. Ambient Air Quality Impact

Pollutant	Averaging Time	Modeled Sources Maximum Impact ¹ (ug/m ³)	Background Conc. (ug/m ³)	Total Impact (ug/m ³)	Florida AAQS (ug/m ³)
CO	1-hour	10,357	7,800	18,157	40,000
	8-hour	4,338	4,600	8,938	10,000

1. Maximum highest, second-highest value over a five-year period.

public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the vicinity of the facility. An air quality related values analysis was also done by the applicant for the Class I area. No significant impacts on this area are expected.

B. Growth-Related Air Quality Impacts

There will be no associated population growth with this project; therefore, there will be no growth-related air quality impacts.

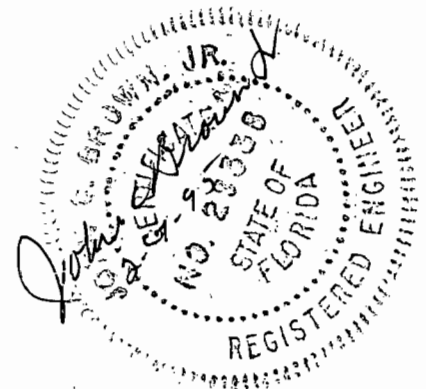
C. GEP Stack Height Determination

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 m (213 ft); or, (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less.

The Boiling House is the most significant structure associated with Boiler No. 4. This building has a height of 27.4 m and is 66.1 by 69.8 m wide. From the above formula, the GEP stack height is $27.4 + (1.5 \times 27.4) = 68.6$ m (225 ft). The stack for Boiler No. 4 will be 45.7 m (150 ft) high. This stack will not exceed the GEP stack height.

V. Conclusion

Based on the information provided by the applicant, the Department has reasonable assurance that the proposed modification of Boiler No. 4, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapters 62-4 and 62-212 of the Florida Administrative Code.





Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

Mr. Murray T. Brinson
Vice President of Sugar
Processing
U.S. Sugar Corporation
P. O. Drawer 1207
Clewiston, Florida 33440

APIS No: 52FTM26000309

Permit Number: AC26-248809/PSD-FL-217

Expiration Date: July 1, 1995

County: Hendry

Latitude/Longitude: 26°44'05"N

80°56'19"W

Project: Boiler No. 4 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-212, 62-275, 62-296, and 62-297, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and specifically described as follows:

Authorization to increase allowable carbon monoxide (CO) emissions from the existing Foster Wheeler Boiler No. 4 located at U.S. Sugar Corporation's sugar mill. This mill is near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida. The UTM coordinates of this site are zone 17, 506.1 km E and 2956.9 km N.

The modification shall be in accordance with the application (cover letter dated April 7, 1994), and the additional information submitted in the U.S. Sugar Corporation's letters dated June 27, 1994, and September 8, 1994, except for the changes mentioned in the Technical Evaluation and Preliminary Determination and listed as Specific Conditions in this permit to construct/modify.

Attachments are listed below:

1. U.S. Sugar Corporation's application received April 8, 1994.
2. U.S. Sugar Corporation's letter dated June 27, 1994.
3. KBN's letter dated August 31, 1994.
4. U.S. Sugar Corporation's letter dated September 8, 1994.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

GENERAL CONDITIONS:

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

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

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

4. This permit conveys no title to land or water, does not constitute State recognition or 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 F.S. and Department rules, unless specifically authorized by an order from the Department.

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

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

GENERAL CONDITIONS:

credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and,
 - the results of such analyses.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

SPECIFIC CONDITIONS:

Equipment Specification

1. Stack sampling facilities for Boiler No. 4 shall be in accordance with the requirements of Rule 62-297.345, F.A.C.
2. The scrubber control system for Boiler No. 4 shall be equipped with instruments to measure the gas pressure drop and pH of the scrubber water.
3. All stationary fuel oil burning equipment at the plant shall be equipped with integrated fuel oil flow meters or continuous recorders to measure the amount of fuel oil consumed by the equipment. Boiler No. 4 shall not have more than two burners with two oil guns each (total of four oil guns). The maximum capacity of all four fuel oil guns shall not exceed the permitted fuel oil input rate.

Operation Limitations

4. Boiler No. 4 is limited to 160 days (3840 hrs/yr) operation per season (October to May).
5. Steam production, steam pressure, steam temperature, heat input, and bagasse consumption shall not exceed the following:

Steam press.	Steam temp. °F	time	Steam Prod. lbs/hr	Heat input 10 ⁶ Btu/hr	Bagasse Consum. lbs/hr-wet
850	900	Max.	346,231	777.2	215,889
		6-hr avg	314,757	706.6	196,264

600	750	Max.	368,500	777.2	215,889
		6-hr avg	335,000	706.6	196,264

*Maximum is a 1-hour average.

6. Readings shall be taken and logged every 8 hours of the scrubber pressure drop and every 24 hours for the pH of the scrubber water for each day during which bagasse is burned in Boiler No. 4. During compliance testing, the scrubber parameters shall be measured and recorded at 15 minute intervals.
7. The scrubber shall be operated at a six-hour average pressure drop that is 90% or more of the six-hour average pressure drop that existed during a particulate matter test that demonstrated compliance.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

SPECIFIC CONDITIONS:

8. The scrubber shall in no case be operated with an instantaneous pressure drop less than 75% of the six-hour average pressure drop that was determined concurrently with a stack test that demonstrated compliance for particulate matter.

9. The heat input for Boiler No. 4 while firing No. 6 residual fuel oil shall not exceed 225 million Btu per hour, which is approximately equivalent to 1,500 gallons per hour of fuel oil. Fuel oil meter readings on all fuel oil consuming equipment shall be read and logged at least once every three hours, unless fuel oil consumption for the equipment is recorded continuously, and these records shall be kept for at least five years for Department inspection. Each meter shall be calibrated annually by a method approved by the Department.

10. During any 12-month period, the maximum quantity of No. 6 residual fuel oil burned in Boiler No. 4 shall not exceed 500,000 gallons.

11. During any 24-hour period, not more than 40,800 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. All permits to operate other oil burning equipment at this plant are revised to include this limitation.

12. During any 3-hour period, not more than 6,300 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. All permits to operate other oil burning equipment at this plant are revised to include this limitation.

13. Any No. 6 residual fuel oil burned in this boiler shall be replaced during the season in which it is burned with fuel oil containing no more than 1.50 percent sulfur content, by weight. Compliance with this condition shall be determined from certified analysis of the replacement fuel oil by ASTM Method D-129. Records of the quantity and analysis of fuel oil consumed in Boiler No. 4 and invoices for the fuel oil purchased shall be kept for a minimum of five years for regulatory agency inspection.

Emission Limitation

14. Particulate matter (PM) emissions from Boiler No. 4 shall not exceed 0.150 pounds per million Btu heat input (lbs/MMBtu) for bagasse fuel or 0.10 lbs/MMBtu for No. 6 residual fuel oil. **Maximum PM emissions shall not exceed 116.6 lbs/hr and 223.8 TPY.** In the event that both fuels are burned concurrently, the allowable PM emissions shall be prorated from the allowable standards for each fuel by their respective heat inputs.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

SPECIFIC CONDITIONS:

15. Visible emissions (VE) from Boiler No. 4 shall not exceed 20 percent opacity except for one two-minute period per hour during which the opacity shall not exceed 40 percent pursuant to Rule 62-296.405(1)(a), F.A.C. Compliance with the standard shall be determined by the EPA Method 9 as described in 40 CFR 60, Appendix A.

16. Sulfur dioxide emissions from Boiler No. 4, while it is burning a mixture of fuel oil and bagasse, shall not exceed 0.87 lbs/MMBtu and 680 lbs/hr. Sulfur dioxide emissions from Boiler No. 4, while it is burning 100 percent bagasse fuel, shall not exceed 0.166 lbs/MMBtu and 129.0 lbs/hr. Total sulfur dioxide emissions from Boiler No. 4 during any 12 month period shall not exceed 340 tons. Sulfur dioxide emissions shall be determined by EPA Method 6 or 6C as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 4 is 55 percent. For informational purposes only, the sulfur dioxide emission rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years).

17. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the Department. Emissions of carbon monoxide (1-hour average) shall not exceed 3.5 lbs/MMBtu, 2,720 lbs/hr, and 4,748 TPY, as determined by EPA Method 10. Emissions of volatile organic compounds shall not exceed 1.7 lbs/ton of wet bagasse as determined by EPA Method 25. These test methods are described in 40 CFR 60, Appendix A.

18. Pursuant to Rule 62-296.310(3), F.A.C., the permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from the bagasse storage and handling system without taking reasonable precautions to prevent such emissions. These precautions shall include, but shall not be limited to the following: paving and maintenance of roads, parking areas and yards; application of water or chemicals to control unconfined emissions; application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar sources; removal of particulate matter from roads and other paved areas under the control of the permittee to prevent reentrainment, and from buildings or work areas to prevent particulate matter from becoming airborne; landscaping or planting of vegetation; use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; and, enclosure or covering of conveyer systems.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

SPECIFIC CONDITIONS:

19. Nitrogen oxides emissions, expressed as NO₂, shall not exceed 192.4 lbs/hr and 346.9 TPY, as determined by EPA Reference Method 7 or 7E in accordance with 40 CFR 60, Appendix A.

20. All references to the 40 CFR 60 requirements are of the July 1, 1993 version.

Testing and Reporting

21. Compliance tests for all emission standards listed in Specific Conditions Nos. 10, 11, 12, 13, and 15 for Boiler No. 4 shall be conducted once each Federal fiscal year and reported to the Department's South District office within 45 days of completion of the last test run.

22. Annual stack tests shall be required for PM, sulfur dioxide, nitrogen oxides, carbon monoxide, and visible emissions.

23. As a condition of this permit, PM emissions and VE tests shall be conducted concurrently on the boiler.

24. Compliance with the PM standards shall be determined by EPA Reference Methods 1, 2, 3, 4, and 5, as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 4 is 55 percent. For informational purposes only, the particulate matter emissions rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years).

25. A test shall be conducted on Boiler No. 4 to determine its actual thermal efficiency in accordance with the ASME short-form procedure each time the operating permit for this boiler is renewed. The test shall be conducted while the tubes are clean and within 14 days of the compliance test. A current report on the thermal efficiency test must be included with the application to operate this boiler.

26. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then emission units may be tested at less than 90 percent of the maximum operating rate allowed by the permit. In this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

PERMITTEE:
U.S. Sugar Corporation

Permit Number: AC26-248809/PSD-FL-217
Expiration Date: July 1, 1995

SPECIFIC CONDITIONS:

27. An annual operation report shall be submitted to the Department's South District office by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C. The report shall include the amount of fuel oil burned by each emission unit at the plant in order to determine compliance with the limits on fuel oil usage in this permit, the sulfur content of the residual fuel oil purchased for the season, and a summary of the scrubber parameters listed in Specific Condition No. 2.

28. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).

29. An application for an operation permit must be submitted to the Department's South District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (Rule 62-4.220, F.A.C.).

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

Virginia B. Wetherell, Secretary
Department of Environmental
Protection

Best Available Control Technology (BACT) Determination
United States Sugar Corporation
Clewiston Mill Boiler No. 4

AC 26-248809
PSD-FL-217

The United States Sugar Corporation requested the carbon monoxide (CO) emission limit for Boiler No. 4 at the existing sugar mill in Clewiston, Hendry County, Florida, be increased from 0.25 lbs CO/MMBtu heat input to 9.0 lbs CO/MMBtu heat input. The requested emission limit is based on actual EPA Method 10 test data on Boiler No. 4. The increase in allowable emission is not associated with any change in production or operation of the boiler. The emissions of all other air pollutants are not affected by this request.

The higher allowable emission rate requested will result in an increase in CO emissions above the significant emission rate of 100 TPY. This subjects the facility to the Prevention of Significant Deterioration (PSD) new source review regulations. These regulations require a BACT determination to be made for CO for the boiler.

Date of Receipt of a BACT Application:

June 29, 1994

Date Application Complete

September 8, 1994

BACT Requested by the Applicant:

The BACT determination requested by the applicant is summarized below:

Carbon Monoxide (CO): The requested emission limit is 9.0 lbs CO/MMBtu heat input. For the 706.6 MMBtu/hr bagasse-fuel oil fired boiler, this will result in 6,359 lbs CO/hr emissions. The heat input and CO emissions are 6-hour averages (permit No. AC 26-126965). For a 3,840 hour per year operation, this is equivalent to 12,210 TPY CO emissions. The CO emission limit of 9.0 lbs/MMBtu is to be achieved by good operation practice of the boiler. Compliance is to be determined using EPA Reference Method 10 as described in 40 CFR 60, Appendix A.

BACT Determination Procedure:

In accordance with Rule 62-212.410, Florida Administrative Code, Best Available Control Technology Determination, Stationary Source-Preconstruction Review, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by

case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of BACT pursuant to 40 CFR 52.21, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission unit in question the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Determined by the Department:

Carbon Monoxide emissions shall not exceed 3.5 lbs/MMBtu and 2,720 lbs/hr. Carbon Monoxide emissions during any 12-month period shall not exceed 4,748 TPY. Compliance shall be determined using EPA Reference Method 10 as described in 40 CFR 60, Appendix A. These emission limits shall be achieved through good operational practice of the boiler.

BACT Determination Rationale:

The applicant submitted information indicating the high CO emissions from this boiler are due to the short residence time of the combustion gases in the furnace area. Based on limited emission data, they concluded that CO emissions averaged 6.7 lbs/MMBtu. The requested limit of 9.0 lbs/MMBtu is to allow for normal fluctuations in emissions experienced by bagasse boilers.

New bagasse fired boilers are capable of meeting a CO emission limit of 0.35 lbs/MMBtu. This has been reported to be a direct function of the residence time of the flue gases in the boiler. Increasing the residence time of an existing boiler is not feasible.

The applicant investigated retrofitting a new bagasse feed/air distribution system (at the Department's request), retrofitting a flue gas recirculation system (FGR), use of a CO oxidation system, and drying the bagasse prior to burning (at the Department's request).

Boiler vendors stated that no decrease in CO emissions would be achieved through the use of a new feed/air distribution system. The high CO level for this boiler was due to the low residence time of the flue gases in the boiler. Higher residence times would allow for more complete combustion. Newer boilers have up to twice the volume of this existing boiler.

Retrofitting a flue gas recirculation (FGR) system to the existing boiler would be difficult and expensive (\$1,400,000 capital cost + \$1,000,000 annual operation cost). The CO reduction by a FGR system was unknown and potentially no reduction would be achieved. No bagasse boiler in Florida is using FGR.

Oxidation catalyst systems require elevated temperatures and low particulate matter loading. This boiler's flue gas temperature is too low and the particulate matter loading is too high to use an oxidation catalyst. No bagasse boiler in Florida uses an oxidation catalyst system.

Drying the bagasse prior to burning was considered unproven technology. No data was available to show a CO reduction from this approach.

All BACT determinations to control CO emissions from bagasse boilers in Florida have been good operational practice. The newer boilers with larger furnaces have lower CO emission rates. Expanding the volume of the existing boiler is not considered feasible. Through elimination of add-on controls, the Department is left with good operational practice as BACT to control CO from this existing boiler.

The Department believes that if this boiler is operated properly, it should be able to meet the same CO limit given to a similar boiler in the sugar industry. The BACT determination for Boiler No. 4 is established at 3.5 lbs CO/MMBtu, which is the limit that was proposed by Osceola Farms Company for Boiler No. 3 and was granted by the Department on July 22, 1991. The Department has no

information to suggest that this boiler is designed significantly differently from the Osceola Farms Company Boiler No. 3.

Conclusion

For a CO emission standard of up to 9.0 lbs/MMBtu, the ambient air impact will be below the ambient air standards.

Details of the Analysis May be Obtained by Contacting:

Martin Costello, P.E., BACT Coordinator
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

Approved by:

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

_____, 1994
Date

_____, 1994
Date

Florida Department of
Environmental Protection

Memorandum

To: Clair Fancy

From: Willard Hanks *wmh*

Date: February 3, 1995

Subject: U. S. Sugar Corp. Boiler No. 4

U. S. Sugar Corp. ~~stroker~~ fed bagasse Boiler No. 4 was subject to PSD in 1985. It was given a BACT standard for CO of 0.25 lbs/MMBtu as determined by EPA Method 3, to be achieved by good combustion practice. This and other bagasse boilers in the industry are unable to meet this standard. Several of the ~~stroker~~ fed bagasse boilers have had their permits modified to allow CO emissions of 6.5 lbs/MMBtu. One cell fed bagasse boiler received a CO emission standard of 3.5 lbs/MMBtu. Based on a series of EPA Method 10 tests on Boiler No. 4, U. S. Sugar Corp. has submitted another PSD application and requested the CO standard be raised to 6.5 lbs/MMBtu.

The attached Technical Evaluation, proposed air construction permit, and BACT determination says the CO standard is to be the lowest rate achievable by good combustion practice, not to exceed 6.5 lbs/MMBtu. Tests are required next season to establish the lowest CO emission rate during good combustion practice.

Other changes to the previous permits for Boiler No. 4 that are in the proposed permit are to replace the previous fugitive dust control requirements with the language from the regulations, to express all emission limits in lbs/hr and TPY, and to require annual compliance tests on all air pollutants subject to PSD.

The other specific conditions in the proposed permit are carried over from previous permits issued for this boiler.

The 90-day waiver for this application expires on February 15, 1995.

CF/WH/h



RECEIVED

JAN 20 1995

Bureau of
Air Regulation

January 11, 1995

Mr. Willard Hanks
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: United States Sugar Corporation -
Clewiston Boiler No. 4 AO26-223258

Dear Mr. Hanks:

In response to the Florida Department of Environmental Protection (FDEP) letter dated December 6, 1994, I am providing additional information regarding United States Sugar Corporation (U.S. Sugar) Clewiston Boiler No. 4. The Department's letter requested four items of new information not previously requested. This information does not relate solely to emissions from Clewiston Boiler 4, but also relates to differences and/or similarities between Clewiston Boiler No. 4 and the other three PSD boilers in the sugar industry for which the CO emission factors have been corrected to reflect Method 10 testing. The attached table presents the pertinent information on each of these boilers at the time the CO emission limits were revised.

Once the CO emission level has been established for Clewiston Boiler No. 4, only one PSD boiler permit will need to be revised to complete the Department's process for correcting the CO emission levels reflected in these permits when first issued. This process was initiated by the Department in 1989 following discussions among the Department, sugar industry representatives, and U.S. Environmental Protection Agency (EPA) Region IV about the need to correct CO emission limits to overcome discrepancies between CO emission levels measured using Method 10 and the emission factors that were thought to reflect accurately the CO emissions from implementation of best available control technology (BACT) as approved in these PSD permits. That process was not designed, nor was there any discussion of a need, to substitute new control technology requirements for the Department's contemporaneous BACT determination. Rather, the program was designed to collect data during actual operation using Method 10 to provide a basis on which the Department could establish a reasonable emission factor for each boiler. That is what was done previously with Osceola Boilers Nos. 3 and 6 and essentially what was done with Atlantic Boiler No. 5.

Although U.S. Sugar is willing to provide the requested information, there appears to be no reason to depart in mid-stream from the process initiated by the Department before all of the permits have been corrected as planned using Method 10 data collected. [Any other general concerns about the operation of these boilers should be addressed in a separate generic proceeding rather than in conjunction with the issuance of this specific permit modification for one boiler.] Moreover, the information provided in this letter shows no need to take any different approach. The information confirms that Clewiston Boiler No. 4 is similar in all important respects to Osceola Boiler No. 6 and Atlantic Boiler No. 5 and should be granted a similar 6.5 lb/MMBtu CO emission limit.

14015A1/9

KBN ENGINEERING AND APPLIED SCIENCES, INC.

6241 Northwest 23rd Street,
Suite 500
Gainesville, Florida 32653-1500
904-336-5600 FAX 904-336-6603

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

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FAX 407-994-9393

7785 Baymeadows Way,
Suite 105
Jacksonville, Florida 32256
904-739-5600 FAX 904-739-7777

1616 'P' Street N.W., Suite 450
Washington, D.C. 20036
202-462-1100
FAX 202-462-2270



The Method 10 permit levels established for each of these other boilers were set above the results of all of the tests conducted under the Department's correction process. U.S. Sugar conducted similar testing and proposed to set the permit level at 9.0 lbs/MMBtu, a level that would be achieved only 90 percent of the time based on the test results submitted to the Department on April 7, 1994 (copy enclosed). Setting the permit level at 6.5 lbs/MMBtu, (the approximate mean of the data from Boiler No. 4) would represent a more stringent approach than was taken with any of the other boilers for which the Method 10 correction has been made. Yet U.S. Sugar is prepared to accept this permit level.

Responses to the Department's latest request for new information are as follows:

1. Design information for each boiler is presented in Table 1. (The information on the Atlantic and Osceola boilers were received from personnel at those facilities, but this information has not been independently verified.) As indicated in Table 1, the basic design of Clewiston Boiler No. 4 is very similar to the design of both Atlantic Boiler No. 5 and Osceola Boiler No. 6. All three of these boilers are of the traveling grate design, and have heat release rates of approximately 30,000 Btu/hr-ft³.

In the case of Osceola Boiler 3, the heat release rate is very similar to the other boilers. However, this boiler was a cell type boiler. The cell type boiler has internal walls in the furnace, forming several "cells." The fuel is combusted in piles formed in the cells. Ash is manually removed from this type of boiler. The cell type design is much different from the traveling grate design of the other three boilers. This is the only distinguishing feature of Osceola Boiler No. 3 that would result in different CO emissions. There is no difference in the heat release rate that would result in different CO emissions.

2. A compilation of the test data used as the basis for the Department's revision of the CO emission rate for Osceola Boilers Nos. 3 and 6 is available and is attached. The test results are in terms of lb/MMBtu. The steam rates and heat input rates during testing are not readily available; however, it is assumed that the tests were conducted at or near the maximum permitted rates since the tests were conducted for compliance purposes.

No CO testing was performed on Atlantic Boiler No. 5 prior to its CO emission limit being revised. Atlantic Sugar relied solely on the testing performed at Osceola as the basis for proposing a revised CO emission limit. Since the Osceola Boiler No. 6 and Atlantic Boiler No. 5 are similar in design, Atlantic proposed and the Department granted Atlantic the same 6.5 lb/MMBtu permit limit that Osceola had obtained for its Boiler No. 6.

3. A compilation of all Method 10 CO test data for Clewiston Boiler No. 4, covering the period February 2, 1990 through March 4, 1994, was provided to the Department in U.S. Sugar's June



27, 1994, submittal¹. This information, which is again attached for your convenience, reveals a CO emissions range for Clewiston Boiler No. 4 of 1.53 lb/MMBtu to 17.49 lb/MMBtu, with an average of 6.48 lb/MMBtu². The attached Table 1 also shows a comparison of the CO emission levels from Clewiston Boiler No. 4, Osceola Boiler No. 3, and Osceola Boiler No. 6. The CO data for the Osceola boilers represent data submitted to the Department in response to its 1988 request for data to use in establishing new emission levels for these boilers based on Method 10 testing.

4. Nearly all boilers constructed to date in the sugar industry have been designed and operated based on a high heat release rate (i.e., approximately 30,000 Btu/hr-ft³). All of these boilers were built prior to 1983, and reflected standard designs from that time. These designs do not include the improved residence time characteristics which are being incorporated into recently permitted or proposed sugar industry boilers. This is merely a reflection of improving technologies. It is this improved residence time of the flue gases in the boiler which results in lower CO emissions.

However, this does not mean that poor combustion is taking place in the older boilers. If poor combustion were taking place in the boilers, the boilers would not be able to achieve the high steam rates that they have demonstrated through years of operation, as reflected in past compliance tests. If too much fuel were being fed to the boilers, the combustion zone temperature would drop dramatically, resulting in a marked decrease in steam production. The very fact that high steam production rates are being achieved in these boilers indicates that very good combustion is taking place in the furnace. However, due to the older furnace design, the flue gas residence time in the furnace is limited; the flue gases are cooled quickly downstream of the boiler, and the unburned carbon in the gas stream cannot combust further. The new design boilers allow for greater residence time and, therefore, allow the unburned carbon formed during combustion to more completely combust.

The CO stack test data for Clewiston Boiler No. 4 reflect heat inputs ranging from 580 to 699 MMBtu/hr. This range represents 82 to 99 percent of the maximum permitted heat input of 707 MMBtu/hr (6-hour average). There are no stack tests available for this boiler at lower heat input rates. This is primarily because compliance tests are required to be performed at 90 to 100 percent of the maximum permitted rate.

¹The initial results of this testing were first submitted to the Department on October 8, 1990, along with additional test results from Bryant Boiler No. 5, as a basis for revising the CO limit in the Clewiston Boiler No. 4 permit. But the Department did not take action to revise the permit at that time.

²The range and average for Clewiston Boiler No. 4 CO emissions presented in U.S. Sugar's June 27, 1994 submittal differs from the numbers presented in U.S. Sugar's April 7, 1994 submittal because the data in the June 27 letter include a larger database. The April 7, 1994 letter covers 20 CO emission tests conducted between February 20, 1990 and January 9, 1992, whereas the June 27 letter covers 65 CO emission tests conducted between February 20, 1990, and March 4, 1994.

Mr. Willard Hanks
January 11, 1995
Page 4



I trust that this information will be sufficient to allow the Department to conclude that a CO limit of 6.5 lb/MMBtu for Clewiston Boiler No. 4 is acceptable. Please call if you have any questions.

Sincerely,

David A. Buff

David A. Buff, P.E.
Florida Registration 19011

DABuff/mlb

cc: Murray Brinson
Don Griffin
Peter Briggs
Bob Van Voorhees
File (2)



Table 1. Design Parameters and EPA Method 10 CO Emissions for Sugar Industry Boilers with CO Limits

Boiler	Manufacturer	Year Installed	Boiler Type	Maximum Steam Rate (lb/hr)	Maximum Heat Input (MMBtu/hr)	Furnace Volume (ft ³)	Heat Release Rate (Btu/hr-ft ³)	CO Emissions Range (lb/MMBtu)	CO Emissions Average (lb/MMBtu)	CO Emissions Limit (lb/MMBtu)
Atlantic Boiler 5	Erie City	1982	Traveling Grate	130,000	253	9,540	26,520	N/A	N/A	6.5
Osceola Boiler 3	Not Available	1961	Cell	150,000	292	9,000	32,444	0.75-4.24 ^a	3.09 ^a	3.5
Osceola Boiler 6	Distral S.A.	1981	Traveling Grate	195,000	379	11,604	32,661	3.87-7.31 ^a	5.61 ^a	6.5
USS Clewiston Blr 4	Foster Wheeler	1985	Traveling Grate	314,757 ^c	707 ^c	21,245	33,278	1.53-17.49 ^b	6.48 ^b	6.5 (requested)

^a Letter to Phillip Edwards, DEP, dated January 2, 1991, from Osceola Farms, Inc.

^b Letter to John C. Brown, Jr., DEP, dated July 27, 1994, from U.S. Sugar Corporation.

^c Six-hour average.

Notes:

N/A = not applicable; no test data obtained.

Atlantic Boiler No. 5 was an existing boiler which was transferred from Florida Crystals Refinery in 1982. The original construction date is not known. The boiler was significantly modified by Atlantic Sugar at the time of installation to increase steam production.

U.S. Sugar Clewiston Boiler No. 4 was an existing coal-fired boiler when purchased. U.S. Sugar modified the boiler upon installation to accommodate bagasse fuel.

Table B1. Summary of CO Emission Tests Performed on Clewiston Boiler No. 4 Using EPA Method 10

Unit	Boiler Type	Date	Steam Rate (Lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate ^a (TPH wet)	CO Emissions			CO Emissions Compliance Average Lb/MMBTU
						Lb/hr	Lb/MMBtu	lb/ton,wet	
U.S. Sugar - Clewiston									
Boiler 4	Traveling Gate	02/20/90	308,636	691.7	96.07	1,940	2.79	20.19	2.75
Boiler 4	Traveling Gate	02/20/90	306,666	690.3	95.87	1,520	2.24	15.85	
Boiler 4	Traveling Gate	02/20/90	310,298	698.8	97.06	2,240	3.23	23.08	
Boiler 4	Traveling Gate	02/15/91	289,091	624.9	86.79	4,760	7.62	54.84	5.27
Boiler 4	Traveling Gate	02/15/91	291,200	629.5	87.43	2,710	4.30	31.00	
Boiler 4	Traveling Gate	02/15/91					3.90		3.78
Boiler 4	Traveling Gate	02/18/91	288,358	622.8	86.50	2,430	3.90	28.09	
Boiler 4	Traveling Gate	02/18/91	285,224	616.4	85.61	2,640	4.28	30.84	
Boiler 4	Traveling Gate	02/18/91	302,647	653.3	90.74	2,060	3.16	22.70	5.43
Boiler 4	Traveling Gate	02/19/91	290,769	627.9	87.21	4,430	7.05	50.80	
Boiler 4	Traveling Gate	02/19/91	294,583	637.1	88.49	3,400	5.33	38.42	
Boiler 4	Traveling Gate	02/19/91	293,382	633.5	87.99	2,480	3.92	28.19	11.23
Boiler 4	Traveling Gate	02/22/91	300,000	647.9	89.99	4,900	7.56	54.45	
Boiler 4	Traveling Gate	02/22/91	293,382	634.2	88.08	9,450	14.90	107.28	
Boiler 4	Traveling Gate	01/07/92	293,425	613.6	85.22	3,200	5.22	37.55	7.91
Boiler 4	Traveling Gate	01/07/92	282,800	591.3	82.12	6,270	10.60	76.35	
Boiler 4	Traveling Gate	01/08/92	299,178	623.2	86.56	2,030	3.26	23.45	4.66
Boiler 4	Traveling Gate	01/08/92	297,973	621.5	86.32	3,160	5.09	36.61	
Boiler 4	Traveling Gate	01/08/92	300,811	627.4	87.14	3,540	5.64	40.62	4.40
Boiler 4	Traveling Gate	01/09/91	302,055	630.0	87.50	2,770	4.40	31.66	
Boiler 4	Traveling Gate	01/09/91	295,135	615.8	85.53	2,710	4.40	31.69	8.03
Boiler 4	Traveling Gate	01/13/93					7.50		
Boiler 4	Traveling Gate	01/13/93					8.59		11.48
Boiler 4	Traveling Gate	01/13/93					7.99		
Boiler 4	Traveling Gate	01/14/93					15.00		7.94
Boiler 4	Traveling Gate	01/14/93					7.95		
Boiler 4	Traveling Gate	02/02/93					7.19		7.64
Boiler 4	Traveling Gate	02/02/93					6.71		
Boiler 4	Traveling Gate	02/02/93					9.92		7.37
Boiler 4	Traveling Gate	02/04/93					6.78		
Boiler 4	Traveling Gate	02/04/93					9.13		7.37
Boiler 4	Traveling Gate	02/04/93					7.01		
Boiler 4	Traveling Gate	01/13/94		628.52			5.55		9.59
Boiler 4	Traveling Gate	01/13/94		614.06			5.26		
Boiler 4	Traveling Gate	01/13/94		615.24			11.31		7.53
Boiler 4	Traveling Gate	01/14/94		639.11			5.18		
Boiler 4	Traveling Gate	01/14/94		629.38			6.11		5.22
Boiler 4	Traveling Gate	01/14/94		635.50			17.49		
Boiler 4	Traveling Gate	02/01/94		592.17			1.84		7.53
Boiler 4	Traveling Gate	02/01/94		595.17			8.59		
Boiler 4	Traveling Gate	02/07/94		587.52			4.63		6.99
Boiler 4	Traveling Gate	02/07/94		599.46			5.47		
Boiler 4	Traveling Gate	02/07/94		582.08			13.03		4.43
Boiler 4	Traveling Gate	02/07/94		586.88			6.97		
Boiler 4	Traveling Gate	02/09/94		620.29			6.99		6.95
Boiler 4	Traveling Gate	02/11/94		622.97			5.78		
Boiler 4	Traveling Gate	02/11/94		580.67			1.53		6.95
Boiler 4	Traveling Gate	02/11/94		625.28			7.89		
Boiler 4	Traveling Gate	02/11/94		644.24			2.51		4.86
Boiler 4	Traveling Gate	02/17/94		608.74			9.47		
Boiler 4	Traveling Gate	02/17/94		584.52			4.86		

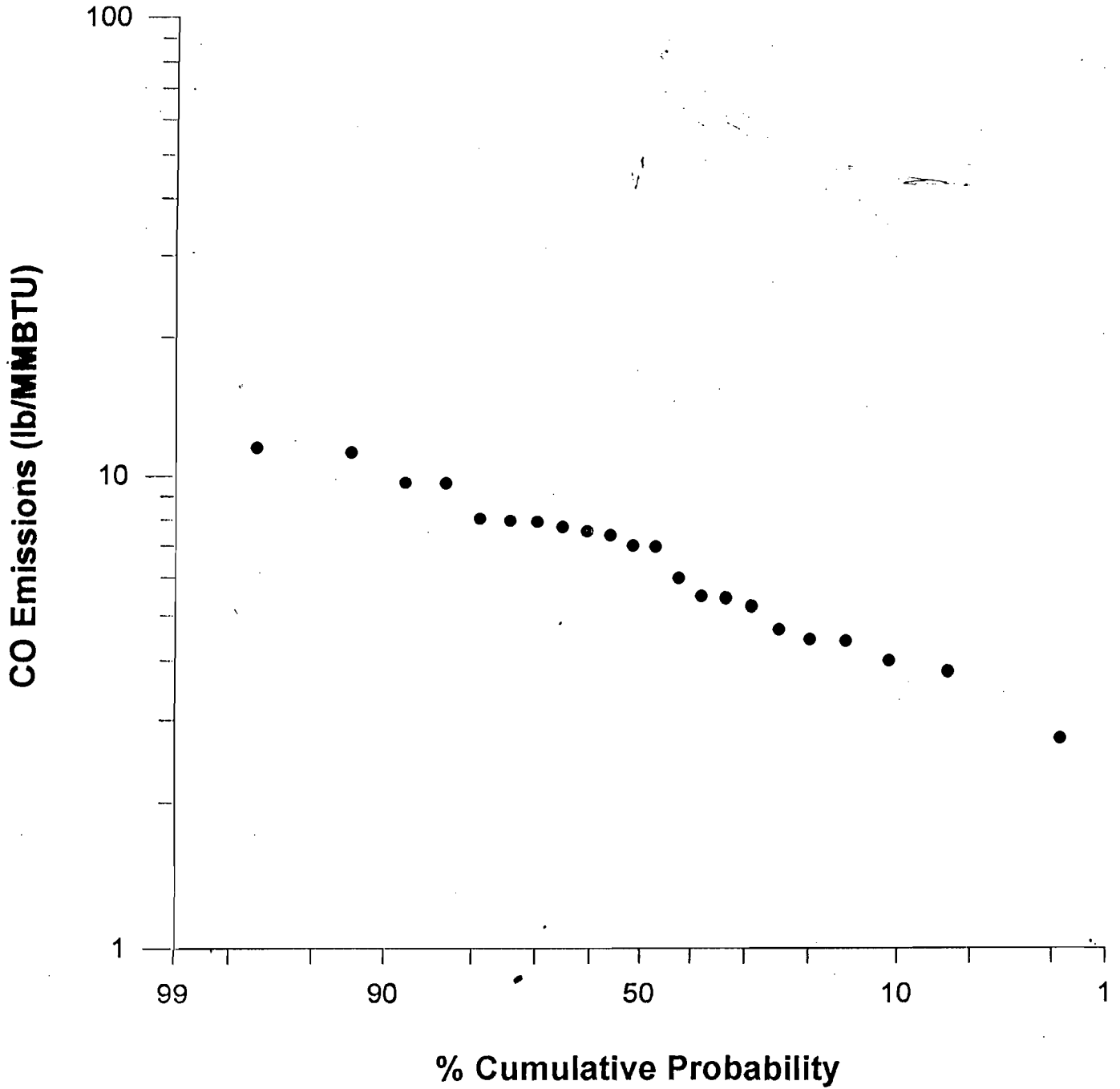
Boiler 4	Traveling Gate	02/17/94	623.65	6.68			
Boiler 4	Traveling Gate	02/17/94	631.71	6.78			
Boiler 4	Traveling Gate	02/22/94	625.33	7.48	7.70		
Boiler 4	Traveling Gate	02/22/94	633.82	7.38			
Boiler 4	Traveling Gate	02/22/94	616.86	7.58			
Boiler 4	Traveling Gate	02/22/94	585.45	7.99			
Boiler 4	Traveling Gate	02/22/94	580.29	8.06			
Boiler 4	Traveling Gate	02/23/94	616.93	3.99	5.48		
Boiler 4	Traveling Gate	02/23/94	633.14	6.07			
Boiler 4	Traveling Gate	02/23/94	617.98	6.39			
Boiler 4	Traveling Gate	03/04/94	636.45	3.02	3.99		
Boiler 4	Traveling Gate	03/04/94	614.71	2.34			
Boiler 4	Traveling Gate	03/04/94	598.50	4.21			
Boiler 4	Traveling Gate	03/04/94	625.69	6.38			
				Max. =	17.49	107.28	11.48
				Avg. =	6.48	39.18	6.63

Note: lb/hr = pounds per hour.
 lb/MMBtu = pounds per million British thermal units.
 lb/ton = pounds per ton.
 MMBtu/hr = million British thermal units per hour.
 NA = not available.
 TPH = tons per hour.

USSCO#4.wk3
 05/17/94

^a Calculated from reported heat input rate, assumed 3,600 Btu/lb average heat content for wet bagasse.

U.S. Sugar - Clewiston Boiler No. 4



OSCEOLA FARMS CO.

RAW SUGAR FACTORY

INTERSECTION U.S. 98 & HATTON HWY.

TELEPHONE:
(407) 924-7156

POST OFFICE BOX 679
PAHOKEE, FLORIDA 33476

CABLE: SUGAR

January 2, 1991

Mr. Phillip Edwards
Deputy Assistant Secretary
Florida Department of
Environmental Regulation
South District
2269 Bay Street
Ft. Myers, Fl 33901-2896

Re: CO Limits in our Boiler #3 Permit #AO-50-165813
and Boiler #6 Permit #'s PSD-FL-80 and AO-50-165814

Dear Mr. Edwards:

In 1988, the E.P.A. and the F.D.E.R. revised the CO emission limits to 4.8 lbs/mm BTU's in the permits for Boiler #'s 3 and 6. This was through an agreement with Osceola Farms to conduct a series of five individual test runs using the E.P.A. Method 10 test instead of the old Orsat Method 3 test. The testing was to reflect the actual emissions which could be measured more accurately with Method 10. This did not reflect any increase in the actual emissions.

During the summer of 1989 Osceola met with Bruce Miller, Paul Reinerman and other E.P.A. employees to discuss these results. It was agreed that Osceola would conduct 2 complete Method 10 tests (6 individual runs) on Boiler #3 and Boiler #6 during the 1989/90 crop. Paul Reinerman has reviewed all of the CO tests conducted by Osceola during the past two years. He came to Osceola to observe some of the testing.

The results are quite different for the two boilers. Boiler #3 is a cell type boiler. These test results were lower. They ranged from .75 to 4.24 lbs/mm BTU's. The two test averages (8 runs in total) that appear to be most representative are 3.14 and 3.04. We feel that a permit limit of 3.5 lbs/mm BTU's for Boiler #3 would be appropriate. This would be a 1.3 lb/mm BTU reduction from the current permitted amount.

Boiler #6 is a traveling grate type boiler and the results were higher. The individual runs varied from 3.87 to 7.31 lbs/mm BTU's. The three average test results (a total of 11 runs) were: 5.42, 5.48 and 5.93 lbs/mm BTU's. Osceola feels that a permit limit of 6.5 lbs/mm BTU's would be appropriate.

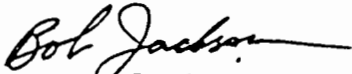
--- Phillip Edwards 1/02/91 (continued)

Please consider this letter a request for modification to our Boiler #'s 3 and 6 permits (#AO-50-165813 & #AO-50-165814). As the attached letter shows, we are requesting the same modification from the E.P.A. to our construction permit for Boiler #6 (PSD-FL-80). Again, we feel this change does not result in any increase in actual emissions. It only more accurately reflects what the emissions have been now that they can be measured with Method 10.

Thank you for your help in this matter.

Sincerely yours,

OSCEDLA FARMS CO.



Robert E. Jackson, Jr.
Vice President &
Assistant General Manager

==J,Jr/gr

---.

==: Winston Smith
~~Glavin Pancy~~
David Knowles
Ajaya Satyal
Peter Cunningham
Alex Fanjul

BEST AVAILABLE COPY

Boilers *CO*

O S C E O L A F A R M S C O M P A N Y

C.O. SUMMARY

PARTICULATE MATTER

STACK	CO	
%O.2	LB/MMBTU	LB/MMBTU

B O I L E R 3

01/17/89			01/05/89	
RUN 1	8.10	3.50	RUN 1	.163
2	8.00	2.08	RUN 2	.185
3	6.30	4.24	RUN 3	.205
4	11.00	2.16		
5	12.60	3.36		
AVERAGE	9.20	3.07	AVERAGE	.184

12/05/89			12/05/89	
RUN 1	7.20	.78	RUN 1	.106
2	8.20	.75	RUN 2	.103
3	7.80	.89	RUN 3	.12
AVERAGE	7.73	.81	AVERAGE	.110

01/24/90		
RUN 1	5.10	2.52
2		3.35
3		3.55
AVERAGE	5.10	3.14

B O I L E R 6

01/16/89			01/25/89	
RUN 1	8.10	5.99	RUN 1	.14
2	7.50	7.31	RUN 2	.139
3	7.30	5.59	RUN 3	.15
4	8.10	3.87		
5	7.90	4.35		
AVERAGE	7.78	5.42	AVERAGE	.143

11/15/89			11/15/89	
RUN 1	8.10	5.63	RUN 1	.14
2	7.40	6.34	RUN 2	.157
3	8.40	4.48	RUN 3	.133
AVERAGE	7.97	5.48	AVERAGE	.143

02/02/90			02/15/90	
RUN 1	7.10	5.79	RUN 1	.117
2	7.00	6.29	RUN 2	.108
3	7.00	5.70	RUN 3	.106
AVERAGE	7.03	5.93	AVERAGE	.100

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121 Telex: 510-952-7753

January 9, 1995

RECEIVED
JAN 10 1995

Bureau of
Air Regulation

Via Facsimile to (904) 922-6979

Mr. Willard Hanks
Florida Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Fl. 32399-2400

Re: Clewiston Boiler No. 4 - Waiver
Permit Application AC26-126965 & AO-223258

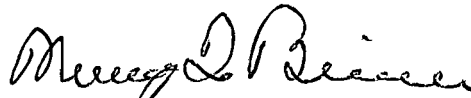
Dear Mr. Hanks:

Enclosed please find a duly-signed waiver of the 90 day time limit in which DEP is normally required to approve or deny an application to modify a construction permit.

We understand that the Department expects to complete its review of all outstanding permit modification issues as soon as practicable and issue its determination by February 15, 1995.

Sincerely,

UNITED STATES SUGAR CORPORATION



Murray T. Brinson
Vice President
Sugar Processing

MTB:jt
Attachment

cc: Clair Fancy, DEP, Tallahassee
John Brown, DEP, Ft. Myers
David Knowles, DEP, Ft. Myers
Robert F. Van Voorhees, Bryan Cave

WAIVER OF 90 DAY TIME LIMIT

UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

Permit Application No: AC26-126965 & AO26-223258

Applicant's Name: UNITED STATES SUGAR CORPORATION -
CLEWISTON BOILER NO. 4

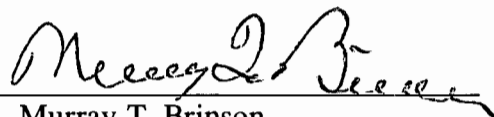
The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes (F.S.), and fully understands the applicant's rights under that section.

With regard to the above referenced permit application, the applicant hereby with full knowledge and understanding of its rights under Sections 120.60(2) and 403.0876, F.S., waives the right under Sections 120.60(2) and 403.0876, F.S., to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day period prescribed in Sections 120.60(2) and 403.0876, F.S. Said waiver is made freely and voluntarily by the applicant, in its self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 15th day of February 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.

January 9, 1995
Date


Murray T. Brinson
Vice President, Sugar Processing
United States Sugar Corporation



December 8, 1994

Mr. John Brown, P.E.
Florida Department of Environmental Protection
111 South Magnolia, Suite 4
Tallahassee, FL 32301

Re: United States Sugar Corporation- Clewiston Boiler No. 4
AO26-223258

Dear Mr. Brown:

At the request of Willard Hanks, I am providing the following information regarding United States Sugar Corporation (U.S. Sugar) Boiler No. 4. This information relates to the differences and/or similarities between Clewiston Boiler 4 and the other three boilers in the sugar industry which have received higher CO emission limits. The attached table presents pertinent information on each of these boilers.

As shown in the table, the design of Clewiston Boiler No. 4 is very similar to the design of both Atlantic Boiler 5 and Osceola Boiler 6. All three of these boilers are of the traveling grate design, were installed in the 1980's, and have heat release rates of around 30,000 Btu/hr-ft³. However, Clewiston Boiler 4 is a much larger boiler than Atlantic Boiler 5 and Osceola Boiler 6, and there may exist some design differences.

In the case of Osceola Boiler 3, the furnace volume is not available at this time, and the engineering drawings of the boiler are not readily accessible. However, it is known that this boiler was formerly a cell type boiler (i.e., the bagasse is combusted in piles formed in the "cells" of the boiler). Ash is manually removed from this type boiler. The cell type design is much different than the traveling grate design of the other three boilers.

Based on these differences in boiler design, as well as CO test data from each boiler, the CO emission limits for Atlantic 5 and Osceola 6 were set at 6.5 lb/MMBtu, and at 3.5 lb/MMBtu for Osceola 3. U.S. Sugar is requesting that the CO emission limit for Boiler 4 be set at 6.5 lb/MMBtu based on the specific design of this boiler, which is similar to but larger than Atlantic 5 and Osceola 6, as well as the source-specific test data for Boiler 4.

14015A1/8

KBN ENGINEERING AND APPLIED SCIENCES, INC.

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Washington, D.C. 20036
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FAX 202-462-2270

EQUAL EMPLOYMENT OPPORTUNITY

AN AFFIRMATIVE ACTION EMPLOYER

Mr. John Brown
December 8, 1994
Page 2



I believe this information is sufficient to allow the Department to reach a conclusion on this matter.
Please call if you have any questions.

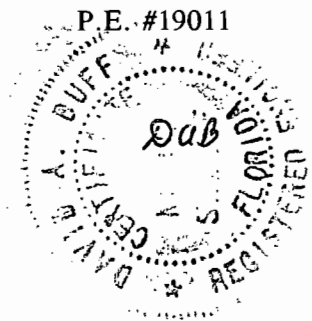
Sincerely,

David A. Buff

David A. Buff, P.E.
Principal Engineer

cc: Don Griffin
Murray Brinson
Peter Briggs
Bob Van Vorhees
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SEAL



DB/mlb

Table 1. Design Parameters for Sugar Industry Boilers With CO Limits

Boiler	Year Installed	Boiler Type	Maximum Heat Input (MMBtu/hr)	Furnace Volume (ft ³)	Heat Release Rate (Btu/hr-ft ³)	CO Emission Limit (lb/MMBtu)
Atlantic Boiler 5	1982	Traveling Grate	253	9,540	26,520	6.5
Osceola Boiler 3	1961	Inclined Grate ¹	292	NA	NA	3.5
Osceola Boiler 6	1981	Traveling Grate	379	11,604	32,661	6.5
USS Clewiston Blr 4	1985	Traveling Grate	707	21,245	33,278	6.5

NA= Not available

¹ Converted cell boiler

ATTACHMENT 6

CO Emission Limit Correspondence



August 15, 1994

Mr. Murray T. Brinson
 Vice President, Sugar Processing
 U.S. Sugar Corporation
 P.O. Drawer 1207
 Clewiston, FL 33440

Re: Revision of Reasonably Available Control Technology (RACT) Limits
 U.S. Sugar Corporation, Bryant Mill

Boiler No. 1	AO50-191891
Boiler No. 2	AO50-191899
Boiler No. 3	AO50-182890

Dear Mr. Brinson:

United States Sugar Corporation (U.S. Sugar) owns a sugar cane processing mill in Palm Beach County which includes four primarily bagasse-fired boilers and associated facilities (Bryant Mill). On March 8, 1994, the Florida Department of Environmental Protection (FDEP) issued air operation permit amendments for U.S. Sugar's Bryant Boilers 1, 2, and 3 to specify compliance test requirements and methods, as well as to incorporate reasonably available control technology (RACT) emission limits. The limits in the amendments were set at the maximum emission rates allowed under the Department's revised RACT rule, 17-296.570, Florida Administrative Code (F.A.C.): 5.0 pounds per million British thermal units (lb/MMBtu) for volatile organic compound (VOC) emissions and 0.9 lb/MMBtu for nitrogen oxide (NO_x) emissions.

Based on KBN's evaluation of test data obtained from U.S. Sugar boilers and other boilers operated throughout the sugar industry during the past two crop seasons, U.S. Sugar is requesting that the permit amendments for Bryant Boilers 1, 2, and 3 be revised to incorporate emission limits lower than those contained in the RACT rule for carbonaceous fuel-fired boilers. These lower limits have been determined after careful consideration of the test data obtained using EPA Method 7E to determine NO_x emissions and EPA Method 25A to determine VOC emissions, with EPA Method 18 used to identify and subtract out the methane emissions. Methane generally constitutes more than half of the VOC levels in the emissions from these and other industry bagasse-fired boilers.

The following discussion presents the VOC and NO_x test data obtained for the Bryant mill, the proposed RACT limits, and proposed test methods to demonstrate compliance.

14015A1/2

KBN ENGINEERING AND APPLIED SCIENCES, INC.

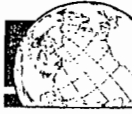
1034 Northwest 57th Street
 Gainesville, Florida 32605
 904-331-9000
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Test Data From Bryant Mill

A summary of the test data from the three U.S. Sugar boilers (Boilers 1, 2, and 3) at the Bryant Mill that are subject to regulation under the RACT rule is presented in Table 1. Tests were conducted when firing bagasse in the boilers. Test data from all three boilers were grouped together in Table 1 since these boilers are of similar design and capacity.

NO_x Test Data

All NO_x emission tests were conducted using EPA Method 7E. This is a continuous emission monitoring method. As shown in Table 1, a total of 13 individual test runs were performed. Test runs were generally 2 hours in duration. NO_x emission levels were low and averaged 0.15 lb/MMBtu for the three Bryant boilers. The NO_x emissions test data reflect a variability ranging from 0.093 to 0.251 lb/MMBtu for individual test runs. Test results from the sugar industry as a whole showed a broader range of NO_x emissions up to 0.33 lb/MMBtu.

VOC Test Data

All VOC emission tests were conducted using a combination of EPA Methods 25A and 18. Method 25A is a continuous emission monitoring method which measures total hydrocarbons. Method 18 is a gas chromatograph method which provides the relative concentration of methane in the gas stream. Based on the results from Methods 25A and 18, the total non-methane VOC emissions are obtained.

The Department recently issued a guidance memorandum discussing the appropriate use of VOC analytical Methods 18, 25 and 25A (DARM-EM-02, dated March 17, 1994). The enclosed letter from Steve Neck of Air Consulting and Engineering, Inc. (Attachment A), examines the use of these methods for analysis of sugar industry VOC emissions and concludes that Methods 18 and 25A provide the proper analytical approach under the guidelines established by the Department.

As shown in Table 1, a total of 13 individual test runs were performed. Test runs were generally 2 hours in duration. VOC emission levels are shown to be generally more variable than NO_x emissions. The VOC emissions averaged 0.10 lb/MMBtu for the three boilers. The VOC emissions ranged from 0.022 to 0.285 lb/MMBtu for individual test runs. For the sugar industry as a whole, VOC emissions ranged from 0.0 to 2.29 lb/MMBtu.

Proposed RACT Limits

Based on evaluation of these test data, U.S. Sugar proposes the following revised RACT limits for Boiler Nos. 1, 2, and 3 at Bryant:

NO_x (carbonaceous): 0.45 lb/MMBtu

VOC (carbonaceous): 1.5 lb/MMBtu

It is emphasized that the NO_x and VOC limits being proposed are based upon the use of Method 7E to determine NO_x emissions and Methods 25A/18 to determine VOC emissions.

In order to demonstrate compliance with the RACT limits, U.S. Sugar proposes to perform an annual compliance test.



Proposed Test Methods

For the purpose of conducting annual stack tests on the U.S. Sugar Bryant boilers, Reference Methods 25A and 18 are proposed for VOC emissions, and Reference Method 7E is proposed for NO_x emissions. These methods were used to obtain all of the test data described and analyzed for the sugar industry.

Method 25A is a flame ionization technique which measures total hydrocarbons. Method 18 is a gas chromatograph technique which measures the methane content of the gas stream. By taking the difference between the Method 25A and Method 18 results, the non-methane hydrocarbon emission rates are obtained. In regard to ozone nonattainment areas, the definition of VOC excludes methane because this compound is not sufficiently reactive to serve as an ozone precursor.

Method 7E is a continuous instrumental method. It is the method of choice for NO_x emissions monitoring because of its ability to provide on-site NO_x data while testing is being performed.

U.S. Sugar appreciates the Department's cooperation during the RACT determination and would be glad to answer any questions you may have concerning this submittal.

Sincerely,

David A. Buff

David A. Buff, P.E.
Principal Engineer

DAB/abb

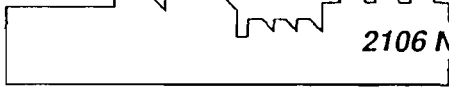
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Table 1. Summary of NOx and VOC Emission Tests Performed on Bagasse Boilers at U.S. Sugar Corporation - Bryant, 92/93 and 93/94 Crop Seasons.

Mill/Boiler	Boiler Type	NOx Emissions (lb/MMBtu)			VOC Emissions (lb/MMBtu)				
		Number of Test Runs	Minimum	Average	Maximum	Number of Test Runs	Minimum	Average	Maximum
<u>U.S. Sugar Corporation - Bryant</u>									
Boiler 1, 2, 3	Vibrating Grate	13	0.093	0.145	0.251	13	0.022	0.103	0.285

ATTACHMENT A

ACE
AIR CONSULTING
& ENGINEERING, INC.



2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32606
(904) 335-1889 FAX (904) 335-1891

August 4, 1994

Mr. David Buff
KBN Engineering and Applied Sciences
1034 NW 57th Street
Gainesville, FL 32605

REF: Use of Method-25A and Method-18 for measurement of VOC emissions from bagasse-fired boilers.

Dear Mr. Buff:

We have reviewed the Florida Department of Environmental Protection (FDEP) guidance memorandum DARM-EM-02 (Attachment-1) in light of the extensive work we have done over the years with bagasse-fired boilers in the sugar industry. While this memo states that EPA "Method-25 is the recommended method for measuring non-methane organic emissions from stationary sources . . . -especially combustion sources", it also recognizes the significant positive interference experienced when testing sources with (percent moisture) x (percent carbon-dioxide) products greater than 100. The extent of this interference was noted in a U.S. EPA Memorandum dated October 25, 1993 from Mr. John B. Rasnic, Director of the Stationary Source Compliance Division, Office of Air Quality Planning and Standards (Attachment-2). Rasnic's memorandum indicates that the magnitude of the positive interference caused by high carbon dioxide (>10%) in the presence of high moisture (>10%) can be as high as 150 ppm.

Extensive testing conducted during the 1993-1994 crop season on sugar industry boilers showed that boiler exhausts routinely have carbon dioxide levels of 8-14% with moisture levels of 20-30%, and total non-methane organic concentrations of 50-1000 ppm. The resultant (percent moisture) x (percent carbon-dioxide) products range from 160-420. Thus, there is ample potential for very significant positive interference when using Method-25 on these sources.

The only other commonly applied approved test method for evaluating total gaseous non-methane organic (TGNMO, also called volatile organic compounds or VOC) emissions is EPA Method-25A. However, to accurately determine the non-methane hydrocarbon emissions, the Method-25A results must be corrected for the methane contribution to the flame ionization detector (FID) response by using Method-18 to measure methane. This is done because methane is not considered a reactive hydrocarbon ozone precursor and is not regulated under VOC emission standards.

Our experience with bagasse fired boilers has consistently shown that approximately 50% of the total carbon present as hydrocarbons is in the form of methane. Attachment-3 shows a plot of results from 251 tests of sugar industry boiler emissions during the 1993-1994 crop season using Method-25A and Method-18 for total hydrocarbons and methane, respectively.

Currently no test method is specified to determine VOC emissions from bagasse-fired boilers under F.A.C. 17-296 or 17-297. Both Method-25A and Method-18 have been approved by FDEP and incorporated by reference in the Florida Administrative Code (17-297.401). It has generally been the practice of the FDEP to allow any promulgated test method under such circumstances.

Mr. David Buff
August 4, 1994
pg. 2

Because of Method-25's potential for significant positive bias when applied to bagasse fuel emissions, we recommend that Method-25A, corrected for methane using Method-18, be used to determine VOC emissions from bagasse-fired boilers.

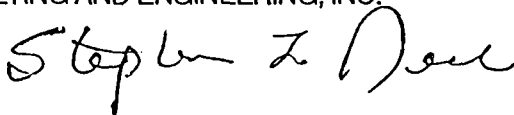
We make this recommendation although we are fully aware that Method-25A measures the response of a FID to the total hydrocarbon content of the sample gas stream, and that the FID response is not universal or linear with respect to hydrocarbons and carbon content when compared to a chosen calibration gas such as propane in air. We feel that these limitations are less severe than the potential problems associated with the use of Method-25 for these sources.

In this context, one should consider that no emission test method is exact. Frequently, the measurement method is used to define the "pollutant" and set emission standards. For example, particulate matter (PM) is defined as any material that is retained on a 0.1 μm glass fiber filter heated to $250\pm 25^\circ\text{F}$. This definition is based on the standard measurement method (Method-5) for PM. Following this approach, we feel that it is consistent to accept a VOC RACT standard that is defined by a specific test method, i.e. EPA Method-25A corrected for methane using EPA Method-18. This is also consistent with the F.A.C. 17-297.310(147) definition of "VOC" which states "Volatile Organic Compounds may be measured by an EPA reference, equivalent or alternative method or by procedures specified under 40 CFR Part 60." This is almost identical to the definition of PM listed in F.A.C. 17-297.310(105).

Method-25A corrected for methane using Method-18 has been used extensively to monitor VOC emissions from bagasse-fired boilers for many years. Results from these measurements constitute the bulk of VOC emission data from this source category. We also note that various air permits issued to date, including RACT permits issued to U.S. Sugar Bryant and Talisman Sugar Corporation, specifically authorize EPA Method-25A as a compliance test method.

Respectfully,

AIR CONSULTING AND ENGINEERING, INC.



Stephen Neck, P.E.

attachments

ACE File 236-gen

Florida Department of
Environmental Protection

Memorandum

DARM-ZH-02

TO: District Air Program Administrators
County Air Program Administrators
Bureau of Air Regulation Engineers

FROM: Howard L. Rhodes, Director *HLR*
Division of Air Resources Management

DATE: March 17, 1994

SUBJECT: Guidance on The Use of EPA Methods 18, 25 and 25A
for Measuring Gas Stream Volatile Organic Compounds
(VOC) Concentration

This memo is to provide guidance concerning the appropriate EPA methods for use in the measurement of VOC concentrations. The commonly used methods are EPA Methods 25 and 25A, and occasionally EPA Method 18. This memo does not preclude the requirement for obtaining an Alternate Standard or Procedure (ASP) per 17-297.620, F.A.C.

Method 25 is the recommended method for the measurement of total gaseous nonmethane organic emissions from most air pollution sources - especially combustion sources. The lower limit of detection for EPA Method 25 is 50 ppmv as carbon. The presence of water vapor and carbon dioxide may positively bias (observed emissions higher than true emissions) the results of the method. Pursuant to 40 CFR 60 Appendix A, the bias is not considered to be significant if the product of the volumetric concentrations of water vapor and carbon dioxide is not greater than 100. For example, the bias is not significant for a source having 10 percent CO₂ and 10 percent water vapor, but it would be significant for a source near the detection limit having 10 percent CO₂ and 20 percent water vapor. EPA Method 25 shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. It shall also be the required VOC measurement technique for combustion sources, sources controlled by VOC incinerators (afterburners), and sources that emit an unknown mix of organic compounds. Any owner who wants to use another measurement technique (i.e., EPA Method 25A) in lieu of EPA Method 25 must apply for and obtain approval of an ASP.

Method 25A is the recommended method for measurement of compounds consisting of only carbon and hydrogen, or a single organic solvent if the analyzer used during the testing is calibrated for this solvent. EPA EMTIC Guideline Document EMTIC GD-011 and the attached EPA memo dated October 25, 1993, recommends the use of EPA Method 25A if the VOC concentration at the outlet of an incinerator is less than 50 ppmv as carbon. However, the presence of partially oxidized organic compounds in a combustion source or VOC incinerator (afterburner) may cause the results

District Air Program Administrators
County Air Program Administrators
March 17, 1994
Page Two

obtained with Method 25A to be biased low. EPA Method 25A shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. Any owner who wants to use another measurement technique in lieu of EPA 25A must apply for and obtain approval of an ASP.

EPA Method 18 applies to the analysis of approximately 90 percent of the total gaseous organic compounds emitted from an industrial source. It is an extremely flexible procedure and is primarily used for the measurement of emissions from sources in the synthetic organic chemical manufacturing industry. EPA Method 18 shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. Any owner who wants to use another measurement technique in lieu of EPA Method 18 must apply for and obtain approval of an ASP.

If the estimated concentration of VOC emissions from the exhaust of a combustion source (incinerator/afterburner) are estimated to be less than 50 ppmv as carbon, the owner may request approval to use EPA Method 25A in lieu of EPA Method 25. The request must be accompanied by the results of simultaneous EPA Method 25 and EPA Method 25A compliance tests which meet all applicable audit requirements. In order to be acceptable the tests must be conducted at 90 to 100% of the maximum permitted capacity, and the EPA Method 25 must pass the required audit, produce EPA Method 25A results that are less than 50 ppmv, and also produce EPA Method 25 results that are not greater than 75 ppmv as carbon. The use of EPA Method 25A for subsequent compliance tests may be approved through the process for alternate standards or procedures under those circumstances.

If it is deemed desirable to subtract methane from the total hydrocarbons measured by EPA Method 25A, EPA Method 18 should be required to identify and measure most (~90%) of the hydrocarbons. EPA Method 18 will determine the degree of negative bias due to partially oxidized/chlorinated organic compounds.

The approval of alternate test methods is handled by the Emissions Monitoring Section. Any questions on the ASP process should be referred to Mike Harley at SC 278-1344 or (904) 488-1344.

HLR/sa/cjh



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 25 1993

AIR PROGRAMS BRANCH

RECEIVED
OCT 27 1993
OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: EPA's VOC Test Methods 25 and 25A

FROM: John B. Rasnic, Director *Richard Blum*
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Air, Pesticides, and Toxics Management Division
Directors
Regions I and IV

Air and Waste Management Division Director
Region II

Air, Radiation, and Toxics Division Director
Region III

Air and Radiation Division Director
Region V

Air, Pesticides, and Toxics Division Director
Region VI

Air and Toxics Division Directors
Regions VII, VIII, IX and X

As a result of requests from industry, Regional Offices and State programs, we have reviewed our guidance regarding the use of Methods 25 and 25A for measuring gas stream volatile organic compounds (VOC) concentration. Information obtained during this review has resulted in the following revised guidance, which is effective immediately and which supersedes all previous guidance on this matter. This revision has been coordinated with the other divisions within the Office of Air Quality Planning and Standards.

The EPA has decided to add an option 3 to permit further the use of Method 25A in lieu of Method 25 under certain conditions. Therefore, our new guidance is as follows. The EPA mandates the use of Method 25 for measuring gas stream VOC concentration when determining the destruction efficiency (DE) of afterburners. It also allows the use of Method 25A, in lieu of Method 25, under any of the following circumstances: 1) when the applicable regulation

METHOD 25

INTRODUCTION:

Method 25 is the best method for gas streams where organic concentrations are greater than 100 ppm and moisture is either less than 5% with an associated high CO₂ concentration (>5%) or less than 10% with an associated low CO₂ (<5%). The interference which results from CO₂ dissolving in condensed moisture can bias the results high as much as 150 ppm in the presence of moisture concentrations exceeding 10%.

METHODOLOGY:

In Method 25, volatile organic carbon (VOC) sample is collected by drawing gases from an emitting source through a heated stainless steel sample probe followed by a glass fiber filter maintained at 250 ± 5°F, which removes particulate carbon from the sampling stream. The VOC sample stream is then drawn through a dry ice cooled stainless steel U-tube condenser packed with quartz wool. In this portion of the train, "condensable" organics are collected. The lighter volatiles then travel through a valve rotameter to an evacuated four liter stainless steel tank. The tank sample represents the "non-condensable" portion of the collected sample. A sample is taken at a constant flow rate over usually a one-hour period. Following each test run, the sample train is disconnected, the trap and tank portions sealed, and the traps are stored on dry ice until analyses are performed.

APPLICABILITY:

The minimum detectable for the method is 50 ppm as carbon. At the outlet of a thermal or catalytic incinerator, if functioning correctly, the VOC concentration should be quite low (<50 ppm as C). Hence, the method, even though appropriate for measuring inlet concentrations, would not give good results for outlet concentrations less than 50 ppm.

In an attempt to control the quality of EPA Method 25 stack test results, EPA initiated a program to develop audit material to assess the accuracy of Method 25 sampling and analysis procedures. The audit gas sampling/analysis program has some shortcomings, which are being looked into by an EPA contractor.

DEP, when evaluating a Method 25 stack test result, determines how the test results are possible biased upon the audit sample result.

limits the exhaust VOC concentration to less than 50 ppm; 2) when the VOC concentration at the inlet of the control system and the required level of control are such to result in exhaust VOC concentrations of 50 ppm or less; or 3) if, because of the high efficiency of the control device, the anticipated VOC concentration at the control system exhaust is 50 ppm or less, regardless of the inlet concentration.

Further, if a source elects to use Method 25A under option 3, above, the exhaust VOC concentration must be 50 ppm or less and the required DE must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required DE apparently has been met, but the exhaust concentration is above 50 ppm, this is an indicator that Method 25A is not the appropriate test method and that Method 25 should be used.

BACKGROUND

The primary industry impacted by this policy is the printing industry, which has consistently claimed that the Method 25 test procedure is too expensive and cumbersome to be used as a compliance demonstration tool. They have stated that current state-of-the-art technology afterburners routinely achieve 98-99 percent destruction efficiency, generally significantly greater than is required by regulations. As a result, control system outlet VOC concentrations are commonly less than 50 ppm, regardless of the inlet concentration.

Regulations which specify performance requirements for the subject control systems have typically been based on older technology, which was less efficient than current technology. We agree with the printing industry's claim that VOC destruction technology currently available can perform at greater levels than as specified by the regulations. It is therefore appropriate to revise our guidance on the usage of these compliance demonstration methods.

This guidance specifies the circumstances under which Method 25 and Method 25A are to be used. It will reduce the administrative burden on a significant number of regulated industrial sources but will not reduce the stringency of any currently applicable regulatory requirements.

cc: OAQPS Division Directors

METHOD 25A

INTRODUCTION:

Method 25A is a better method for measuring hydrocarbon concentrations greater than 2 ppm and less than 100 ppm. The method gives good results when the hydrocarbons are all hydrogen and carbon. When applied to measuring hydrocarbons containing oxygen, nitrogen, and chlorine, the efficiency of the method is reduced.

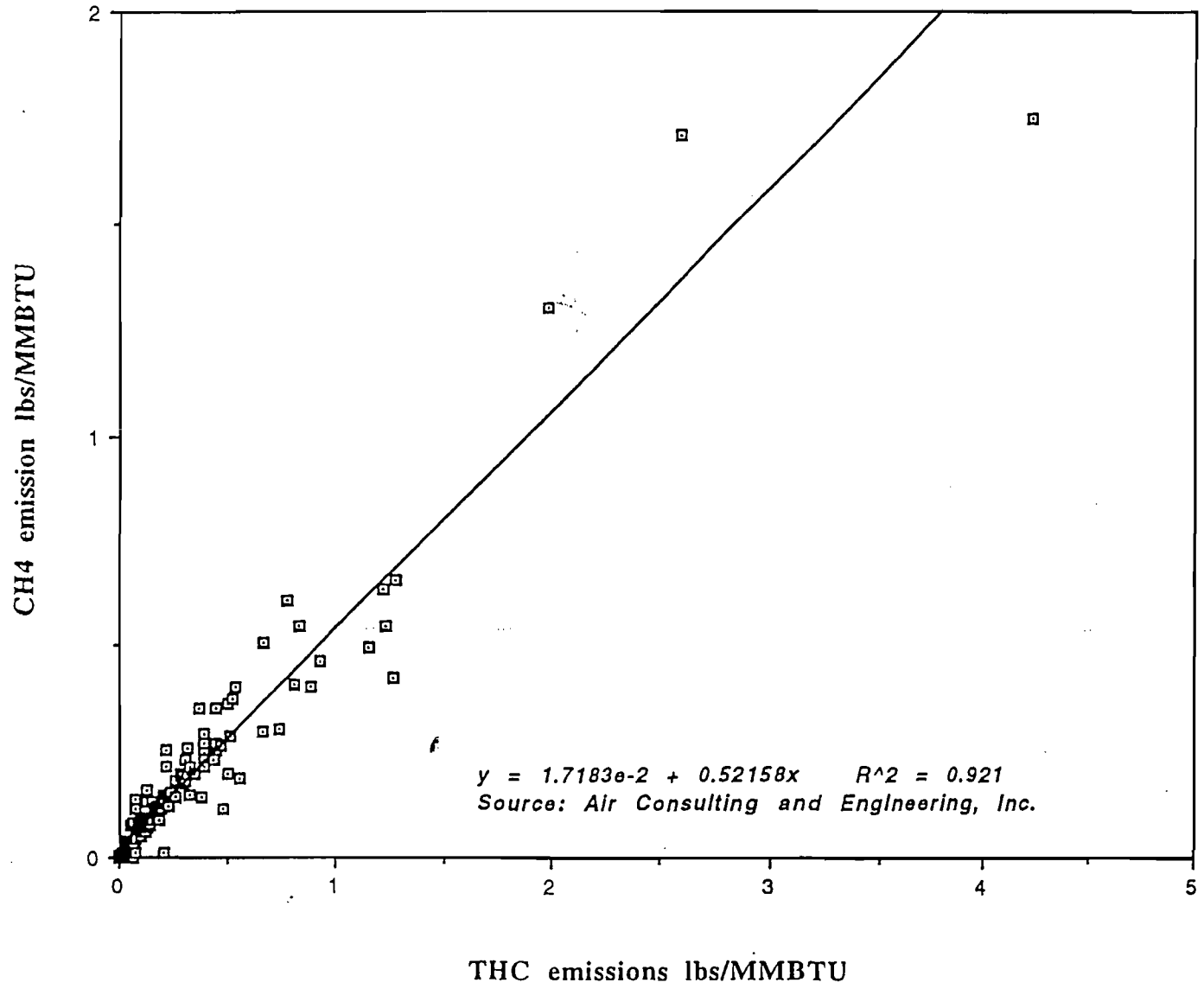
METHODOLOGY:

A gas sample is drawn from the source through a heated sample line, if necessary, and glass fiber filter to a flame ionization analyzer (FIA). Results are reported as volume concentrations equivalent to the calibration gas or as carbon equivalents.

APPLICABILITY:

The flame ionization analyzer (FIA) can be easily calibrated if dealing with a known mixture containing one or two compounds. The difficulty rises when confronted with an unknown mixture. Generally, in these cases, FIA cannot reasonably measure true mass. Also, in sources where incineration is used as a control measure, oxygenated hydrocarbons may be present in the exit mixture. The FIA response for the oxygenated compounds is biased low, thereby introducing an error.

Boiler Emission Data from 251 Emission Tests, 1993-1994 Sugar Industry Production Season



UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121 Telex: 510-952-7753

August 16, 1994

Mr. Clair Fancy
Bureau Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

RE: Revision of RACT Limits and Test Methods
U. S. Sugar Corporation - Bryant Mill

Boiler No. 1 - AO50-191891
Boiler No. 2 - AO50-191899
Boiler No. 3 - AO50-182890

Dear Mr. Fancy::

The United States Sugar Corporation (U. S. Sugar) requests that the Department approve revised reasonably available control technology (RACT) emission levels for volatile organic compounds (VOCs) and nitrogen oxides (NOx) applicable to the above-referenced bagasse-fired boilers. These levels -- 1.5 lb/MMBtu for VOCs and 0.45 lbs/MMBtu for NOx -- are based on an industry-wide testing program conducted during the most recent sugar cane crop season. The results of the testing program and the proposed emission limits are described in the enclosed letters prepared in conjunction with U. S. Sugar's consultants and pursuant to earlier consultation with the Bureau of Air Regulation.

Based on the results of the testing program, and the Department's recently-issued guidelines for VOC testing, U.S. Sugar also proposes to use EPA Method 25A in conjunction with EPA Method 18 to determine nonmethane VOC emissions from bagasse boilers.

If the request is approved, we ask that the Bryant RACT amendments be revised to read as follows:

SPECIFIC CONDITIONS 11-13 (No changes to the other conditions)

11. Volatile Organic Compound (VOC) emissions shall not exceed 1.5 pounds per million Btu heat input. [Requested by permittee.]
12. Nitrogen Oxides (NOx) emissions shall not exceed 0.45 pounds per million Btu heat input. [Requested by permittee.]
13. U.S. Sugar shall test this boiler for VOCs and NOx on an annual basis within 60 days of the date of January 1. Each compliance test shall be conducted in

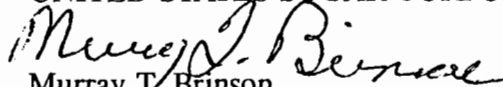
accordance with 40 CFR 60, appendix A, using the method indicated [Rule 17-297.340(1) (d), F.A.C.]:

- (A) VOC - EPA Method 25A in conjunction with EPA Method 18 to determine nonmethane VOC.
- (B) NOx - EPA Method 7 or 7E.

We appreciate your attention to this matter and the time devoted by the Department to resolving your concerns and those of the sugar industry, and U. S. Sugar Corporation in particular, with respect to these permits.

Very truly yours,

UNITED STATES SUGAR CORPORATION


Murray T. Brinson
Vice President
Sugar Processing

MTB:jt

Enclosures

cc: Ronald D. Blackburn - DEP, South District
Arthur Lyle - DEP, South District
A.J. Satyal - P.B. Co. Dept. of Health
Jeff Braswell, Esq. - DEP Tallahassee
Peter Briggs - USSC
David Buff - KBN
Steve Neck - ACE
Robert F. Van Voorhees - Bryan Cave

Table 1. Summary of VOC Emission Tests Performed on Bagasse Boilers in Florida

Sugar Mill	Date	Steam Rate (lb/hr)	Heat Input Rate (10 ⁶ Btu/hr)	Bagasse Burning Rate (ton/hr, wet)*	VOC Emissions		
					lb/hr	lb/10 ⁶ Btu	lb/ton, wet
<u>Sugar Cane Growers Coop.</u>							
Boiler 8	2/4/83	246,429	414	51.75	13.9	0.03	0.27
Boiler 8	2/4/83	243,250	406	50.75	26.8	0.07	0.53
Boiler 8	2/4/83	254,211	425	53.13	88.1	0.21	1.66
<u>Osceola Farms</u>							
Boiler 6	12/18/86	160,000	310	38.75	79	0.25	2.04
Boiler 6	12/18/86	160,000	310	38.75	49	0.16	1.26
<u>U.S. Sugar Clewiston</u>							
Boiler 4	12/23/85	262,500	561.4	70.18	104.4	0.19	1.49
Boiler 4	12/23/85	266,000	562.7	70.34	71.0	0.13	1.01
Boiler 4	12/23/85	251,407	532.3	66.54	120.2	0.23	1.81
<u>Atlantic Sugar</u>							
Boiler 5	3/21/83	108,000	201	25.13	14.3	0.07	0.57
Boiler 5	3/21/83	98,000	183	22.88	14.6	0.08	0.64
Boiler 5	3/21/83	108,000	201	25.13	14.5	0.07	0.58
Boiler 5	2/20/87	N/A	N/A	N/A	20.0	-	-
					(Avg)		

N/A = Not Available

* Assumes 4,000 Btu/lb average heat content for wet bagasse



Florida Department of Environmental Regulation

South District • 2269 Bay Street • Fort Myers, Florida 33901-2896 • 813-332-2667

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Philip Edwards, Deputy Assistant Secretary

October 26, 1989



Peter Barquin
U. S. Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Re: Hendry County - AP
U. S. Sugar Corporation
Boiler No. 4
AC26-126965 and A026-144701

Dear Mr. Barquin:

As requested in your recent telephone conversation with David Knowles, we hereby clarify the intent of the specific conditions of the operating permit A026-144701 for boiler No. 4.

The intent of specific condition No. 8 is that the flue gas pressure drop across the scrubber be measured and recorded once in each 8 hour shift. The pH of the scrubber water shall be measured and recorded once per day.

We request that you test the CO emissions from Boiler #4 using EPA Method 10 during the 1989-1990 crop season. The purpose of the this test is to help us determine a reasonable CO emission factor for boilers of this type. Please notify this office in advance of the date and time of each test.

If you have any questions please call David Knowles.

Sincerely,

Philip R. Edwards
Deputy Assistant Secretary

PRE/DMK/jsw

cc: Williard Hanks

ATTACHMENT 7

CO Emission Test Data

ATTACHMENT A
Application for Renewal of Permit to Operate
Boiler No. 4
U.S. Sugar Corporation - Clewiston Mill

In this application for renewal of the operating permit for Boiler No. 4, U.S. Sugar requests that Specific Conditions 5, 8, and 13 in the current operating permit be revised. The requested changes are summarized as follows:

- Specific Condition 5 - A revision is requested to provide that the limit on burning more than 6,300 gallons of fuel oil in any 3 hour period, which is intended as a limit on emissions, may be exceeded during startup, shutdown or malfunction in accordance with DER Rule 17-2.250, F.A.C.
- Specific Condition 8 - A revision is requested to incorporate the clarification provided by DER on October 26, 1989, with respect to the timing of measurements.
- Specific Condition 13 - U.S. Sugar has completed testing carbon monoxide (CO) emissions from Boiler No. 4 using EPA Method 10 and requests the establishment of a reasonable CO limit, as previously intended by DER. The proposed emission limit and the basis for the limit is provided.

Each of these items are discussed in the following paragraphs.

Specific Condition 5

This condition in the current permit requires that during any 3-hour period, not more than 6,300 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. This condition is included in the permit to limit SO₂ emissions. It is requested that this condition be revised to permit excess emissions resulting from startup, shutdown or malfunction, such as when power is lost at the mill. Startup conditions occur during the "grind-in" period (which usually occurs on one day approximately one week prior to the sugar mill startup), during startup of the sugar mill at the beginning of the crop season, and at other times when the mill has been shut down for an extended period (such as during the Christmas holidays). The purpose of the grind-

in period is to test major equipment for proper operation. Plant emergencies are very rare, but when they do occur, bagasse feed to the boilers may be interrupted, and it may become necessary to switch to fuel oil.

Excess emissions during these limited and unusual periods are expressly allowed under DER Rule 17-2.250, F.A.C. The rule allows excess emissions from fossil fuel steam generators during such periods "provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions" is minimized. It is readily apparent that this rule was intended to cover precisely the type of situation encountered by U.S. Sugar during startups and other emergencies. Indeed, the rule would apply by its own terms if Specific Condition 5 were expressed as an emission limit rather than a fuel burning limit. Accordingly, we request that Specific Condition 5 be revised to read as follows:

5. During any 3-hour period, not more than 6,300 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. Excess fuel oil burning resulting from startup, shutdown, or malfunction of any source shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. All permits to operate other oil burning equipment at this plant are revised to include this limitation.

Specific Condition 8

DER has clarified the intent of Specific Condition 8 of the current operating permit to required that the flue gas pressure drop across the scrubber be measured and recorded once in each 8-hour shift. Reference letter from Phillip R. Edwards, Deputy Assistant Secretary of DER, to Peter Barquin of U.S. Sugar Corporation, October 26, 1989 (copy enclosed). The letter states further that the pH of the scrubber water shall be measured and recorded once per day. We request that Specific Condition 8 of the permit be revised to reflect these modified requirements.

Specific Condition 13

Specific Condition 13 of the current permit limits CO emissions to 0.25 lb/MMBtu as determined by EPA Method 10. U.S. Sugar has addressed the concern with this condition in a letter addressed to DER dated October 8, 1990.

The concern with the condition is that the 0.25 lb/MMBtu limit was not based on Method 10 testing, but was based instead on EPA emission factors which have proven to be inappropriate as

estimates of actual CO emissions from sugar processing mills. Subsequent testing at U.S. Sugar and other sugar mills has demonstrated that the 0.25 lb/MMBtu limit is much too low based on Method 10 testing, as acknowledged by the USEPA Region IV and the DER through correspondence in 1989.

Presented in the attached Table 1 are CO test results for the three mills known to have conducted Method 10 tests. A total of 20 individual test runs have been conducted on Boiler No. 4 at the U.S. Sugar mill in Clewiston. These were all conducted by Air Consulting and Engineering, Inc. Boiler No. 4 is a traveling grate boiler. The average CO emission rate for this boiler, as reflected in the test data, is 5.44 lb/MMBtu. The individual measurements range from 2.2 to 14.9 lb/MMBtu.

In order to determine an acceptable upper CO limit for compliance purposes, a statistical analysis of the test data was performed, using the average test results from each test date, consistent with the manner in which compliance tests are performed. The average test results are shown in Table 2. A frequency distribution for the data is presented in Figure 1. This plot shows that a CO emission level of 9.0 lb/MMBtu would have the probability of being exceeded only about 10 percent of the time. This probability of exceedance is acceptable to U.S. Sugar. Therefore, U.S. Sugar requests an allowable CO emission rate of 9.0 lb/MMBtu for Boiler No. 4.

Table 1. Summary of CO Emission Tests Performed on Bagasse Boilers in Florida Using EPA Method 10

Unit	Boiler Type	Date	Steam Rate (lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate ^a (TPH wet)	CO Emissions		
						lb/hr	lb/MMBtu	lb/ton, wet
U.S. Sugar Bryant								
Boiler 5	Vibrating Grate	02/16/89	256,928	577	80.14	2,586.9	4.48	32.28
Boiler 5	Vibrating Grate	02/17/89	249,228	561	77.92	2,658.0	4.74	34.11
Boiler 5	Vibrating Grate	02/17/89	249,480	562	78.06	1,693.3	3.01	21.69
						Max =	4.74	34.11
						Avg =	4.08	29.36
Osceola Farms								
Boiler 3	Fuel Cell	01/17/89	NA	NA	NA	NA	3.07	22.10
Boiler 3	Fuel Cell	12/05/89	NA	NA	NA	NA	0.81	5.83
Boiler 3	Fuel Cell	01/24/90	NA	NA	NA	NA	3.14	22.61
Boiler 6	Traveling Grate	01/16/89	NA	NA	NA	NA	5.42	39.02
Boiler 6	Traveling Grate	11/15/89	NA	NA	NA	NA	5.48	39.46
Boiler 6	Traveling Grate	02/02/90	NA	NA	NA	NA	5.93	42.70
						Max =	5.93	42.70
						Avg =	3.98	28.62
U.S. Sugar - Clewiston								
Boiler 4	Traveling Grate	02/20/90	308,636	691.7	96.07	1,940	2.80	20.19
Boiler 4	Traveling Grate	02/20/90	306,666	690.3	95.88	1,520	2.20	15.85
Boiler 4	Traveling Grate	02/20/90	310,298	698.8	97.06	2,240	3.20	23.08
Boiler 4	Traveling Grate	02/15/91	289,091	624.9	86.79	4,760	7.62	54.84
Boiler 4	Traveling Grate	02/15/91	291,200	629.5	87.43	2,710	4.30	31.00
Boiler 4	Traveling Grate	02/18/91	288,358	622.8	86.50	2,430	3.90	28.09
Boiler 4	Traveling Grate	02/18/91	285,224	616.4	85.61	2,640	4.28	30.84
Boiler 4	Traveling Grate	02/18/91	302,647	653.3	90.74	2,060	3.16	22.70
Boiler 4	Traveling Grate	02/19/91	290,769	627.9	87.21	4,430	7.05	50.80
Boiler 4	Traveling Grate	02/19/91	294,583	637.1	88.49	3,400	5.33	38.42
Boiler 4	Traveling Grate	02/19/91	293,382	633.5	87.99	2,480	3.92	28.19
Boiler 4	Traveling Grate	02/22/91	300,000	647.9	89.99	4,900	7.56	54.45
Boiler 4	Traveling Grate	02/22/91	293,382	634.2	88.08	9,450	14.90	107.28
Boiler 4	Traveling Grate	01/07/92	293,425	613.6	85.22	3,200	5.22	37.55
Boiler 4	Traveling Grate	01/07/92	282,800	591.3	82.13	6,270	10.60	76.35
Boiler 4	Traveling Grate	01/08/92	299,178	623.2	86.56	2,030	3.26	23.45
Boiler 4	Traveling Grate	01/08/92	297,973	621.5	86.32	3,160	5.09	36.61
Boiler 4	Traveling Grate	01/08/92	300,811	627.4	87.14	3,540	5.64	40.62
Boiler 4	Traveling Grate	01/09/92	302,055	630.0	87.50	2,770	4.40	31.66
Boiler 4	Traveling Grate	01/09/92	295,135	615.8	85.53	2,710	4.44	31.69
						Max =	14.90	107.28
						Avg =	5.44	39.18

Note: lb/hr = pounds per hour.
lb/MMBtu = pounds per million British thermal units.
lb/ton = pounds per ton.

MMBtu/hr = million British thermal units per hour.
NA = not available.
TPH = tons per hour.

^a Calculated from reported heat input rate, assumed 3,600 Btu/lb average heat content for wet bagasse.

$108.83 \div 20 = 5.44$
 $108.83 - (14.90 + 10.60 + 2.20) \div 17 = 4.77$

Table 2. Summary of CO Test Averages, U.S. Sugar Clewiston Boiler No. 4

Test Date	Number of Runs	Average CO Emissions (lb/MM Btu)
February 20, 1990	3	2.73
February 15, 1991	2	3.97
February 18, 1991	3	3.78
February 19, 1991	3	5.43
February 22, 1991	2	11.23
January 7, 1992	2	7.91
January 8, 1992	3	4.66
January 9, 1992	2	4.40

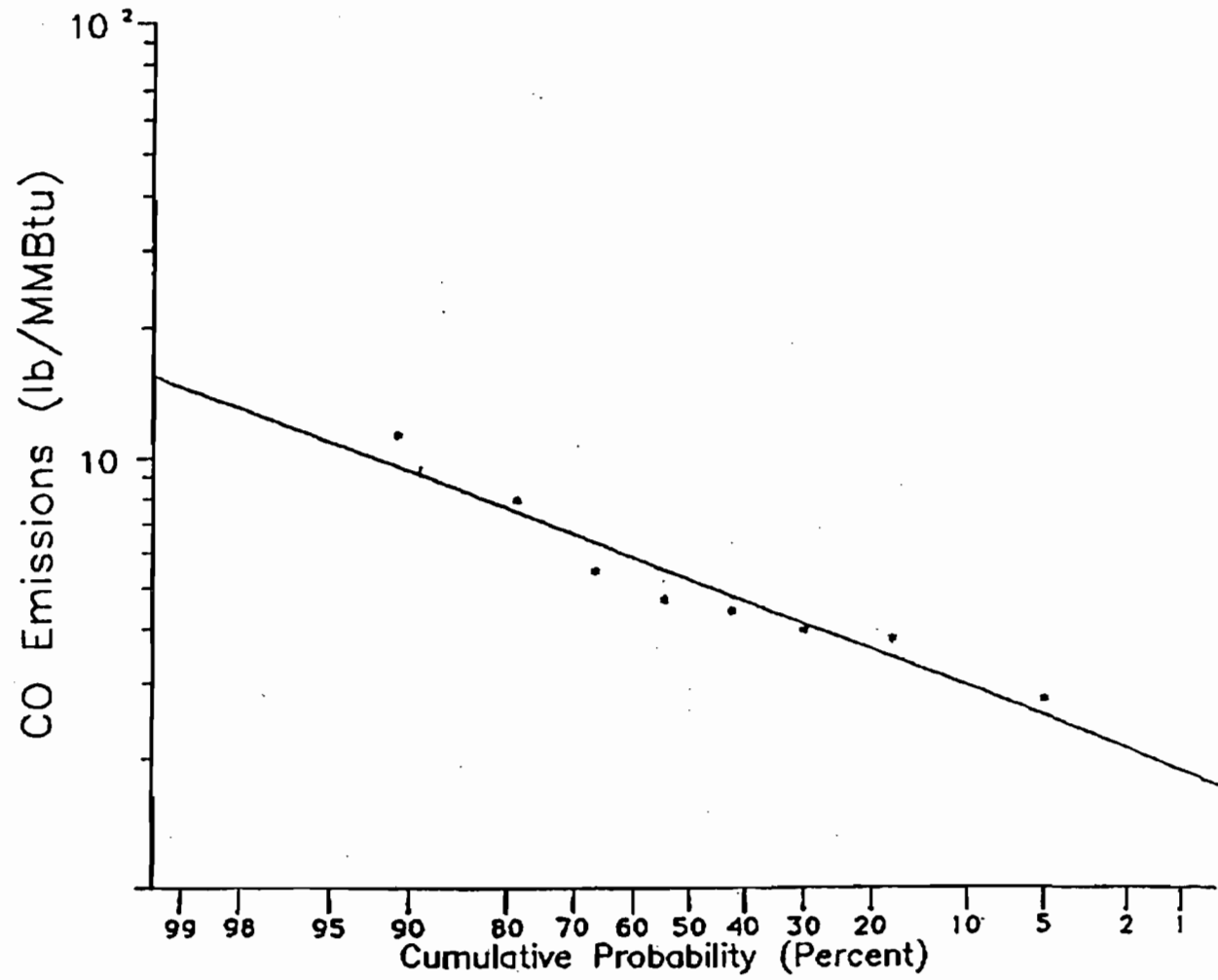


Figure 1 FREQUENCY DISTRIBUTION OF CO TEST DATA, CLEWISTON BOILER NO. 4



ATTACHMENT C
Application for Renewal of Permit to Operate
Boiler No. 4
U.S. Sugar Corporation - Clewiston Mill

Because the underlying assumptions about carbon monoxide emission rates have proven to be erroneous, we have not complied with Specific Condition 13 of the permit. The inappropriateness and inapplicability of this condition has been recognized and acknowledged by the Department in correspondence with U.S. Sugar. Reference the letter from Philip Edwards of DER to Peter Barquin of U.S. Sugar, dated October 26, 1989. Accordingly, U.S. Sugar has conducted testing pursuant to instructions from the Department to provide the basis for establishing reasonable CO emissions levels for this boiler. The results of that testing are included in Attachment A of this application, and U.S. Sugar is requesting a revision of Specific Condition 13.

In addition, it has not always been possible to complete testing in accordance with the dates specified in the specific conditions of this permit. On those occasions when testing would not be completed within the specified time period, U.S. Sugar has advised the Department of the specific date scheduled for testing and has obtained authorization to complete testing on the alternative date, allowing an opportunity for witnessing by the Department.

ATTACHMENT 8

VOC BACT Analysis

5.4 BACT EVALUATION FOR CO AND VOC EMISSIONS

In this section, the available control technologies capable of reducing CO and VOC emissions produced from firing bagasse and residual oil will be identified and evaluated. Potential application of these technologies as BACT for the proposed spreader-stoker boiler, rated on oil at 255 MM Btu/hr, is discussed. Table 5-8 is a summary of the potential CO and VOC control technologies presented in this section.

The EPA BACT/LAER clearinghouse has no BACT determinations for CO or VOC emission from bagasse combustors or residual oil combustion in boilers. Historically, BACT and LAER emission limits for CO and VOC on bagasse and oil-fired boilers have been based on the use of good combustion practices, rather than add-on control systems.

In bagasse-fired boilers, the fuel characteristics and the combustion practices result in CO and VOC emissions that are somewhat high, relative to fossil-fuel fired boilers. Improving combustion would likely require improving fuel quality (e.g., lowering bagasse moisture content through drying), which would make use of this waste fuel uneconomical and result in higher fossil fuel usage. The use of FGR could theoretically reduce CO and VOC emissions by reburning a portion of the VOCs in the recirculated exhaust. The overall effectiveness of fluegas recirculation would be limited because:

- The extremely high particulate loading of the combustion gas and the abrasive nature of the flyash would make this system very unreliable
- This has never been applied to a bagasse combustor
- This technology would not be economically feasible, per the analysis done for NO_x control

Post-combustion VOC controls have not been applied to bagasse-fired boilers. Such common techniques as direct-flame incineration, catalytic oxidation, and carbon absorption are also inappropriate technologies for bagasse boilers for the same reasons as above.

The only technically feasible CO and VOC control technology for bagasse-fired boilers is good combustion practices.

Because of their utility in reducing CO and VOC emissions, along with its success record in the sugar industry, **good combustion practices are proposed as BACT for emissions for the proposed boiler No. 7 when firing bagasse or oil.**

Table 5-8
 Summary of Potential CO and VOC control Technologies¹

Control Technology	Typical Effic. (% CO)	Typical Effic. (% VOC)	In Service On Bagasse Combustors?	In Service On Other Combustion Sources?	Technically Feasible For This Combustor?
Direct-flame Oxidation	90-99	90-99	No	Yes	No ²
Catalytic Oxidation	90-95	90-95	No	Yes	No ³
Fluegas Recirculation	30-50%	30-50%	No	No	Yes ⁴
Good Combustion Practices	15-50	15-50	Yes	Yes	Yes

Notes:

¹ Source: Air Pollution Engineering Manual, AWMA, 1992.

² Abrasive Particulate loading to high in combustor.

³ Same as above.

⁴ See discussion under NO_x control.

For the proposed boiler No. 7, the most appropriate BACT precedent for VOC, CO and NO_x appears to be the permit for Clewiston boiler No. 4, which relies on the inherent design features of the bagasse boiler along with the appropriate operating procedures to ensure that emission will be maintained at the lowest possible level. That permit imposes no requirement for add-on control technology, and that is the approach recommended here for the U.S. Sugar Corporation Clewiston mill boiler No. 7.

5.5 BACT EVALUATION FOR SULFURIC ACID MIST EMISSIONS

Sulfuric acid mist is generated from the emissions of SO₃ when oil is combusted. Sulfur trioxide can further react with water present in the fluegas to form sulfuric acid mist. The control of acid gas emissions is primarily controlled by removing the precursor pollutants from the fluegas with either wet or semi-dry scrubbing processes. Sulfuric acid mist emissions will be therefore be controlled by reducing the amount of sulfur in the stack gases by the following methods discussed previously:

- Installation of a wet impingement scrubber for SO₂ emissions from bagasse combustion
- Use of low-sulfur fuel oil for SO₂ emissions from residual oil combustion

5.6 BACT EVALUATION FOR BERYLLIUM EMISSIONS

Beryllium emissions were estimated using EPA factors for fuel oil combustion and assuming no removal in the scrubbing system, as there are no published factors for beryllium removal efficiency in the scrubber. Beryllium emissions are primarily controlled by removing the gaseous or particulate metal from the fluegas with either wet or semi-dry scrubbing processes. Beryllium emissions will be therefore be controlled for this project by installation of a wet impingement scrubber for PM emissions from fuel oil combustion.

ATTACHMENT 9

Tables 2-3, 2-4, 2-5 and 2-6

Table 2-3
Clewiston Mill Potential Annual Emissions

FUEL OIL COMBUSTION

	Avg MMBtu/hr	Day/yr	Mgal/yr	PM	SO2	NOx	CO	VOC
Boiler No.1	3.49	160	89.23	0.67	17.51	2.45	0.22	0.01
Boiler No.2	3.38	160	86.51	0.65	16.98	2.38	0.22	0.01
Boiler No.3	1.91	160	48.97	0.37	9.61	1.35	0.12	0.01
Boiler No.4	1.93	160	49.33	0.37	5.81	1.36	0.12	0.01
Boiler No.7 crop	2.01	160	51.54	0.39	2.02	1.42	0.13	0.01
Boiler No.7 off	255	69	2,810	21.08	110.29	77.28	7.03	0.39
Total TPY			3,136	23.5	162.2	86.2	7.8	0.4

BAGASSE COMBUSTION

	Avg MMBtu/hr	Day/yr	Wet Feed TPY	PM	SO2	NOx	CO	VOC
Boiler No.1	415	160	199,054	199.1	49.8	119.4	7,166	199.1
Boiler No.2	402	160	192,982	193.0	48.2	115.8	6,947	193.0
Boiler No.3	220	160	105,569	126.7	26.4	63.3	3,800	105.6
Boiler No.4	603	160	289,384	173.6	192.2	346.9	10,418	246.0
Boiler No.7 crop	630	160	302,341	181.4	200.8	346.9	10,884	257.0
Boiler No.7 off	450	136	183,564	110.1	121.9	294.9	5,683	156.0
Total TPY			1,272,894	984	639	1,287	44,899	1,157

lb/MMBTU

TOTAL COMBUSTION EMISSIONS

	Avg MMBtu/hr	PM	SO2	NOx	CO	VOC
Boiler No.1	418	200	67	122	7,166	199
Boiler No.2	405	194	65	118	6,948	193
Boiler No.3	222	127	36	65	3,801	106
Boiler No.4	605	174	198	348	10,418	246
Boiler No.7	493	313	435	721	16,575	413
Total TPY		1,007	801	1,374	44,907	1,157

Table 2-4
Clewiston Mill Potential Emissions (24-hour case)

Fuel Oil Combustion

	MMBtu/hr Avg.	Mgal/yr	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	103.5	0.69	10.4	270.8	38.0	3.45	0.19	72,000
Boiler No.2	94.5	0.63	9.5	247.3	34.7	3.15	0.18	65,739
Boiler No.3	57.0	0.38	5.7	149.2	20.9	1.90	0.11	41,044
Boiler No.4	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0
Boiler No.7	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0
Total lb/hr		1.70	25.5	667.3	93.5	8.50	0.48	178,783

Bagasse Combustion

	MMBtu/hr Avg.	Wet Feed Ton/yr	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	341	42.6	85.2	21.3	51.1	3,067	85.2	163,000
Boiler No.2	354	44.2	88.5	22.1	53.1	3,185	88.5	169,261
Boiler No.3	190	23.7	56.9	11.9	28.5	1,708	47.4	93,956
Boiler No.4	707	88.3	106.0	117.3	180.7	6,359	150.2	335,000
Boiler No.7	738	92.3	110.7	122.5	180.7	6,644	156.9	350,000
Total lb/hr		291	447	295	494	20,964	528	1,111,217

Total Hourly Emissions

	MMBtu/hr Avg.	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	444	96	292	89	3,071	85	235,000
Boiler No.2	448	98	269	88	3,188	89	235,000
Boiler No.3	247	63	161	49	1,710	48	135,000
Boiler No.4	707	106	117	181	6,359	150	335,000
Boiler No.7	738	111	123	181	6,644	157	350,000
Total lb/hr		473	962	588	20,973	529	1,290,000

Table 2-5
Clewiston Mill Potential Emissions (3-hour case)

Fuel Oil Combustion

	MMBtu/hr Ave.	Mgal/yr	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	122.3	0.82	12.2	320.0	44.8	4.08	0.23	85,078
Boiler No.2	120.0	0.80	12.0	314.0	44.0	4.00	0.22	83,478
Boiler No.3	72.8	0.49	7.3	190.5	26.7	2.43	0.14	52,421
Boiler No.4	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0
Boiler No.7	0.0	0.00	0.0	0.0	0.0	0.00	0.00	0
Total lb/hr	315.1	2.10	31.5	824.5	115.5	10.50	0.59	220,978

Bagasse Combustion

	MMBtu/hr Ave.	Wet Feed Ton/yr	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	313	39.2	78.4	19.6	47.0	2,821	78.4	149,922
Boiler No.2	317	39.6	79.2	19.8	47.5	2,851	79.2	151,521
Boiler No.3	167	20.9	50.0	10.4	25.0	1,501	41.7	82,579
Boiler No.4	707	88.3	106.0	117.3	192.4	6,359	150.2	335,000
Boiler No.7	738	92.3	110.7	122.5	192.4	6,644	156.9	350,000
Total lb/hr		280	424	290	504	20,177	506	1,069,021

Total Hourly Emissions:

	MMBtu/hr Ave.	PM	SO2	NOx	CO	VOC	Steam Lb/hr
Boiler No.1	436	91	340	92	2,825	79	235,000
Boiler No.2	437	91	334	92	2,855	79	235,000
Boiler No.3	240	57	201	52	1,504	42	135,000
Boiler No.4	707	106	117	192	6,359	150	335,000
Boiler No.7	738	111	123	192	6,644	157	350,000
Total lb/hr		456	1,114	620	20,188	507	1,289,999

Table 2-6
Clewiston Mill Air Toxics Emissions

POLLUTANT	Annual Emission TPY	24-hour Emission lb/hr	3-hour Emission lb/hr
Antimony	0.00519	0.00593	0.00732
Arsenic	0.00424	0.00485	0.00599
Barium	0.01495	0.01707	0.02109
Beryllium	0.00094	0.00107	0.00132
Bromine	0.00156	0.00178	0.00220
Cadmium	0.00351	0.00400	0.00495
Chromium	0.00469	0.00536	0.00662
Chromium (IV)	0.00094	0.00107	0.00066
Cobalt	0.02621	0.02993	0.03698
Copper	0.06254	0.07140	0.08823
Fluoride	0.00140	0.00160	0.03781
Formaldehyde	0.09046	0.10328	0.12762
Hydrogen Chloride	0.14222	0.16238	0.20065
Lead	0.00625	0.00714	0.00882
Manganese	0.00581	0.00663	0.00819
Mercury	0.00071	0.00082	0.00101
Molybdenum	0.01090	0.01245	0.01538
Nickel	0.28142	0.32130	0.39703
Phosphorus	0.01298	0.01482	0.01831
Selenium	0.00831	0.00948	0.01172
Tin	0.07371	0.08415	0.10399
Zinc	0.01495	0.01707	0.02109

ATTACHMENT 10

Revised Tables 3-3, H-1 and H-2

Table 3-3.
PSD Source Applicability Analysis for Clewiston Boiler No. 7

Regulated Pollutant	Baseline¹ Emissions (TPY)	Boilers No. 1-4 and 7 Proposed Project Emissions (TPY)	Net Change (TPY)	Significant Emission Rate (TPY)	PSD Applies
Particulate (TSP)	750	1,007	257	25	Yes
Particulate (PM10)	750	1,007	257	15	Yes
Sulfur Dioxide	366	801	435	40	Yes
Nitrogen Oxides	709	1,374	665	40	Yes
Carbon Monoxide	28,425	44,907	16,482	100	Yes
VOC	837	1,157	320	40	Yes
Lead	0.00058	0.00683	0.00625	0.6	No
Mercury	0.00007	0.00078	0.00071	0.1	No
Beryllium	0.00009	0.00102	0.00093	0.0004	Yes
Fluorides	0.00013	0.00153	0.00140	3	No
Sulfuric Acid Mist	37	80	43	7	Yes
Total Reduced Sulfur	--	--	0	10	No
Asbestos	--	--	0	0.007	No
Vinyl Chloride	--	--	0	0	No

¹ See Attachment H for the derivation of baseline emissions.

TABLE H-1. ACTUAL EMISSIONS FOR BOILERS No. 5 AND 6, 1991-1992

	Activity Factor TPY Wet Feed	PM Emission Ton/yr	SO ₂ Emission Ton/yr	NO _x Emission Ton/yr	CO Emission Ton/yr	VOC Emission Ton/yr
Boiler No.5	42,522	26.7	0.0	25.5	42.5	42.5
Boiler No.6	50,458	28.6	0.0	30.2	50.5	50.5
Total TPY	92,980	55.3	0.0	55.7	93.0	93.0

TABLE H-2. CLEWISTON MILL PSD BASELINE ANNUAL EMISSIONS (TON/YEAR)

FUEL OIL COMBUSTION

	Avg. MMBtu/hr	Day/yr	Mgal/yr	PM	SO ₂	NO _x	CO	VOC
Boiler No.1	3.49	160	89.23	0.67	17.51	2.45	0.22	0.01
Boiler No.2	3.38	160	86.51	0.65	16.98	2.38	0.22	0.01
Boiler No.3	1.91	160	48.97	0.37	9.61	1.35	0.12	0.01
Boiler No.4	1.93	160	49.33	0.37	5.81	1.36	0.12	0.01
Total TPY			274	2.1	49.9	7.5	0.7	0.0

	Be	F	Pb	Hg
Boiler No.1	2.81E-05	4.20E-05	1.87E-04	2.14E-05
Boiler No.2	2.73E-05	4.07E-05	1.82E-04	2.08E-05
Boiler No.3	1.54E-05	2.30E-05	1.03E-04	1.18E-05
Boiler No.4	1.55E-05	2.32E-05	1.04E-04	1.18E-05
Total TPY	8.63E-05	1.29E-04	5.76E-04	6.58E-05

BAGASSE COMBUSTION

	Avg. MMBtu/hr	Day/yr	Wet Feed TPY	PM	SO ₂	NO _x	CO	VOC
Boiler No.1	415	160	199,054	199.1	49.8	119.4	7,166	199.1
Boiler No.2	402	160	192,982	193.0	48.2	115.8	6,947	193.0
Boiler No.3	220	160	105,569	126.7	26.4	63.3	3,800	105.6
Boiler No.4	603	160	289,384	173.6	192.2	346.9	10,418	246.0
Boiler No.5	97	147	42,522	26.7	0.0	25.5	42.5	42.5
Boiler No.6	112	151	50,458	28.6	0.0	30.3	50.5	50.5
Total TPY			879,968	748	317	701	28,425	837

TOTAL COMBUSTION EMISSIONS

	Avg. MMBtu/hr	PM	SO ₂	NO _x	CO	VOC
Boiler No.1	418	200	67	122	7,166	199
Boiler No.2	405	194	65	118	6,948	193
Boiler No.3	222	127	36	65	3,801	106
Boiler No.4	605	174	198	348	10,418	246
Boiler No.5	97	27	0	26	43	43
Boiler No.6	112	29	0	30	51	50
Total TPY		750	366	709	28,425	837

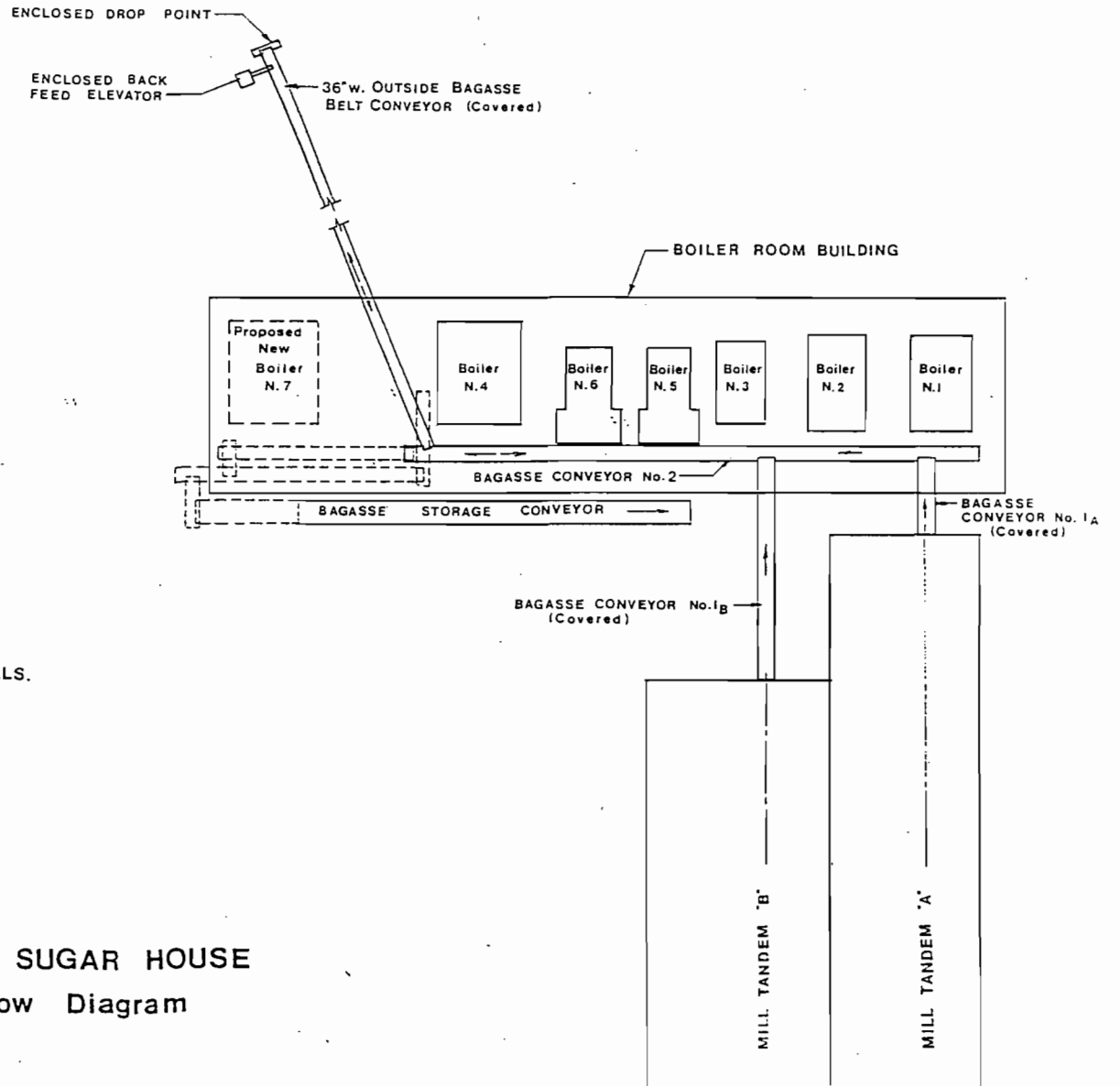
ATTACHMENT 11

Precautions to Minimize Dust Emissions

Reasonable Precautions Taken To Date At US Sugar Clewiston Mill To Minimize Dust Emissions From Bagasse

To minimize fugitive or unconfined emissions from bagasse handling in conveyors and storage systems, U.S. Sugar Corporation has taken the following reasonable precautions at its Clewiston mill:

1. Belt Conveyors - Belt conveyors, or that portion of belt conveyors used for bagasse handling and located outside of mill buildings, are enclosed or properly covered with seals.
2. Drag Conveyors - Drag conveyors, or that portion of drag conveyors used for bagasse handling and located outside of mill buildings, are equipped with sideboards or other structures to enclose or cover the sides of the conveyor.
3. Transfer Points - All transfer points, or conveyor systems (belt or drag) used for bagasse handling and located outside of mill buildings, are enclosed or covered.
4. End of Conveyor - The drop point at the end of any bagasse handling conveyor system is designed and equipped with either: (1) Devices that will reduce the distance of free fall from the drop point (such as boot and chute arrangement with a canvas or similar material "split skirt"), or (2) A windbreaker system that will protect the drop point from wind.
5. Payloader Drop Point to Backfeed - The drop point for payloaders to backfeed the bagasse conveyor/elevator system is located inside an enclosure with walls and roof to provide a windbreak.

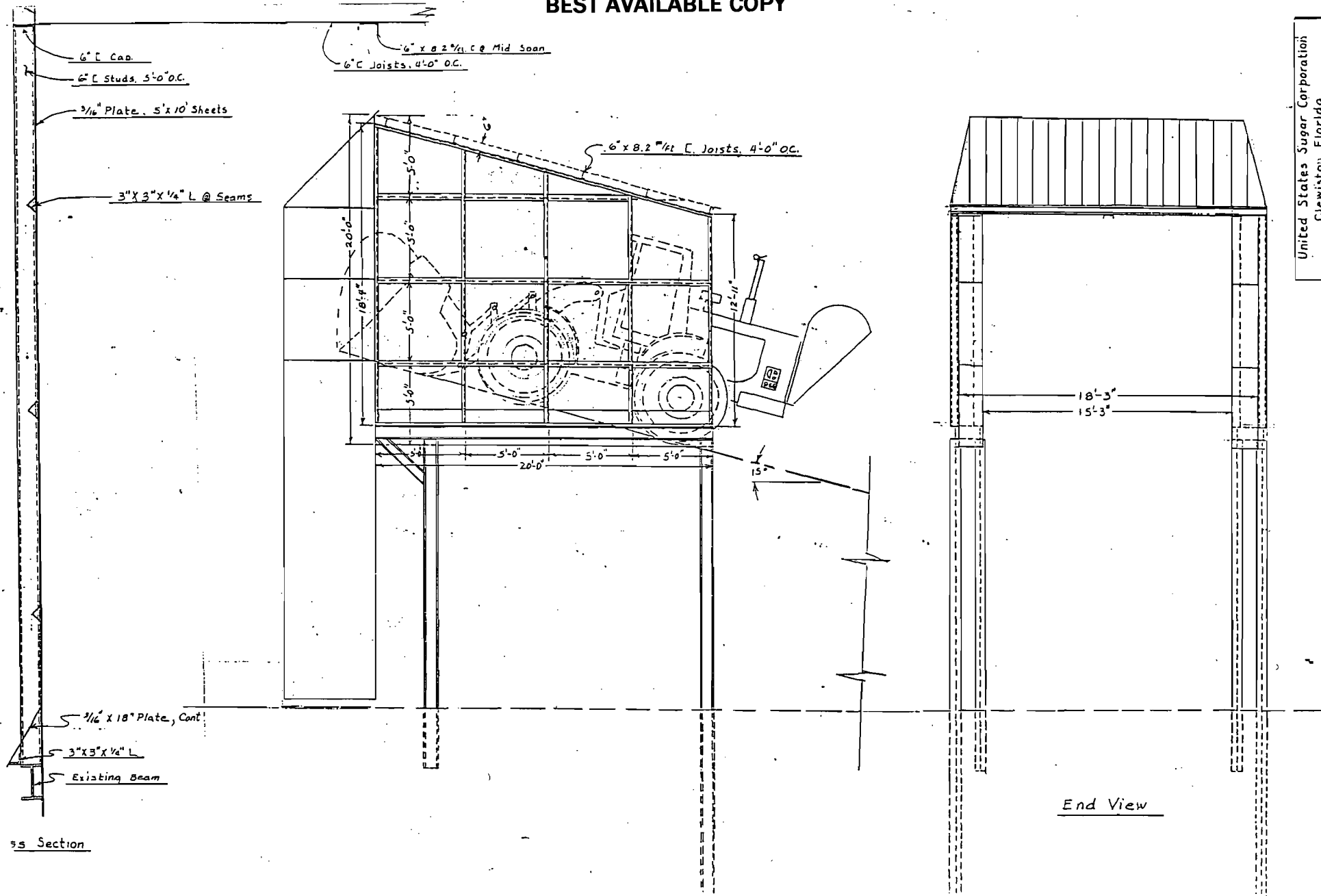


Notes:

- 1: ALL BOILERS BAGASSE FEEDERS ARE ENCLOSED.
- 2: ALL DROP POINTS HAVE CHUTES AND WALLS.
- 3: ALL ADDED EXCHANGE POINTS WILL HAVE CHUTES AND WALLS.

CLEWISTON SUGAR HOUSE
Bagasse Flow Diagram

BEST AVAILABLE COPY



United States Sugar Corporation
Clewiston, Florida
Hood For Bagasse Back Feed Conv.
Clewiston Sugar House
Dr. By: B.B.H. Scale: 1/4" = 1'-0" Date: 1/20/66
Dr. No. CI-41-06-AG-188

ATTACHMENT 4

CO Emission Limit Correspondence

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121 Telex: 510-952-7753

October 8, 1990

Mr. David Knowles
Florida Department of Environmental
Regulation
2269 Bay Street
Fort Myers, Florida 33901-2896

RE: Hendry County - AP
U. S. Sugar Corporation
Clewiston Boiler No. 4
Permit AC26-126965 and
AO26-144701

Dear Mr. Knowles:

Following Mr. Philip R. Edward's request as per his letter of October 26, 1989, we are sending you Report No. 1376-A for CO Emissions from Boiler No. 4.

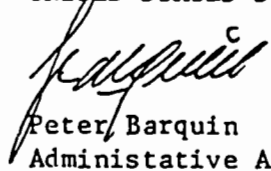
We would have wanted to make more tests in this boiler, but due to certain difficulties with the testing company and the early end of the crop due to the extensive freeze which we sustained last winter, we were unable to run a more adequate number of tests.

Results from these three (3) one (1) hour runs might not be representative of the actual range and average emissions from this boiler.

The purpose of this test as requested by Mr. Edwards is to help the Department determine a reasonable CO Emission Factor for boilers of this type. We suggest you consider and evaluate the results of the nine (9) runs carried out at our Bryant Boiler No. 5 as well, in making this determination.

Very truly yours,

UNITED STATES SUGAR CORPORATION



Peter Barquin
Administrative Ass't. to
Senior Vice President
Sugar Houses

PB:jt
Enclosures

ATTACHMENT 5

CO BACT Analysis

5.4 BACT EVALUATION FOR CO AND VOC EMISSIONS

In this section, the available control technologies capable of reducing CO and VOC emissions produced from firing bagasse and residual oil will be identified and evaluated. Potential application of these technologies as BACT for the proposed spreader-stoker boiler, rated on oil at 255 MM Btu/hr, is discussed. Table 5-8 is a summary of the potential CO and VOC control technologies presented in this section.

The EPA BACT/LAER clearinghouse has no BACT determinations for CO or VOC emission from bagasse combustors or residual oil combustion in boilers. Historically, BACT and LAER emission limits for CO and VOC on bagasse and oil-fired boilers have been based on the use of good combustion practices, rather than add-on control systems.

In bagasse-fired boilers, the fuel characteristics and the combustion practices result in CO and VOC emissions that are somewhat high, relative to fossil-fuel fired boilers. Improving combustion would likely require improving fuel quality (e.g., lowering bagasse moisture content through drying), which would make use of this waste fuel uneconomical and result in higher fossil fuel usage. The use of FGR could theoretically reduce CO and VOC emissions by reburning a portion of the VOCs in the recirculated exhaust. The overall effectiveness of fluegas recirculation would be limited because:

- The extremely high particulate loading of the combustion gas and the abrasive nature of the flyash would make this system very unreliable
- This has never been applied to a bagasse combustor
- This technology would not be economically feasible, per the analysis done for NO_x control

Post-combustion VOC controls have not been applied to bagasse-fired boilers. Such common techniques as direct-flame incineration, catalytic oxidation, and carbon absorption are also inappropriate technologies for bagasse boilers for the same reasons as above.

The only technically feasible CO and VOC control technology for bagasse-fired boilers is good combustion practices.

Because of their utility in reducing CO and VOC emissions, along with its success record in the sugar industry, **good combustion practices are proposed as BACT for emissions for the proposed boiler No. 7 when firing bagasse or oil.**

Table 5-8
Summary of Potential CO and VOC control Technologies¹

Control Technology	Typical Effic. (% CO)	Typical Effic. (% VOC)	In Service On Bagasse Combustors?	In Service On Other Combustion Sources?	Technically Feasible For This Combustor?
Direct-flame Oxidation	90-99	90-99	No	Yes	No ²
Catalytic Oxidation	90-95	90-95	No	Yes	No ³
Fluegas Recirculation	30-50%	30-50%	No	No	Yes ⁴
Good Combustion Practices	15-50	15-50	Yes	Yes	Yes

Notes:

¹ Source: Air Pollution Engineering Manual, AWMA, 1992.

² Abrasive Particulate loading to high in combustor.

³ Same as above.

⁴ See discussion under NO_x control.

For the proposed boiler No. 7, the most appropriate BACT precedent for VOC, CO and NO_x appears to be the permit for Clewiston boiler No. 4, which relies on the inherent design features of the bagasse boiler along with the appropriate operating procedures to ensure that emission will be maintained at the lowest possible level. That permit imposes no requirement for add-on control technology, and that is the approach recommended here for the U.S. Sugar Corporation Clewiston mill boiler No. 7.

5.5 BACT EVALUATION FOR SULFURIC ACID MIST EMISSIONS

Sulfuric acid mist is generated from the emissions of SO₃ when oil is combusted. Sulfur trioxide can further react with water present in the fluegas to form sulfuric acid mist. The control of acid gas emissions is primarily controlled by removing the precursor pollutants from the fluegas with either wet or semi-dry scrubbing processes. Sulfuric acid mist emissions will be therefore be controlled by reducing the amount of sulfur in the stack gases by the following methods discussed previously:

- Installation of a wet impingement scrubber for SO₂ emissions from bagasse combustion
- Use of low-sulfur fuel oil for SO₂ emissions from residual oil combustion

5.6 BACT EVALUATION FOR BERYLLIUM EMISSIONS

Beryllium emissions were estimated using EPA factors for fuel oil combustion and assuming no removal in the scrubbing system, as there are no published factors for beryllium removal efficiency in the scrubber. Beryllium emissions are primarily controlled by removing the gaseous or particulate metal from the fluegas with either wet or semi-dry scrubbing processes. Beryllium emissions will be therefore be controlled for this project by installation of a wet impingement scrubber for PM emissions from fuel oil combustion.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 6, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Vice President of Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Re: U.S. Sugar Corp., Clewiston Mill Boiler No. 4

The Department acknowledges receipt of your November 30, 1994 letter granting a waiver of the 90-day time limit on processing the application for permit to increase carbon monoxide (CO) emissions from the referenced source. To justify an emission rate higher than 3.5 lbs CO/MMBtu for this boiler, we request you furnish the following information:

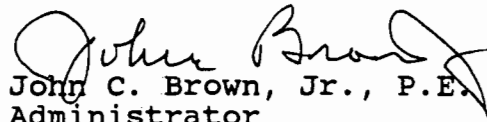
- o Please provide the make, model, year of manufacture and furnace volume for Boilers 3 and 6 at Osceola Farms, Boiler 5 at Atlantic Sugar and U.S. Sugar Boiler No. 4 to the extent that the information wasn't provided with your application. Address the difference in the boilers that result in the variability of the test data.
- o If available, please provide copies of the most recent stack tests for each boiler that was conducted to provide the basis for the 3.5 lb/MMBtu and 6.5 lb/MMBtu CO limits for Boilers No. 3 and No. 6, respectively, at Osceola farms. Also provide the most recent test for Boiler No. 5 at Atlantic Sugar. If these and the data requested above are not available, we can request the data directly from Atlantic Sugar and Osceola. That would create a further delay in evaluating your permit application.
- o Provide all the stack test data that was used as a basis for your request for the new emissions limit for Boiler No. 4, in the application dated April 7, 1994.

Mr. Murray T. Brinson
December 6, 1994
Page Two

- o It is noted that the U.S. Sugar Corporation's Clewiston Boiler No. 4 with half the furnace volume is operated at a maximum heat input rate essentially equivalent to Clewiston Boiler No. 7, the Okeelanta Cogeneration boilers and the Osceola Cogeneration boilers. This suggests that the Btu input rate is too high (that more bagasse is fed into the boiler than can result in good combustion). Please explain and provide any information available for stack tests at lower input rates.

The Department will consider any information provided by U.S. Sugar Corporation in a timely manner prior to issuing an intent on application to increase CO emissions from Boiler No. 4. If you have any questions on this matter, please write to me or call Martin Costello at (904) 488-1344.

Sincerely,



John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JCB/WH/bjb

cc: David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
David Buff, KBN

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Murray T. Brinson Vice President of Sugar Processing United States Sugar Corporation Post Office Drawer 1207 Clewiston, Florida 33440		4a. Article Number Z 751 860 006	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery DEC 12 1994	
5. Signature (Addressee)		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) <i>USSC Raymond Paul...</i>			
PS Form 3811, December 1991 U.S. GPO: 1992-323-402 DOMESTIC RETURN RECEIPT			

Thank you for using Return Receipt Service.

Z 751 860 006



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sent to Mr. Murray T. Brinson	
Street and No. Post Office Drawer 1207	
P.O., State and ZIP Code Clewiston, Florida 33440	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 12/06/94 U.S. Sugar Corp., Clewiston Mill Boiler No. 4	

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121

November 30, 1994

RECEIVED
DEC 1 1994

Bureau of
Air Regulation

Mr. Clair Fancy, P.E.
Bureau Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

RE: U S. Sugar Corporation - Boiler No. 4 - Waiver
Permit Application AC26-126965 & AO-223258

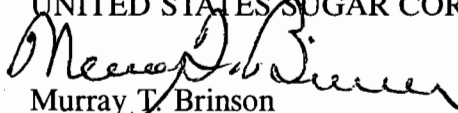
Dear Mr. Fancy:

Enclosed please find a duly-signed waiver of the 90-day time limit in which DEP is normally required to approve or deny an application to modify a construction permit.

We understand that DEP expects to complete its review of all outstanding permit modification issues as soon as practicable and issue its determination by January 17, 1995.

Very truly yours,

UNITED STATES SUGAR CORPORATION



Murray T. Brinson
Vice President
Sugar Processing

MTB:jt

Attachment

cc: Mr. Willard Hanks, DEP Tallahassee
Mr. David Knowles
Mr. Robert Van Voorhees
Mr. Donald Griffin

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.50(2) AND 403.0876, FLORIDA STATUTES

Permit Application No: AC26-126965 & AO26-223258

Applicant's Name: UNITED STATES SUGAR CORPORATION


The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes (F.S.), and fully understands the applicant's rights under the section.

With regard to the above referenced permit application, the applicant hereby with full knowledge and understanding of its rights under Sections 120.60(2) and 403.0876, F.S., waives the right under Sections 120.60(2) and 403.0876, F.S., to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day period prescribed in Sections 120.60(2) and 403.0876, F.S. Said waiver is made freely and voluntarily by the applicant, in its self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 17th day of January 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.

11/30/94
Date


Murray T. Brinson
Vice President, Sugar Processing
United States Sugar Corporation

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.50(2) AND 403.0876, FLORIDA STATUTES

Permit Application No:

AC26-126965 & AO26-223258

Applicant's Name:

UNITED STATES SUGAR CORPORATION


The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes (F.S.), and fully understands the applicant's rights under the section.

With regard to the above referenced permit application, the applicant hereby with full knowledge and understanding of its rights under Sections 120.60(2) and 403.0876, F.S., waives the right under Sections 120.60(2) and 403.0876, F.S., to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day period prescribed in Sections 120.60(2) and 403.0876, F.S. Said waiver is made freely and voluntarily by the applicant, in its self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 17th day of January 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.

11/30/94
Date


Murray T. Brinson
Vice President, Sugar Processing
United States Sugar Corporation

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121

November 30, 1994

Mr. Clair Fancy, P.E.
Bureau Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

RE: U S. Sugar Corporation - Boiler No. 4 - Waiver
Permit Application AC26-126965 & AO-223258

Dear Mr. Fancy:

Enclosed please find a duly-signed waiver of the 90-day time limit in which DEP is normally required to approve or deny an application to modify a construction permit.

We understand that DEP expects to complete its review of all outstanding permit modification issues as soon as practicable and issue its determination by January 17, 1995.

Very truly yours,

UNITED STATES SUGAR CORPORATION

Murray J. Brinson
Murray J. Brinson
Vice President
Sugar Processing

MTB:jt

Attachment

cc: Mr. Willard Hanks, DEP Tallahassee
Mr. David Knowles
Mr. Robert Van Voorhees
Mr. Donald Griffin

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 2
To <i>Mr. C. Fancy</i>	From <i>MT Brinson</i>	
Co. <i>FL DEP</i>	Co. <i>USSC</i>	
Dept. <i>Env. Air Reg.</i>	Phone # <i>813/983-8121</i>	
Fax # <i>904/422-6479</i>	Fax # <i>813/983-4255</i>	



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 22, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Vice President of Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Attached is a copy of the Technical Evaluation and Preliminary Determination and proposed BACT determination and permit to increase the allowable carbon monoxide emission limit for the Clewiston Mill Boiler No. 4.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. John Brown of the Department's Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/WH/wh

Attachment

cc: David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
David Buff, P.E., KBN

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121 Telex: 510-952-7753

September 08, 1994

John C. Brown Jr., P.E., Administrator
Air Permitting and Standards
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

SEP 12 1994

**Bureau of
Air Regulation**

RE: U.S. Sugar Corp., Clewiston Mill Boiler No. 4

Dear Mr. Brown,

In response to your letter of July 18, 1994, the United States Sugar Corporation (U.S. Sugar) submits the enclosed letter from David Buff of KBN providing information relating to revision of the carbon monoxide (CO) emission limits for Clewiston Boiler No. 4. The information enclosed should be sufficient to allow the Department to complete the administrative process to modify or amend the permit to reflect expected CO emissions for this boiler, as the Department has done for a number of other bagasse boilers.

The Department initiated this administrative process in 1989 in conjunction with the U.S. Environmental Protection Agency Region 4 (EPA Region 4) and the sugar mill operators as a mutually acceptable means for adjusting CO emission factors and amending permit emission levels. The need for an adjustment process was identified during discussions with the Department and with EPA Region 4 in response to test data and test reports on bagasse boilers showing that the emission factor for CO that had been previously used throughout the sugar industry was low when compared with the results of tests conducted using EPA Method 10. Adjustments have been completed for most of the other boilers in the industry. EPA Region 4 has concurred in the use of this adjustment process for modification of the CO emission levels and has accepted the permit amendments adopted for the other bagasse boilers.

To provide a basis for modification, the Department requested U.S. Sugar and other sugar mill operators to collect CO emission data during the 1989-90 crop season and to submit the data as the basis for establishing new emission levels. U.S. Sugar submitted its first test data to the Department on October 8, 1990. U.S. Sugar has supplemented the initial 1989-90 crop data by submitting the results of substantial additional testing conducted during the 1990-91, 1991-92, 1992-93, and 1993-94 crop seasons. These data show the average CO emissions based on the

John C. Brown, Jr., P.E.
Administrator
August 30, 1994
Page 2

average of all test data for Clewiston Boiler No. 4 to be approximately 6.7 lb/MMBtu.

On June 27, 1994, and in the enclosed letter from David Buff of KBN, U.S. Sugar has also submitted information on the potential for controlling CO emissions from bagasse boilers. This information, though not previously obtained from others requesting CO emission level adjustments, confirms that, even today, good combustion practices constitute the best available control technology (BACT) for CO emissions from bagasse boilers. Accordingly, this information serves to confirm the validity of the Department's 1985 determination for Clewiston Boiler No. 4 that "add on controls" for CO were not warranted, and the Department's consistent determination for other bagasse boilers that good combustion practices constitute BACT for CO. There is no basis for concluding that any other BACT determination could have or should have been made at that time. Nor is there any basis for reopening that decision at this time.

Assuming that the Department does not intend to impose any different standard of process on this boiler than it has consistently applied and followed to date in making CO emission level adjustments for each of the other bagasse boilers, the information submitted by U.S. Sugar provides a sound and sufficient basis on which to amend the CO emission level for Clewiston Boiler No. 4.

More over, the new modeling results developed by KBN confirm that operation of the Clewiston boilers will not result in exceedance of the national ambient air quality standards for CO, and even these results are very conservative since they are based on background CO levels many times those ever likely to occur in the vicinity of the Clewiston Mill. This is true because the background level used in the original modeling was taken from CO monitors in Palm Beach County (see Attachment A to permit modification application at page 6-22), where the motor vehicle population (the principal source of CO emissions) is more than 25 times greater than the motor vehicle population in Hendry County.

With the enclosed information, the Department now has all of the information necessary to complete the permit amendment process to establish reasonable CO emission levels for Clewiston Boiler No. 4 as the Department has done for the other bagasse boilers that have completed this administrative revision process. To complete the process, U.S. Sugar requests that specific condition No. 13 in permit AC 26-126965 be revised to read as follows:

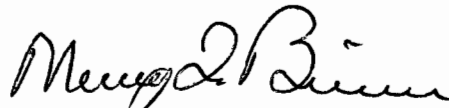
- "13. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of the Operation

John C. Brown, Jr., P.E.
Administrator
August 30, 1994
Page 3

and Maintenance plan dated June 29, 1993. Emissions of carbon monoxide shall not exceed 6.7 lb/million BTU for the crop season as determined by EPA Method 10. Emissions of nonmethane volatile organic compounds shall not exceed 1.7 lb/ton of wet bagasse as determined by EPA Method 25A. in conjunction with EPA Method 18. These test methods are described in 40 C.F.R. 60, Appendix A. Compliance tests for these pollutants will not be required if the visible emissions from boiler No. 4 are below 20 percent opacity."

Please contact me or Don Griffin at (813) 983-8121 if you have any questions about the enclosed information. We look forward to working with you and our staff to assist in your review and approval of this application

Very truly yours,



Murray T. Brinson
Vice President, Sugar Houses

MTB:ph
Enclosure

cc: Willard M. Hanks, FDEP
Cleve G. Holladay, FDEP
David M. Knowles, P.E. FDEP SD
William Congdon, Esq. FDEP
Peter Briggs
Don Griffin
David Buff, P.E. KBN
Robert Van Voorhees, Esq, Bryan Cave



August 31, 1994

Mr. John C. Brown, Jr., P.E.
 Administrator, Air Permitting and Standards
 Florida Department of Environmental Protection
 2600 Blair Stone Road
 Tallahassee, FL 32399-2400

Re: U.S. Sugar Clewiston Mill Boiler No. 4
 Permit AO26-223258

Dear Mr. Brown:

United States Sugar Corporation (U.S. Sugar) has received the Florida Department of Environmental Protection's (Department's) letter dated July 19, 1994, requesting additional information for the above referenced application. KBN Engineering and Applied Sciences, Inc. (KBN), has assisted U.S. Sugar in developing responses to these questions. On behalf of U.S. Sugar, responses to each of the Department's comments are provided below in the same order as they appear in the July 19 letter.

Based on discussions with the potential vendors for the proposed Boiler No. 7 at Clewiston and the vendor for the new Okeelanta and Osceola cogeneration boilers, these new boilers are designed to achieve the 0.35 lb/MMBtu level for carbon monoxide (CO) by increasing the residence time of the flue gases in the boiler. Increasing the residence time of the flue gases in the boiler allows combustion to proceed to a more complete state (i.e., greater carbon burnout). This results in lower CO emissions. This design is reflected in the design heat release rates for these new boilers compared to the existing Clewiston Boiler No. 4:

Boiler	Maximum Heat Input (MMBtu/hr)	Furnace Volume (ft ³)	Heat Release Rate (Btu/hr-ft ³)
Clewiston Boiler 7	738	44,925	16,427
Okeelanta Cogen Boilers	715	39,917	17,912
Osceola Cogen Boilers	665	35,945	18,500
Clewiston Boiler 4	707	21,245	33,278

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Clewiston Boiler No. 4 has a heat release rate that is nearly double that of the new or proposed boilers. The heat release rate is a direct measure of the flue gas residence time within the boiler (i.e., the lower the heat release rate, the longer the residence time). It is noted that none of the new boilers have yet been constructed. No operating bagasse boiler has achieved a CO emission rate of 0.35 lb/MMBtu.

Based on information provided by the boiler vendors, no decrease in CO emissions could be anticipated from retrofitting a new bagasse feed or air distribution system on Boiler No. 4. The bagasse feed/air distribution system on the new boilers has little or no effect on CO emissions. The low CO emissions result from the increased residence time of the flue gases in the boiler.

Capital cost information was presented in the June 27 letter to the Department. The capital costs of a retrofit flue gas recirculation (FGR) application on Boiler No. 4 were estimated at \$1.4 million. The annual operating costs would be approximately \$1.0 million per year. In addition to this extremely high cost, operational difficulties would be expected with such a retrofit installation and the CO reduction achievable by an FGR system is not known. Potentially no reduction would be realized. Such a system has never been attempted on a bagasse boiler.

CO oxidation catalyst system vendors have provided information which indicates no application of a catalytic oxidation system exists for bagasse-fired boilers such as Boiler No. 4. Catalyst systems require elevated temperatures (> 500 °F) and low particulate matter (PM) loading (< 0.1 lb/MMBtu). There is no point along the exhaust gas flow for Boiler No. 4 where these conditions are met. The particulate loading in the flue gas stream prior to the scrubber is much too high to allow an oxidation catalyst system to be implemented. The flue gas temperature after the scrubber is much too low and contains too much moisture for a catalyst system. Therefore, as stated in the June 27 response, a CO oxidation catalyst is considered technically infeasible for a bagasse boiler.

In regard to bagasse drying systems, it is stressed that bagasse boilers are already designed to dry the bagasse prior to combustion. This occurs in the boiler as the fuel exits from the feeders and passes down through the boiler and onto the grate or boiler floor. There are no known add-on bagasse drying systems currently in use in the United States today. Any such system would have limited ability to reduce moisture content and would be expected to have minimal effect upon CO emissions. As discussed above, the major factor affecting CO emissions is residence time of the flue gases in the boiler. Due to the unproven nature of this technology, the unavailability of equipment, and the uncertainty of any CO reduction, this alternative is considered technically infeasible.

The Department should consider in its evaluation that best available control technology (BACT) is based on technologies and costs that other similar sources have implemented as BACT. No other existing

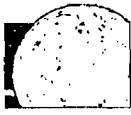


bagasse boiler in Florida has ever been required to implement add-on or retrofit technology as BACT for CO emissions. The three other CO emission level revisions issued to date for existing bagasse boilers have specified CO limits up to 6.5 lb/MMBtu with the use of good combustion practices for the same type boiler. U.S. Sugar is relying on the same BACT technology and requesting similar limits as these previous BACT determinations. It would be unfair to require U.S. Sugar to implement costly controls, particularly considering the unproven nature of any such controls on bagasse boilers. The Department should also consider in its evaluation that based on information presented in the June 27 letter the average CO emissions from Boiler No. 4 are approximately 6.7 lb/MMBtu. This is lower than the requested maximum limit of 9.0 lb/MMBtu. However, this higher short-term limit is necessary in order to account for the normal fluctuations in emissions experienced by bagasse boilers.

In order to address the ambient CO impact concerns raised by the Department, the following approach was used to estimate maximum CO impacts in the vicinity of the Clewiston mill. Maximum 1-hour and 8-hour CO impacts due to the U.S. Sugar Clewiston mill have already been determined in the prevention of significant deterioration (PSD) permit application for Clewiston Boiler No. 7. In this application, a very conservative CO background concentration was used and added to predicted model results to predict total ambient impacts (for convenience, Table 6-7 from the Clewiston Boiler No. 7 permit application is attached). The maximum predicted CO impacts from the Clewiston Boiler No. 7 application were 13,505 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), 1-hour average, and 7,720 $\mu\text{g}/\text{m}^3$, 8-hour average.

The background CO concentrations included in the PSD permit application for Boiler No. 7 were obtained from a SLAMS monitor located in West Palm Beach. The background concentrations provided were added to the modeled CO sources for comparison to the Ambient Air Quality Standards (AAQS). The 8-hour non-modeled background concentration was 4,600 $\mu\text{g}/\text{m}^3$ [4 parts per million (ppm)], which is nearly half of the ambient standard of 10,000 $\mu\text{g}/\text{m}^3$ (9 ppm), and the 1-hour background concentration was 7,400 $\mu\text{g}/\text{m}^3$. Background CO concentrations are primarily due to vehicular traffic. The vehicle traffic density in the West Palm Beach area is much greater than that in the Clewiston area. The registered vehicle population in Palm Beach County (872,476 vehicles) is approximately 25 times greater than the number of registered vehicles in Hendry County (32,615 vehicles). Therefore, the background CO concentrations used for Boiler No. 7 are very conservative.

To demonstrate that the impact of all bagasse boilers emitting CO at 9.0 lb/MMBtu will not cause or contribute to exceedances of the ambient air quality standards, these other bagasse boilers were modeled for receptors surrounding the Clewiston mill, and the impacts were then added directly to the total CO impacts presented in the Clewiston Boiler No. 7 application. This is extremely conservative, since the Boiler No. 7 impacts already reflect some contribution from other bagasse boilers, as well as the very conservative background concentration.



A dispersion modeling analysis was performed to estimate the maximum worst-case modeled source CO concentrations in the vicinity of the Clewiston mill due to all other non-U.S. Sugar Clewiston bagasse boilers. All bagasse boiler CO emissions were conservatively assumed to be 9.0 lb/MMBtu, except for three boilers which have specific CO emission limits in their permits (two boilers at Osceola Farms and one at Atlantic Sugar). For these three boilers, the specified permit levels were used. For each of the other bagasse boilers, CO emissions were determined by taking the maximum heat input times the CO emission rate in lb/MMBtu. A listing of the bagasse boilers and the CO emission rates is presented in Table 1.

Maximum predicted impacts were determined with a 5-year meteorological data record from West Palm Beach. Impacts were obtained at a polar receptor grid which included receptors every 10 degrees of azimuth and at ring distances of 300, 600, 900, 1,200, 1,500 and 2,000 m from the Clewiston mill. Impacts were determined for time periods during which the other sugar mills are operational (i.e., October 1 through April 30). The highest predicted 1- and 8-hour CO concentrations due to all non-Clewiston bagasse boilers based on this analysis are 3,876 and 1,068 $\mu\text{g}/\text{m}^3$, respectively (refer to attached modeling results). When added directly to the predicted total CO impacts from the Boiler No. 7 application, the total CO impacts are 17,381 $\mu\text{g}/\text{m}^3$, 1-hour average and 8,788 $\mu\text{g}/\text{m}^3$, 8-hour average. These totals are below the ambient standards of 40,000 $\mu\text{g}/\text{m}^3$, 1-hour average and 10,000 $\mu\text{g}/\text{m}^3$, 8-hour average. This analysis demonstrates that Clewiston Boiler No. 4, when emitting CO at 9.0 lb/MMBtu in conjunction with all other bagasse boilers emitting at 9.0 lb/MMBtu (or permitted rate, if applicable) and background sources, will not cause or contribute to exceedances of the ambient CO standards.

These responses should provide all of the information necessary to complete your review and approval of the PSD permit modification for Clewiston Boiler No. 4. A summary of the modeling results is attached. A diskette containing the input and output files are being sent to Cleve Holliday under separate cover. If you have any questions concerning this information, please call (904) 331-9000.

Sincerely,

David A. Buff
Principal Engineer
Florida P.E. #19011

SEAL

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Table 6-7
Predicted Short-Term Crop Season Impacts for the
Ambient Air Quality Analysis

Pollutant	Averaging Time	Year	Background Concentration ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Total Concentration ($\mu\text{g}/\text{m}^3$)	AAQS ($\mu\text{g}/\text{m}^3$)
SO ₂	3-Hour	1985	53	374	427	1300
		1986		404	457	
		1987		440	493	
		1988		379	432	
		1989		407	460	
	24-Hour	1985	21	150	171	260
		1986		128	149	
		1987		159	180	
		1988		173	194	
		1989		140	161	
PM10	24-Hour ¹	1985	53	69.8	123	150
		1986		85.7	139	
		1987		69.5	123	
		1988		107	160	
				(HSH) 107	160	
				(HTH) 81.3	134	
		1989		75.7	131	
CO	1-Hour	1985	7,400	6,105	13,505	40,000
		1986		6,481	13,881	
		1987		5,682	13,082	
		1988		6,376	13,776	
		1989		6,190	13,590	
	8-Hour	1985	4,600	3,120	7,720	10,000
		1986		2,458	7,058	
		1987		2,983	7,583	
		1988		3,124	7,724	
		1989		3,270	7,870	

¹ Reported PM10 concentrations are the maximum predicted concentrations with the exception of 1988 HSH and 1988 highest-third-highest (HTH) concentrations.

Table 1. Summary of Non-U.S. Sugar Clewiston Source Data Used in Modeling Analysis

Facility/Source	Heat Input Rate (MMBtu/Hr)	CO Emission Rate			Stack							
		(lb/MMBtu)	(lb/hr)	(g/s)	Height		Diameter		Temp		Velocity	
					(m)	(ft)	(m)	(ft)	(K)	(F)	(m/s)	(ft/s)
Okeelanta												
Boiler 4	181.42	9.00	1,632.78	205.73	22.90	75.13	2.29	7.51	333.20	140.04	7.36	24.15
Boiler 5	235.51	9.00	2,119.60	267.07	22.90	75.13	2.29	7.51	333.20	140.04	12.07	39.60
Boiler 6	239.95	9.00	2,159.52	272.10	22.90	75.13	2.29	7.51	334.30	142.02	8.74	28.63
Boiler 10	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	334.30	142.02	10.35	33.96
Boiler 11	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	341.50	154.98	9.89	32.45
Boiler 12	302.45	9.00	2,722.06	342.98	22.90	75.13	2.29	7.51	329.80	133.92	8.16	26.77
Boiler 14	302.45	9.00	2,722.06	342.98	22.90	75.13	2.29	7.51	333.20	140.04	8.28	27.17
Boiler 15	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	332.00	137.88	10.23	33.56
Osceola												
Boiler 2	280.00	9.00	2,520.00	317.52	25.00	82.03	1.52	4.99	341.00	154.08	18.10	59.39
Boiler 3	292.00	3.50	1,021.98	128.77	21.90	71.85	1.93	6.33	341.00	154.08	14.50	47.57
Boiler 4	280.00	9.00	2,520.00	317.52	25.00	82.03	1.83	6.00	341.00	154.08	18.80	61.68
Boiler 5	330.00	9.00	2,970.00	374.22	25.00	82.03	1.52	4.99	341.00	154.08	14.90	48.89
Boiler 6	379.00	6.50	2,463.49	310.40	27.40	89.90	1.93	6.33	341.00	154.08	14.90	48.89
Sugar Cane Growers												
Boiler 1	285.76	9.00	2,571.83	324.05	24.40	80.06	1.40	4.59	344.00	159.48	11.40	37.40
Boiler 2	285.76	9.00	2,571.83	324.05	24.40	80.06	1.40	4.59	344.00	159.48	11.40	37.40
Boiler 3	228.64	9.00	2,057.78	259.28	24.40	80.06	1.60	5.25	344.00	159.48	15.60	51.18
Boiler 4	571.67	9.00	5,145.00	648.27	33.50	109.91	1.63	5.35	344.00	159.48	10.60	34.78
Boiler 5	419.20	9.00	3,772.78	475.37	24.40	80.06	1.40	4.59	344.00	159.48	15.20	49.87
Boiler 8	504.00	9.00	4,536.03	571.54	47.20	154.86	3.05	10.01	344.00	159.48	10.60	34.78
US Sugar Corp, Bryant												
Boiler 1	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43
Boiler 2	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43
Boiler 3	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43
Boiler 5	671.00	9.00	6,038.97	760.91	42.70	140.10	2.90	9.51	345.00	161.28	11.49	37.70
Atlantic Sugar												
Boiler 1	214.00	9.00	1,926.03	242.68	18.90	62.01	1.92	6.30	346.00	163.08	12.70	41.67
Boiler 2	214.00	9.00	1,926.03	242.68	18.90	62.01	1.92	6.30	342.00	155.88	10.90	35.76
Boiler 3	260.00	9.00	2,340.00	294.84	21.90	71.85	1.83	6.00	341.00	154.08	17.50	57.42
Boiler 4	275.00	9.00	2,475.00	311.85	18.30	60.04	1.83	6.00	344.00	159.48	15.00	49.22
Boiler 5	252.65	6.50	1,642.22	206.92	27.40	89.90	1.68	5.51	339.00	150.48	15.70	51.51
Talisman Sugar												
Boiler 4	224.00	9.00	2,016.03	254.02	21.30	69.89	1.59	5.22	336.00	145.08	22.90	75.13
Boiler 5	224.00	9.00	2,016.03	254.02	21.30	69.89	1.59	5.22	336.00	145.08	22.90	75.13
Boiler 6	400.00	9.00	3,600.00	453.60	22.90	75.13	3.05	10.01	361.00	190.08	9.10	29.86

CO MODELING RESULTS

ALL NON-CLEWISTON BAGASSE BOILERS

BEST AVAILABLE COPY

SO SRCPARAM OSCE03	128.77	21.9	341.0	14.50	1.93
SO SRCPARAM OSCE04	317.52	25.0	341.0	18.80	1.83
SO SRCPARAM OSCE05	374.22	25.0	341.0	14.90	1.52
SO SRCPARAM OSCE06	310.40	27.4	341.0	14.90	1.93
** SUGAR CANE GROWERS MILL BOILERS 1,2,3,4,5,8 AT 9.0 LB/MMBTU					
SO SRCPARAM SCGRW12	648.10	24.4	344.0	11.40	1.40
SO SRCPARAM SCGRW3	259.28	24.4	344.0	15.60	1.60
SO SRCPARAM SCGRW4	648.27	33.5	344.0	10.60	1.63
SO SRCPARAM SCGRW5	475.37	24.4	344.0	15.20	1.40
SO SRCPARAM SCGRW8	571.54	47.2	344.0	10.60	3.05
** US SUGAR CORP - BRYANT MILL BOILERS 1,2,3,5 AT 9.0 LB/MMBTU					
SO SRCPARAM USBRY123	1309.77	19.8	342.0	36.40	1.64
SO SRCPARAM USBRY4	760.91	42.7	345.0	11.49	2.90
** ATLANTIC SUGAR BOILERS 1,2,3,4 AT AT 9.0 LB/MMBTU, BLR 5 AT 6.5 LB/MMBTU					
SO SRCPARAM ATLSUG1	242.68	18.9	346.0	12.70	1.92
SO SRCPARAM ATLSUG2	242.68	18.9	342.0	10.90	1.92
SO SRCPARAM ATLSUG3	294.84	21.9	341.0	17.50	1.83
SO SRCPARAM ATLSUG4	311.85	18.3	344.0	15.00	1.83
SO SRCPARAM ATLSUG5	206.92	27.4	339.0	15.70	1.68
** TALISMAN SUGAR MILL BOILERS 4 TO 6 AT 9.0 LB/MMBTU					
SO SRCPARAM TALIS45	508.03	21.3	336.0	22.90	1.59
SO SRCPARAM TALIS6	453.60	22.9	361.0	9.10	3.05

SO EMISUNIT .100000E+07 (GRAMS/SEC) (MICROGRAMS/CUBIC-METER)
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 ISCST2 OUTPUT FILE NUMBER 3 :SUGCO.084
 ISCST2 OUTPUT FILE NUMBER 4 :SUGCO.085
 ISCST2 OUTPUT FILE NUMBER 5 :SUGCO.086

First title for last output file is: 1982 BACKGROUND SUGAR MILL CO IMPACTS 8/22/94
 Second title for last output file is: SUGAR MILL SEASON, RECEPTOR GRID AROUND US SUGAR - CLEWISTON

New

AVERAGING TIME	YEAR	CONC (ug/m3)	DIR (deg) or X (m)	DIST (m) or Y (m)	PERIOD ENDING (YYMMDDHH)

SOURCE GROUP ID: ALL					
HIGH 8-Hour					
	1982	1059.77	180.	2000.	82113008
	1983	793.00	210.	2000.	83013124
	1984	1067.24	200.	2000.	84042024
	1985	1067.73	170.	2000.	85111708
	1986	887.58	160.	600.	86020308
HSH 8-Hour					
	1982	1008.23	180.	2000.	82110224
	1983	652.98	250.	2000.	83100108
	1984	833.03	50.	2000.	84042608
	1985	956.94	70.	2000.	85032824
	1986	704.44	120.	1500.	86013124
HIGH 1-Hour					
	1982	3845.27	190.	2000.	82110220
	1983	3875.68	120.	2000.	83033022
	1984	3756.23	70.	2000.	84042822
	1985	3834.22	170.	2000.	85031121
	1986	3803.54	190.	2000.	86101406
HSH 1-Hour					
	1982	3423.00	210.	2000.	82110220
	1983	3479.76	110.	2000.	83033022
	1984	3002.12	90.	2000.	84042822
	1985	3718.61	70.	2000.	85022702
	1986	3307.60	150.	1500.	86112704

All receptor computations reported with respect to a user-specified origin

GRID 506100.00 2956900.00
 DISCRETE 0.00 0.00

** Source Parameter Cards:

** POINT:	SRCID	QS	HS	TS	VS	DS
**		(g/s)	(m)	(K)	(m/s)	(m)
** OKEELANTA MILL BOILERS	4,5,6,10,11,12,14,15	AT 9.0 LB/MMBTU				
SO SRCPARAM OKEEL4		205.73	22.9	333.2	7.36	2.29
SO SRCPARAM OKEEL5		267.07	22.9	333.2	12.07	2.29
SO SRCPARAM OKEEL6		272.10	22.9	334.3	8.74	2.29
SO SRCPARAM OKEEL10		285.82	22.9	334.3	10.35	2.29
SO SRCPARAM OKEEL11		285.82	22.9	341.5	9.89	2.29
SO SRCPARAM OKEEL12		342.98	22.9	329.8	8.16	2.29
SO SRCPARAM OKEEL14		342.98	22.9	333.2	8.28	2.29
SO SRCPARAM OKEEL15		285.82	22.9	332.0	10.23	2.29
** OSCEOLA MILL BOILERS	2,4,5	AT 9.0 LB/MMBTU, BLR 3 AT 3.5 LB, AND BLR 6 AT 6.5 LB/MMBTU				
SO SRCPARAM OSCE02		317.52	25.0	341.0	18.10	1.52



RECEIVED

SEP 1 1994

Bureau of
Air Regulation

August 31, 1994

Mr. John C. Brown, Jr., P.E.
Administrator, Air Permitting and Standards
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

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Clewiston Boiler No. 4 has a heat release rate that is nearly double that of the new or proposed boilers. The heat release rate is a direct measure of the flue gas residence time within the boiler (i.e., the lower the heat release rate, the longer the residence time). It is noted that none of the new boilers have yet been constructed. No operating bagasse boiler has achieved a CO emission rate of 0.35 lb/MMBtu.

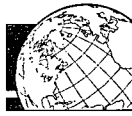
Based on information provided by the boiler vendors, no decrease in CO emissions could be anticipated from retrofitting a new bagasse feed or air distribution system on Boiler No. 4. The bagasse feed/air distribution system on the new boilers has little or no effect on CO emissions. The low CO emissions result from the increased residence time of the flue gases in the boiler.

Capital cost information was presented in the June 27 letter to the Department. The capital costs of a retrofit flue gas recirculation (FGR) application on Boiler No. 4 were estimated at \$1.4 million. The annual operating costs would be approximately \$1.0 million per year. In addition to this extremely high cost, operational difficulties would be expected with such a retrofit installation and the CO reduction achievable by an FGR system is not known. Potentially no reduction would be realized. Such a system has never been attempted on a bagasse boiler.

CO oxidation catalyst system vendors have provided information which indicates no application of a catalytic oxidation system exists for bagasse-fired boilers such as Boiler No. 4. Catalyst systems require elevated temperatures (> 500 °F) and low particulate matter (PM) loading (< 0.1 lb/MMBtu). There is no point along the exhaust gas flow for Boiler No. 4 where these conditions are met. The particulate loading in the flue gas stream prior to the scrubber is much too high to allow an oxidation catalyst system to be implemented. The flue gas temperature after the scrubber is much too low and contains too much moisture for a catalyst system. Therefore, as stated in the June 27 response, a CO oxidation catalyst is considered technically infeasible for a bagasse boiler.

In regard to bagasse drying systems, it is stressed that bagasse boilers are already designed to dry the bagasse prior to combustion. This occurs in the boiler as the fuel exits from the feeders and passes down through the boiler and onto the grate or boiler floor. There are no known add-on bagasse drying systems currently in use in the United States today. Any such system would have limited ability to reduce moisture content and would be expected to have minimal effect upon CO emissions. As discussed above, the major factor affecting CO emissions is residence time of the flue gases in the boiler. Due to the unproven nature of this technology, the unavailability of equipment, and the uncertainty of any CO reduction, this alternative is considered technically infeasible.

The Department should consider in its evaluation that best available control technology (BACT) is based on technologies and costs that other similar sources have implemented as BACT. No other existing



bagasse boiler in Florida has ever been required to implement add-on or retrofit technology as BACT for CO emissions. The three other CO emission level revisions issued to date for existing bagasse boilers have specified CO limits up to 6.5 lb/MMBtu with the use of good combustion practices for the same type boiler. U.S. Sugar is relying on the same BACT technology and requesting similar limits as these previous BACT determinations. It would be unfair to require U.S. Sugar to implement costly controls, particularly considering the unproven nature of any such controls on bagasse boilers. The Department should also consider in its evaluation that based on information presented in the June 27 letter the average CO emissions from Boiler No. 4 are approximately 6.7 lb/MMBtu. This is lower than the requested maximum limit of 9.0 lb/MMBtu. However, this higher short-term limit is necessary in order to account for the normal fluctuations in emissions experienced by bagasse boilers.

In order to address the ambient CO impact concerns raised by the Department, the following approach was used to estimate maximum CO impacts in the vicinity of the Clewiston mill. Maximum 1-hour and 8-hour CO impacts due to the U.S. Sugar Clewiston mill have already been determined in the prevention of significant deterioration (PSD) permit application for Clewiston Boiler No. 7. In this application, a very conservative CO background concentration was used and added to predicted model results to predict total ambient impacts (for convenience, Table 6-7 from the Clewiston Boiler No. 7 permit application is attached). The maximum predicted CO impacts from the Clewiston Boiler No. 7 application were 13,505 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), 1-hour average, and 7,720 $\mu\text{g}/\text{m}^3$, 8-hour average.

The background CO concentrations included in the PSD permit application for Boiler No. 7 were obtained from a SLAMS monitor located in West Palm Beach. The background concentrations provided were added to the modeled CO sources for comparison to the Ambient Air Quality Standards (AAQS). The 8-hour non-modeled background concentration was 4,600 $\mu\text{g}/\text{m}^3$ [4 parts per million (ppm)], which is nearly half of the ambient standard of 10,000 $\mu\text{g}/\text{m}^3$ (9 ppm), and the 1-hour background concentration was 7,400 $\mu\text{g}/\text{m}^3$. Background CO concentrations are primarily due to vehicular traffic. The vehicle traffic density in the West Palm Beach area is much greater than that in the Clewiston area. The registered vehicle population in Palm Beach County (872,476 vehicles) is approximately 25 times greater than the number of registered vehicles in Hendry County (32,615 vehicles). Therefore, the background CO concentrations used for Boiler No. 7 are very conservative.

To demonstrate that the impact of all bagasse boilers emitting CO at 9.0 lb/MMBtu will not cause or contribute to exceedances of the ambient air quality standards, these other bagasse boilers were modeled for receptors surrounding the Clewiston mill, and the impacts were then added directly to the total CO impacts presented in the Clewiston Boiler No. 7 application. This is extremely conservative, since the Boiler No. 7 impacts already reflect some contribution from other bagasse boilers, as well as the very conservative background concentration.



A dispersion modeling analysis was performed to estimate the maximum worst-case modeled source CO concentrations in the vicinity of the Clewiston mill due to all other non-U.S. Sugar Clewiston bagasse boilers. All bagasse boiler CO emissions were conservatively assumed to be 9.0 lb/MMBtu, except for three boilers which have specific CO emission limits in their permits (two boilers at Osceola Farms and one at Atlantic Sugar). For these three boilers, the specified permit levels were used. For each of the other bagasse boilers, CO emissions were determined by taking the maximum heat input times the CO emission rate in lb/MMBtu. A listing of the bagasse boilers and the CO emission rates is presented in Table 1.

Maximum predicted impacts were determined with a 5-year meteorological data record from West Palm Beach. Impacts were obtained at a polar receptor grid which included receptors every 10 degrees of azimuth and at ring distances of 300, 600, 900, 1,200, 1,500 and 2,000 m from the Clewiston mill. Impacts were determined for time periods during which the other sugar mills are operational (i.e., October 1 through April 30). The highest predicted 1- and 8-hour CO concentrations due to all non-Clewiston bagasse boilers based on this analysis are 3,876 and 1,068 $\mu\text{g}/\text{m}^3$, respectively (refer to attached modeling results). When added directly to the predicted total CO impacts from the Boiler No. 7 application, the total CO impacts are 17,381 $\mu\text{g}/\text{m}^3$, 1-hour average and 8,788 $\mu\text{g}/\text{m}^3$, 8-hour average. These totals are below the ambient standards of 40,000 $\mu\text{g}/\text{m}^3$, 1-hour average and 10,000 $\mu\text{g}/\text{m}^3$, 8-hour average. This analysis demonstrates that Clewiston Boiler No. 4, when emitting CO at 9.0 lb/MMBtu in conjunction with all other bagasse boilers emitting at 9.0 lb/MMBtu (or permitted rate, if applicable) and background sources, will not cause or contribute to exceedances of the ambient CO standards.

These responses should provide all of the information necessary to complete your review and approval of the PSD permit modification for Clewiston Boiler No. 4. A summary of the modeling results is attached. A diskette containing the input and output files are being sent to Cleve Holliday under separate cover. If you have any questions concerning this information, please call (904) 331-9000.

Sincerely,

David A. Buff
Principal Engineer
Florida P.E. #19011

cc: File (2)

H. Adams
C. Holladay
D. Knowles, S. Dist
G. Harper, EPA
G. Barry, NPS

14015A1/3



Table 6-7
Predicted Short-Term Crop Season Impacts for the
Ambient Air Quality Analysis

Pollutant	Averaging Time	Year	Background Concentration ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Total Concentration ($\mu\text{g}/\text{m}^3$)	AAQS ($\mu\text{g}/\text{m}^3$)	
SO ₂	3-Hour	1985	53	374	427	1300	
		1986		404	457		
		1987		440	493		
		1988		379	432		
		1989		407	460		
	24-Hour	1985	21	150	171	260	
		1986		128	149		
		1987		159	180		
		1988		173	194		
		1989		140	161		
PM10	24-Hour ¹	1985	53	69.8	123	150	
		1986		85.7	139		
		1987		69.5	123		
		1988		107	160		
					(HSH) 107	160	
					(HTH) 81.3	134	
		1989		75.7	131		
CO	1-Hour	1985	7,400	6,105	13,505	40,000	
		1986		6,481	13,881		
		1987		5,682	13,082		
		1988		6,376	13,776		
		1989		6,190	13,590		
	8-Hour	1985	4,600	3,120	7,720	10,000	
		1986		2,458	7,058		
		1987		2,983	7,583		
		1988		3,124	7,724		
		1989		3,270	7,870		

¹ Reported PM10 concentrations are the maximum predicted concentrations with the exception of 1988 HSH and 1988 highest-third-highest (HTH) concentrations.

Table 1. Summary of Non-U.S. Sugar Clewiston Source Data Used in Modeling Analysis

Facility/Source	Heat Input Rate (MMBtu/Hr)	CO Emission Rate			Stack								
		(lb/MMBtu)	(lb/hr)	(g/s)	Height		Diameter		Temp		Velocity		
					(m)	(ft)	(m)	(ft)	(K)	(F)	(m/s)	(ft/s)	
Okeelanta													
Boiler 4	181.42	9.00	1,632.78	205.73	22.90	75.13	2.29	7.51	333.20	140.04	7.36	24.15	
Boiler 5	235.51	9.00	2,119.60	267.07	22.90	75.13	2.29	7.51	333.20	140.04	12.07	39.60	
Boiler 6	239.95	9.00	2,159.52	272.10	22.90	75.13	2.29	7.51	334.30	142.02	8.74	28.68	
Boiler 10	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	334.30	142.02	10.35	33.96	
Boiler 11	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	341.50	154.98	9.89	32.45	
Boiler 12	302.45	9.00	2,722.06	342.98	22.90	75.13	2.29	7.51	329.80	133.92	8.16	26.77	
Boiler 14	302.45	9.00	2,722.06	342.98	22.90	75.13	2.29	7.51	333.20	140.04	8.28	27.17	
Boiler 15	252.05	9.00	2,268.41	285.82	22.90	75.13	2.29	7.51	332.00	137.88	10.23	33.56	
Osceola													
Boiler 2	280.00	9.00	2,520.00	317.52	25.00	82.03	1.52	4.99	341.00	154.08	18.10	59.39	
Boiler 3	292.00	3.50	1,021.98	128.77	21.90	71.85	1.93	6.33	341.00	154.08	14.50	47.57	
Boiler 4	280.00	9.00	2,520.00	317.52	25.00	82.03	1.83	6.00	341.00	154.08	18.80	61.68	
Boiler 5	330.00	9.00	2,970.00	374.22	25.00	82.03	1.52	4.99	341.00	154.08	14.90	48.89	
Boiler 6	379.00	6.50	2,463.49	310.40	27.40	89.90	1.93	6.33	341.00	154.08	14.90	48.89	
Sugar Cane Growers													
Boiler 1	285.76	9.00	2,571.83	324.05	24.40	80.06	1.40	4.59	344.00	159.48	11.40	37.40	
Boiler 2	285.76	9.00	2,571.83	324.05	24.40	80.06	1.40	4.59	344.00	159.48	11.40	37.40	
Boiler 3	228.64	9.00	2,057.78	259.28	24.40	80.06	1.60	5.25	344.00	159.48	15.60	51.18	
Boiler 4	571.67	9.00	5,145.00	648.27	33.50	109.91	1.63	5.35	344.00	159.48	10.60	34.78	
Boiler 5	419.20	9.00	3,772.78	475.37	24.40	80.06	1.40	4.59	344.00	159.48	15.20	49.87	
Boiler 8	504.00	9.00	4,536.03	571.54	47.20	154.86	3.05	10.01	344.00	159.48	10.60	34.78	
US Sugar Corp. Bryant													
Boiler 1	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43	
Boiler 2	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43	
Boiler 3	385.00	9.00	3,465.00	436.59	19.80	64.96	1.64	5.38	342.00	155.88	36.40	119.43	
Boiler 5	671.00	9.00	6,038.97	760.91	42.70	140.10	2.90	9.51	345.00	161.28	11.49	37.70	
Atlantic Sugar													
Boiler 1	214.00	9.00	1,926.03	242.68	18.90	62.01	1.92	6.30	346.00	163.08	12.70	41.67	
Boiler 2	214.00	9.00	1,926.03	242.68	18.90	62.01	1.92	6.30	342.00	155.88	10.90	35.76	
Boiler 3	260.00	9.00	2,340.00	294.84	21.90	71.85	1.83	6.00	341.00	154.08	17.50	57.42	
Boiler 4	275.00	9.00	2,475.00	311.85	18.30	60.04	1.83	6.00	344.00	159.48	15.00	49.22	
Boiler 5	252.65	6.50	1,642.22	206.92	27.40	89.90	1.68	5.51	339.00	150.48	15.70	51.51	
Talisman Sugar													
Boiler 4	224.00	9.00	2,016.03	254.02	21.30	69.89	1.59	5.22	336.00	145.08	22.90	75.13	
Boiler 5	224.00	9.00	2,016.03	254.02	21.30	69.89	1.59	5.22	336.00	145.08	22.90	75.13	
Boiler 6	400.00	9.00	3,600.00	453.60	22.90	75.13	3.05	10.01	361.00	190.08	9.10	29.86	

CO MODELING RESULTS
ALL NON-CLEWISTON BAGASSE BOILERS

ISCST2 OUTPUT FILE NUMBER 1 :SUGCO.082
 ISCST2 OUTPUT FILE NUMBER 2 :SUGCO.083
 ISCST2 OUTPUT FILE NUMBER 3 :SUGCO.084
 ISCST2 OUTPUT FILE NUMBER 4 :SUGCO.085
 ISCST2 OUTPUT FILE NUMBER 5 :SUGCO.086

First title for last output file is: 1982 BACKGROUND SUGAR MILL CO IMPACTS 8/22/94
 Second title for last output file is: SUGAR MILL SEASON, RECEPTOR GRID AROUND US SUGAR - CLEWISTON

New

AVERAGING TIME	YEAR	CONC (ug/m3)	DIR (deg) or X (m)	DIST (m) or Y (m)	PERIOD ENDING (YYMMDDHH)

SOURCE GROUP ID: ALL					
HIGH 8-Hour					
	1982	1059.77	180.	2000.	82113008
	1983	793.00	210.	2000.	83013124
	1984	1067.24	200.	2000.	84042024
	1985	1067.73	170.	2000.	85111708
	1986	887.58	160.	600.	86020308
HSH 8-Hour					
	1982	1008.23	180.	2000.	82110224
	1983	652.98	250.	2000.	83100108
	1984	833.03	50.	2000.	84042608
	1985	956.94	70.	2000.	85032824
	1986	704.44	120.	1500.	86013124
HIGH 1-Hour					
	1982	3845.27	190.	2000.	82110220
	1983	3875.68	120.	2000.	83033022
	1984	3756.23	70.	2000.	84042822
	1985	3834.22	170.	2000.	85031121
	1986	3803.54	190.	2000.	86101406
HSH 1-Hour					
	1982	3423.00	210.	2000.	82110220
	1983	3479.76	110.	2000.	83033022
	1984	3002.12	90.	2000.	84042822
	1985	3718.61	70.	2000.	85022702
	1986	3307.60	150.	1500.	86112704

All receptor computations reported with respect to a user-specified origin

GRID 506100.00 2956900.00
 DISCRETE 0.00 0.00

SO SRCPARAM OSCE03	128.77	21.9	341.0	14.50	1.93
SO SRCPARAM OSCE04	317.52	25.0	341.0	18.80	1.83
SO SRCPARAM OSCE05	374.22	25.0	341.0	14.90	1.52
SO SRCPARAM OSCE06	310.40	27.4	341.0	14.90	1.93
** SUGAR CANE GROWERS MILL BOILERS 1,2,3,4,5,8 AT 9.0 LB/MMBTU					
SO SRCPARAM SCGRW12	648.10	24.4	344.0	11.40	1.40
SO SRCPARAM SCGRW3	259.28	24.4	344.0	15.60	1.60
SO SRCPARAM SCGRW4	648.27	33.5	344.0	10.60	1.63
SO SRCPARAM SCGRW5	475.37	24.4	344.0	15.20	1.40
SO SRCPARAM SCGRW8	571.54	47.2	344.0	10.60	3.05
** US SUGAR CORP - BRYANT MILL BOILERS 1,2,3,5 AT 9.0 LB/MMBTU					
SO SRCPARAM USBRY123	1309.77	19.8	342.0	36.40	1.64
SO SRCPARAM USBRY4	760.91	42.7	345.0	11.49	2.90
** ATLANTIC SUGAR BOILERS 1,2,3,4 AT 9.0 LB/MMBTU, BLR 5 AT 6.5 LB/MMBTU					
SO SRCPARAM ATLSUG1	242.68	18.9	346.0	12.70	1.92
SO SRCPARAM ATLSUG2	242.68	18.9	342.0	10.90	1.92
SO SRCPARAM ATLSUG3	294.84	21.9	341.0	17.50	1.83
SO SRCPARAM ATLSUG4	311.85	18.3	344.0	15.00	1.83
SO SRCPARAM ATLSUG5	206.92	27.4	339.0	15.70	1.68
** TALISMAN SUGAR MILL BOILERS 4 TO 6 AT 9.0 LB/MMBTU					
SO SRCPARAM TALIS45	508.03	21.3	336.0	22.90	1.59
SO SRCPARAM TALIS6	453.60	22.9	361.0	9.10	3.05

SO EMISUNIT .100000E+07 (GRAMS/SEC) (MICROGRAMS/CUBIC-METER)
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SO FINISHED

RE STARTING
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** GRID ORIGIN IS US SUGAR CORP-CLEWISTON UTM COORDINATES
RE GRIDPOLR POL ORIG 506100. 2956900.
RE GRIDPOLR POL DIST 300. 600. 900. 1200. 1500. 2000.
RE GRIDPOLR POL GDIR 36 10.00 10.00
RE GRIDPOLR POL END
RE FINISHED

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ME SURFDATA 12844 1982 WEST-PALM-BCH
ME UAIRDATA 12844 1982 WEST-PALM-BCH
ME DAYRANGE 10/1-12/31 1/1-4/30
ME FINISHED

OU STARTING
OU RECTABLE ALLAVE FIRST SECOND
OU FINISHED

CO STARTING
 CO TITLEONE 1982 BACKGROUND SUGAR MILL CO IMPACTS 8/22/94
 CO TITLETWO SUGAR MILL SEASON, RECEPTOR GRID AROUND US SUGAR - CLEWISTON
 CO MODELOPT DFAULT CONC RURAL
 CO AVERTIME 8 1
 CO POLLUTID CO
 CO DCAYCOEF .000000
 CO EVENTFIL SUGCOEV.I82
 CO RUNORNOT RUN
 CO FINISHED

SO STARTING

** Source Location Cards:

** SRCID	SRCTYP	XS UTM (m)	YS UTM (m)	ZS (m)
** Okeelanta Boilers				
SO LOCATION OKEEL4	POINT	525000.	2939400.	0.
SO LOCATION OKEEL5	POINT	525000.	2939400.	0.
SO LOCATION OKEEL6	POINT	525000.	2939400.	0.
SO LOCATION OKEEL10	POINT	525000.	2939400.	0.
SO LOCATION OKEEL11	POINT	525000.	2939400.	0.
SO LOCATION OKEEL12	POINT	525000.	2939400.	0.
SO LOCATION OKEEL14	POINT	525000.	2939400.	0.
SO LOCATION OKEEL15	POINT	525000.	2939400.	0.
** Osceola Boilers				
SO LOCATION OSCE02	POINT	544200.	2968000.	0.
SO LOCATION OSCE03	POINT	544200.	2968000.	0.
SO LOCATION OSCE04	POINT	544200.	2968000.	0.
SO LOCATION OSCE05	POINT	544200.	2968000.	0.
SO LOCATION OSCE06	POINT	544200.	2968000.	0.
** Sugar Cane Growers				
SO LOCATION SCGRW12	POINT	534900.	2953300.	0.
SO LOCATION SCGRW3	POINT	534900.	2953300.	0.
SO LOCATION SCGRW4	POINT	534900.	2953300.	0.
SO LOCATION SCGRW5	POINT	534900.	2953300.	0.
SO LOCATION SCGRW8	POINT	534900.	2953300.	0.
** US Sugar Corp. Bryant Mill				
SO LOCATION USBRY123	POINT	538800.	2968100.	0.
SO LOCATION USBRY4	POINT	538800.	2968100.	0.
** Atlantic Sugar				
SO LOCATION ATLSUG1	POINT	552900.	2945200.	0.
SO LOCATION ATLSUG2	POINT	552900.	2945200.	0.
SO LOCATION ATLSUG3	POINT	552900.	2945200.	0.
SO LOCATION ATLSUG4	POINT	552900.	2945200.	0.
SO LOCATION ATLSUG5	POINT	552900.	2945200.	0.
** Talisman Sugar				
SO LOCATION TALIS45	POINT	531500.	2928400.	0.
SO LOCATION TALIS6	POINT	531500.	2928400.	0.

** Source Parameter Cards:

** POINT:	SRCID	QS (g/s)	HS (m)	TS (K)	VS (m/s)	DS (m)
** OKEELANTA MILL BOILERS 4,5,6,10,11,12,14,15 AT 9.0 LB/MMBTU						
SO SRCPARAM	OKEEL4	205.73	22.9	333.2	7.36	2.29
SO SRCPARAM	OKEEL5	267.07	22.9	333.2	12.07	2.29
SO SRCPARAM	OKEEL6	272.10	22.9	334.3	8.74	2.29
SO SRCPARAM	OKEEL10	285.82	22.9	334.3	10.35	2.29
SO SRCPARAM	OKEEL11	285.82	22.9	341.5	9.89	2.29
SO SRCPARAM	OKEEL12	342.98	22.9	329.8	8.16	2.29
SO SRCPARAM	OKEEL14	342.98	22.9	333.2	8.28	2.29
SO SRCPARAM	OKEEL15	285.82	22.9	332.0	10.23	2.29
** OSCEOLA MILL BOILERS 2,4,5 AT 9.0 LB/MMBTU, BLR 3 AT 3.5 LB, AND BLR 6 AT 6.5 LB/MMBTU						
SO SRCPARAM	OSCE02	317.52	25.0	341.0	18.10	1.52



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 19, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray T. Brinson
Vice President of Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Re: U. S. Sugar Corp., Clewiston Mill Boiler No. 4

The Department acknowledges receipt of the proper application processing fee (\$7,500) and the additional copies of the application to increase carbon monoxide (CO) emissions from the reference boiler. We will need additional information on the Best Available Control Technology (BACT) evaluation and ambient air modeling analysis for CO before this application can be processed.

New bagasse boilers are proposing to meet a CO emission standard of 0.35 lbs/MMBtu. The applications for the new boilers indicate that this standard can be met with the new bagasse feed/combustion air distribution system. Can boiler No. 4 be retrofitted with a new feed/air distribution system? What would the CO emissions and the cost of the new system (capitol, operation, and \$/ton CO removed) be?

What is the estimated cost (capitol, operation, and \$/ton CO removed) to install flue gas recirculation and catalytic oxidation on boiler No. 4?

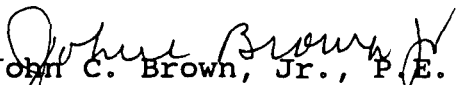
Will drying of the bagasse prior to using it as a fuel lower the CO emissions? What is the feasibility on this process?

The modeling analysis for boiler No. 7 shows the ambient air impact at the actual CO emission rate from the U. S. Sugar boilers. However, it does not address the impact of similar CO emission rates from the bagasse boilers at other sugar mills in the area. Please address the total CO ambient air impact of all the bagasse boilers in the sugar industry by modeling.

Mr. Murray T. Brinson
July 19, 1994
Page Two

We will resume processing this application after the requested information is received. If you have any questions on this matter, please write to me or call Willard Hanks, review engineer, or Cleve Holladay, meteorologist, at (904) 488-1344.

Sincerely,


John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JCB/WH/plm

cc: David Knowles, SD
John Bunyak, NPS
David Buff, KBN

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 Mr. Murray T. Brinson
 Vice President of Sugar Processing
 U.S. Sugar Corporation
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 Clewiston, FL 33440

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PS Form 3811, December 1991 *U.S. GPO: (1992-523-402) **DOMESTIC RETURN RECEIPT**

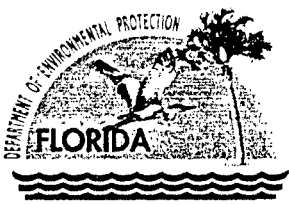
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Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 12, 1994

Ms. Jewell A. Harper, Chief
Air Enforcement Branch
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Dear Ms. Harper:

RE: United States Sugar Corporation
Boiler No. 4
Hendry County, PSD-FL-217

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by July 25, 1994. The Bureau's FAX number is (904)922-6979.

If you have any questions, please contact Willard Hanks or Cleve Holladay at (904)488-1344 or write to me at the above address.

Sincerely,

Patricia G. Adams
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/pa

Enclosures

UNITED STATES SUGAR CORPORATION

Post Office Drawer 1207 Clewiston, Florida 33440
Telephone: (813) 983-8121 Telex: 510-952-7753

June 27, 1994

John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

RE: Hendry County AP - Clewiston Mill Boiler No. 4
DEP File No. AO26-223258

Dear Mr. Brown:

This letter provides responses of the United States Sugar Corporation (U. S. Sugar) to the Department's April 26, 1994 request for additional information relating to the pending application for a modification of the PSD permit for Clewiston Boiler No. 4.

Answers to the Department's questions are as follows:

1. *[Please provide] The PSD application processing fee of \$7,500 and seven additional copies of the Application. You may credit your previously submitted \$250. to the application fee.*

RESPONSE TO QUESTION 1:

Enclosed is a check in the amount of \$7,250 and seven additional copies of the application to modify the PSD permit for Clewiston Boiler No. 4. (Attachments A and B).

2. *[Please provide] A Best Available Control Technology determination. The "top-down" determination should include the use of oxidation catalyst, modification of the fuel/combustion air fuel system, and any other equipment or method that has the potential to significantly reduce the CO emissions.*

RESPONSE TO QUESTION 2:

Enclosed is a Best Available Control Technology (BACT) determination prepared by David Buff, P.E. of KBN Engineering and Applied Sciences, Inc. (Attachment C). The "top-down" determination evaluates the use of combustion controls, catalytic oxidation and flue gas recirculation, and selects good combustion practices as BACT to control CO emissions.

John C. Brown, Jr., P.E.
June 27, 1994
Page 2

3. [Please provide] The PSD modeling analysis for CO. The estimated CO emissions, based on your tests, from the bagasse boilers at the sugar mills shall be used in this analysis. Modeling is needed to insure that this large emissions increase of CO by the industry will not cause an exceedance of the ambient air quality standards of 10,000 ug/m³ (8 hr. avg.) or 40,000 ug/m³ (1 hr. avg.).


RESPONSE TO ITEM 3:

The requested PSD modeling analysis for CO was conducted as part of the modeling for the proposed Clewiston Boiler No. 7, and was submitted to the Department on April 7, 1994 as an attachment to the application for modification of Clewiston Boiler No. 4's PSD permit. It has been our understanding that this modeling would satisfy the Department's information request because it includes modeling for Clewiston Boiler No. 4 at the proposed CO emissions level of 9.0 lbs/MMBtu. We have reviewed this modeling in light of our further discussions with the Department and are still satisfied that it provides the information necessary for the Department's review and approval of the PSD permit modification application.

These responses should provide all of the remaining information necessary to complete your review and approval of the PSD permit modification application for Clewiston Boiler No. 4.

Sincerely,

UNITED STATES SUGAR CORPORATION


Murray T. Brinson
Vice President
Sugar Processing

MTB:jt
Enclosures

cc: David Knowles, FDEP, Ft. Myers
Jeff Koerner, FDEP, Tallahassee
Gary Maier, FDEP, Ft. Myers
Teresa Heron, FDEP, Tallahassee
David Buff, KBN Engineering
Robert F. Van Voorhees, Esq., Bryan Cave
Peter Briggs, USSC
Peter Barquin, USSC
Donald Griffin, USSC

**EVALUATION OF ALTERNATIVE CO CONTROL TECHNOLOGIES
FOR
U.S. SUGAR CORPORATION CLEWISTON BOILER NO. 4**

BACKGROUND

U.S. Sugar Corporation received a state construction permit and federal prevention of significant deterioration (PSD) construction permit for Boiler No. 4 in 1985. This permit included an emission limit for carbon monoxide (CO) of 0.25 pounds per million British thermal units (lb/MMBtu) heat input. This emission limit was based on the U.S. Environmental Protection Agency (EPA) emission factor for bagasse combustion of 2 pounds per ton (lb/ton) contained in the publication "AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants." This factor of 2 lb/ton today remains listed in the latest version of this document (reference attached copy).

With the requirement for using EPA Method 10 incorporated into the Boiler No. 4 permit, the original basis for the CO emission limit was determined to be invalid. The actual CO emissions from bagasse-fired boilers, based on EPA Method 10, have been found to vary widely, ranging from approximately 3 lb/MMBtu up to 10 lb/MMBtu.

Since this finding, several other companies have requested modifications of their existing PSD permits to allow for a more appropriate CO emission limit. CO emission limits within the range of 3 to 10 lb/MMBtu have been approved by FDEP in these instances. Osceola Farms received revised limits for Boilers 3 and 6 in 1988. The limits for both boilers was initially revised to 4.8 lb/MMBtu, but after further testing the Boiler 3 limit was revised to 3.5 lb/MMBtu, and Boiler 6 was revised to 6.5 lb/MMBtu. Atlantic Sugar received revised CO limits for Boiler 5 in 1992. The limit was revised from 0.27 lb/MMBtu to 6.5 lb/MMBtu. In each of these cases, the control technology of good combustion practices was determined to be BACT.

The revised CO emission limit proposed for Boiler No. 4 is 9.0 lb/MMBtu heat input and is based on a maximum CO emission rate developed from statistical analysis of actual test data using EPA Method 10. These data are presented in Table 1, and are also presented graphically in a frequency distribution plot in Figure 1. The proposed maximum emission rate is based on a

potential frequency of exceedance of about 15 percent, based upon a compliance test average emission rate (i.e., the average of three individual test runs).

It is noted that the average CO emissions, as reflected in Table 1, are considerably lower than the proposed CO emission limit. The average CO emissions based on the average of all test data for Boiler No. 4 is approximately 6.7 lb/MMBtu.

Good combustion techniques are proposed as the control technology to achieve this emission limit. Presented below is a discussion of alternative control techniques which could potentially result in lower CO emissions.

EMISSION CONTROL HIERARCHY

Emission control techniques available for bagasse boilers consist of combustion controls, flue gas recirculation (FGR), and catalytic oxidation. Each of these control techniques are described below.

CO emissions are a result of incomplete combustion of carbon in the fuel. Historically, combustion control has been used exclusively for controlling CO emissions from bagasse boilers. While good combustion practices can reduce CO formation, the variable nature of bagasse fuel, coupled with the high moisture content (average of 50% moisture), results in certain limitations in controlling CO emissions through combustion practices. The fuel characteristics and the combustion practices result in CO emissions that are high relative to fossil-fuel fired boilers. This is shown by the variability in the test data for Boiler No. 4, which range from 3.2 to 17.5 lb/MMBtu, with an average emission rate of 6.7 lb/MMBTU.

Flue gas recirculation (FGR) is an NO_x control technique where a portion of the flue gas is recirculated back to the combustion zone. FGR has not been used to control CO emissions from bagasse-fired boilers. This is because CO controls have not been identified as necessary for bagasse boilers, even for new boilers which have undergone PSD review, and the severe operating and economic impacts that would result from use of FGR.

Catalytic oxidation has been used to reduce CO emissions primarily from natural gas fired boilers and gas-fired combustion turbines. This is a post-combustion control that has been employed in

CO nonattainment areas where regulations require the installation of lowest achievable emission rate (LAER). Catalytic oxidation has not been applied to bagasse fired boilers.

TECHNOLOGY DESCRIPTION

1) Combustion Controls

Combustion controls involve operating the boiler within the manufacturer's specifications and may include the control of excess air, fuel firing rate, and furnace temperature. U.S. Sugar operators are trained to operate Boiler No. 4 within the design parameters and document this operation in a boiler log.

Of the combustion modification techniques, only overfire air is currently used for bagasse boilers, and is integral to the design of the boilers. This technology is one of the likely reasons for the relatively low NO_x and VOC emissions exhibited from these boilers (in the range of 0.2 to 0.3 lb/MMBtu). In general, the boilers are already operated using the optimum amount of overfire air possible to promote complete combustion. Additional overfire air would not likely reduce CO emissions significantly from current levels.

2) Flue Gas Recirculation

FGR involves recycling a portion of the flue gas back into the primary combustion zone of the boiler. A portion of the CO in the flue gas could theoretically be combusted as long as the flue gases were injected into a temperature zone that would promote CO combustion. On oil and gas-fired boilers, 15 to 20 percent of the flue gas can be recirculated, based on flame stability considerations. The CO reduction achievable is in the range of 15 to 20 percent.

However, FGR has not been employed as a CO control technique for boilers in general, nor for bagasse-fired boilers specifically. In regards to bagasse boilers, the amount of flue gases that could be successfully recirculated is not known, nor is the CO emission reduction known. The extremely high particulate loading in the combustion gases and the abrasive nature of the flyash would make FGR very unreliable by greatly increasing wear on the fans and ductwork. This would lead to increased maintenance costs. In addition, FGR would substantially affect the boiler efficiency by lowering fuel efficiency and increasing the required fan power. A reduction in steam production would result, which is not acceptable based on mill operational considerations (i.e., either sugar

production would have to be reduced, or additional boiler capacity installed to replace the lost steam due to FGR).

FGR is recognized as being appropriate for new boilers, but has not generally been used for retrofit applications, in part due to the difficulty in retrofit applications. Depending upon the configuration of the boiler and available space, retrofitting with FGR may be impractical. In addition, the cost of the duct work, fans, redesign and installation and operating costs would make this alternative uneconomical.

An economic analysis of FGR was presented in the U.S. Sugar Clewiston Boiler No. 7 permit application. This analysis showed that FGR would cost upwards of \$900,000 in both capital and annual operating costs. The capital costs of a retrofit application are 1.5 times greater than a new installation. These economic impacts would be prohibitive, especially considering that the achievable CO reduction, if any, is not known.

3) Catalytic Oxidation

Catalytic oxidation involves the installation of a precious metal catalyst operating in a temperature range between 600 and 800°F in the boiler. CO emissions are reduced by allowing the unburned CO to react with O₂ at the catalyst surface. While combustion of CO starts at approximately 300°F, efficiencies above 90 percent are achieved when the catalyst is operated at temperatures above 600°F.

Oxidation catalysts are subject to contamination from a variety of sources including halogens, sulfur compounds, zinc, arsenic, lead, mercury and particulates. The presence of these contaminants in the flue gas stream will over time render the catalyst ineffective. The length of time that the catalyst remains effective depends upon the specific contaminants present and the concentration of the contaminants in the gas stream. The success of oxidation catalysts with natural gas firing is a direct result of the absence of contaminating materials in the combustion gases.

Flue gases from bagasse-fired units such as Boiler No. 4 contain substantial amounts of particulate matter (PM), some of which is relatively large (> 100 microns). Based upon the AP-42 emission factor for uncontrolled PM emissions from bagasse boilers (15.6 lb/ton), PM in the flue gas stream for Boiler No. 4 would be 1,576 lb/hr. This emission rate is a direct result of the fibrous nature of bagasse and variability of this fuel. Such a high particulate loading can de-activate catalyst sites

because of their size. In addition, a build up of such particles on the catalyst can cause excessive heat due to continued combustion and result in the catalyst being irreparably damaged. Accordingly, the use of catalytic oxidation is not deemed to be technically feasible for a bagasse boiler. Even if technically feasible, the installation of an oxidation catalyst would require retrofit, including duct work modifications and installation of soot blowers, and would incur considerable costs.

CONCLUSION

The evaluation of alternative CO control technologies for U. S. Sugar Corporation Boiler No. 4 demonstrates that combustion controls are the only feasible and economical methods for minimizing CO emissions from a bagasse-fired boiler. It should be noted that the requested emission limit reflects statistical uncertainty that must be accounted for when the method of compliance is an individual stack test. On average, the CO emissions will be approximately 30 percent lower than the proposed emission limit.

In requesting that the CO emission limit for Boiler No. 4 be revised, U.S. Sugar is not requesting any modification to the existing control technology or requirements. CO emissions will continue to be controlled to the extent possible by the implementation of good combustion practices.

All previous BACT determinations for CO emissions from bagasse boilers have been based upon the use of good combustion practices, rather than add-on control systems. This includes BACT determinations for CO issued in 1988 and 1992. U.S. Sugar's proposed technology is consistent with all previous determinations. To require add-on control technology or other costly alternatives would be unduly burdensome and unfair to U.S. Sugar.

In conclusion, good combustion practices are proposed as BACT for CO emissions for Clewiston Boiler No. 4 when firing bagasse or oil. Because of its ability to reduce both NO_x and VOC emissions, along with its success record in the sugar industry, overfire air, high excess air rates, and good combustion practices are proposed as BACT for CO emissions from Clewiston Boiler No. 4, with a maximum CO emission rate of 9.0 lb/MMBtu.

Table B1. Summary of CO Emission Tests Performed on Clewiston Boiler No. 4 Using EPA Method 10

Unit	Boiler Type	Date	Steam Rate (Lb/hr)	Heat Input (MMBtu/hr)	Bagasse Firing Rate ^a (TPH wet)	CO Emissions			CO Emissions Compliance Average Lb/MMBTU
						lb/hr	Lb/MMBtu	Lb/ton,wet	
U.S. Sugar - Clewiston									
Boiler 4	Traveling Gate	02/20/90	308,636	691.7	96.07	1,940	2.79	20.19	2.75
Boiler 4	Traveling Gate	02/20/90	306,666	690.3	95.87	1,520	2.24	15.85	
Boiler 4	Traveling Gate	02/20/90	310,298	698.8	97.06	2,240	3.23	23.08	5.27
Boiler 4	Traveling Gate	02/15/91	289,091	624.9	86.79	4,760	7.62	54.84	
Boiler 4	Traveling Gate	02/15/91	291,200	629.5	87.43	2,710	4.30	31.00	3.78
Boiler 4	Traveling Gate	02/15/91					3.90		
Boiler 4	Traveling Gate	02/18/91	288,358	622.8	86.50	2,430	3.90	28.09	3.78
Boiler 4	Traveling Gate	02/18/91	285,224	616.4	85.61	2,640	4.28	30.84	
Boiler 4	Traveling Gate	02/18/91	302,647	653.3	90.74	2,060	3.16	22.70	5.43
Boiler 4	Traveling Gate	02/19/91	290,769	627.9	87.21	4,430	7.05	50.80	
Boiler 4	Traveling Gate	02/19/91	294,583	637.1	88.49	3,400	5.33	38.42	11.23
Boiler 4	Traveling Gate	02/19/91	293,382	633.5	87.99	2,480	3.92	28.19	
Boiler 4	Traveling Gate	02/22/91	300,000	647.9	89.99	4,900	7.56	54.45	11.23
Boiler 4	Traveling Gate	02/22/91	293,382	634.2	88.08	9,450	14.90	107.28	
Boiler 4	Traveling Gate	01/07/92	293,425	613.6	85.22	3,200	5.22	37.55	7.91
Boiler 4	Traveling Gate	01/07/92	282,800	591.3	82.12	6,270	10.60	76.35	
Boiler 4	Traveling Gate	01/08/92	299,178	623.2	86.56	2,030	3.26	23.45	4.66
Boiler 4	Traveling Gate	01/08/92	297,973	621.5	86.32	3,160	5.09	36.61	
Boiler 4	Traveling Gate	01/08/92	300,811	627.4	87.14	3,540	5.64	40.62	4.40
Boiler 4	Traveling Gate	01/09/91	302,055	630.0	87.50	2,770	4.40	31.66	
Boiler 4	Traveling Gate	01/09/91	295,135	615.8	85.53	2,710	4.40	31.69	8.03
Boiler 4	Traveling Gate	01/13/93					7.50		
Boiler 4	Traveling Gate	01/13/93					8.59		11.48
Boiler 4	Traveling Gate	01/13/93					7.99		
Boiler 4	Traveling Gate	01/14/93					15.00		11.48
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Boiler 4	Traveling Gate	02/02/93					7.19		7.94
Boiler 4	Traveling Gate	02/02/93					6.71		
Boiler 4	Traveling Gate	02/02/93					9.92		7.64
Boiler 4	Traveling Gate	02/04/93					6.78		
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Boiler 4	Traveling Gate	02/11/94		580.67			1.53		4.43
Boiler 4	Traveling Gate	02/11/94		625.28			7.89		
Boiler 4	Traveling Gate	02/11/94		644.24			2.51		6.95
Boiler 4	Traveling Gate	02/17/94		608.74			9.47		
Boiler 4	Traveling Gate	02/17/94		584.52			4.86		

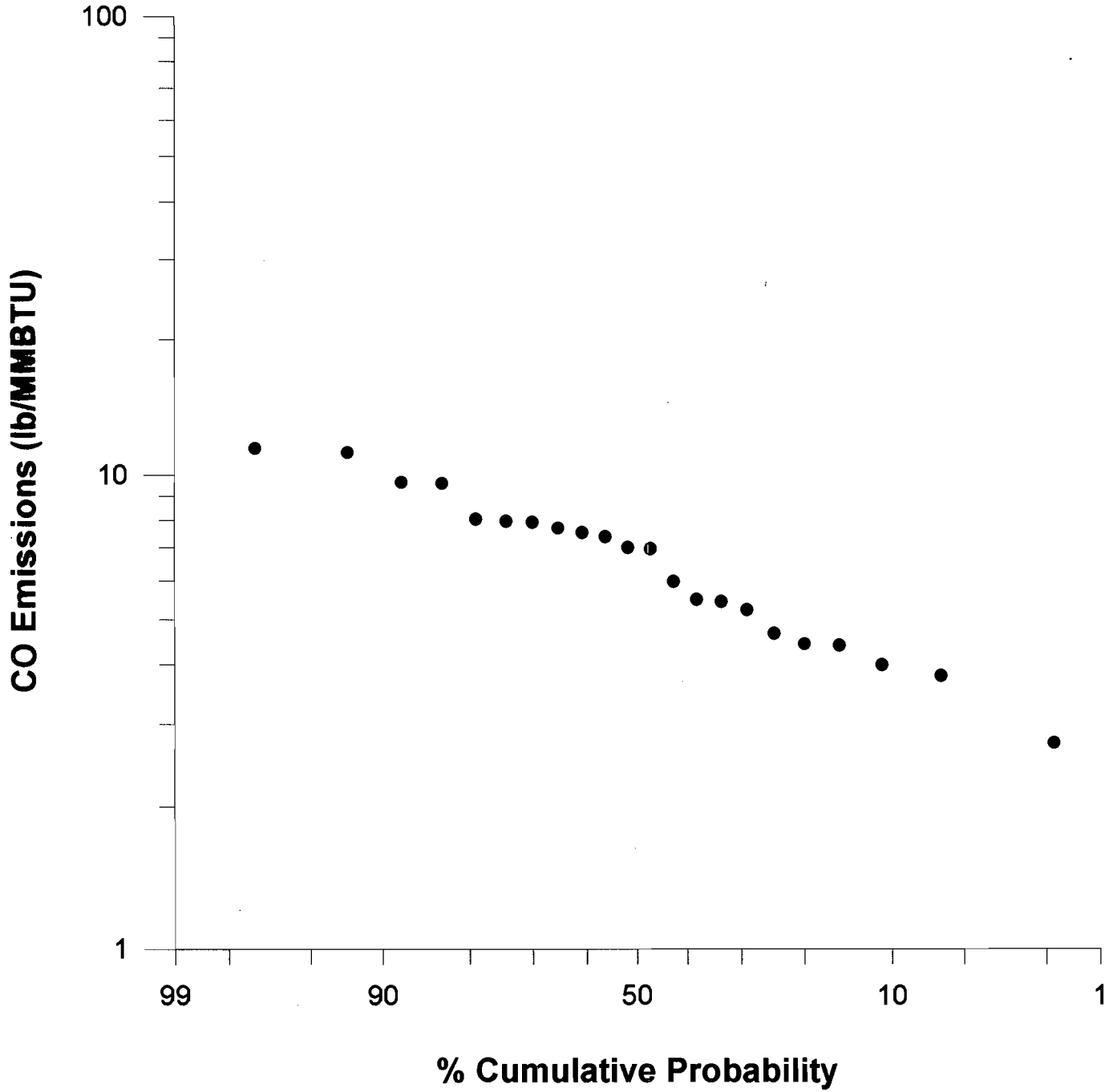
Boiler 4	Traveling Gate	02/17/94	623.65	6.68			
Boiler 4	Traveling Gate	02/17/94	631.71	6.78			
Boiler 4	Traveling Gate	02/22/94	625.33	7.48	7.70		
Boiler 4	Traveling Gate	02/22/94	633.82	7.38			
Boiler 4	Traveling Gate	02/22/94	616.86	7.58			
Boiler 4	Traveling Gate	02/22/94	585.45	7.99			
Boiler 4	Traveling Gate	02/22/94	580.29	8.06			
Boiler 4	Traveling Gate	02/23/94	616.93	3.99	5.48		
Boiler 4	Traveling Gate	02/23/94	633.14	6.07			
Boiler 4	Traveling Gate	02/23/94	617.98	6.39			
Boiler 4	Traveling Gate	03/04/94	636.45	3.02	3.99		
Boiler 4	Traveling Gate	03/04/94	614.71	2.34			
Boiler 4	Traveling Gate	03/04/94	598.50	4.21			
Boiler 4	Traveling Gate	03/04/94	625.69	6.38			
				-----	-----		
				Max. =	17.49	107.28	11.48
				Avg. =	6.48	39.18	6.63

Note: lb/hr = pounds per hour.
 lb/MMBtu = pounds per million British thermal units.
 lb/ton = pounds per ton.
 MMBtu/hr = million British thermal units per hour.
 NA = not available.
 TPH = tons per hour.

USSCO#4.wk3
 05/17/94

^a Calculated from reported heat input rate, assumed 3,600 Btu/lb average heat content for wet bagasse.

U.S. Sugar - Clewiston Boiler No. 4





Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

April 26, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Murray Brinson
Vice President, Sugar Processing
United States Sugar Corporation
Post Office Box 1207
Clewiston, Florida 33440

Dear Mr. Brinson:

Re: Boiler No. 4, CO emissions

The Department has received your April 7, 1994, letter requesting the allowable carbon monoxide emissions from boiler No. 4 at your Clewiston sugar mill be increased from 339.1 to 10,418 TPY. When your permit was issued, the Department accepted your carbon monoxide (CO) emission estimate of 0.25 lb/MMBtu (339.1 TPY) and it was incorporated as a standard in the Best Available Control Technology (BACT) determination and permits for boiler No. 4. Your Reference Method 10 test results confirm that the actual CO emissions are significantly greater than the standard. An increase in CO emissions of 100 TPY or more is subject to the Prevention of Significant Deterioration regulations. Therefore, the BACT and permits for this boiler must be modified to show additional air pollution control equipment and/or new CO emission standards. Additional information is needed before the Department can process your request. Please provide the following:

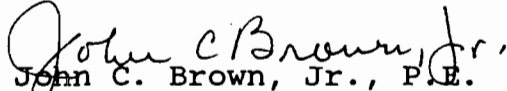
1. The PSD application processing fee of \$7,500 and seven additional copies of the application. You may credit your previously submitted \$250 to the application fee.
2. A Best Available Control Technology determination. The "top-down" determination should include the use of oxidation catalyst, modification of the fuel/combustion air fuel system, and any other equipment or method that has the potential to significantly reduce the CO emissions.

Mr. Murray Brinson
April 26, 1994
Page Two

3. The PSD modeling analysis for CO. The estimated CO emissions, based on your tests, from the bagasse boilers at the sugar mills shall be used in this analysis. Modeling is needed to insure that this large emissions increase of CO by the industry will not cause an exceedance of the ambient air quality standards of 10,000 ug/m³ (8 hr. avg.) or 40,000 ug/m³ (1 hr. avg.).

The Department will resume processing your application after receipt of the requested information.

Sincerely,


John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JCB/WH/bjb

cc: David Knowles, SD
Jeff Koerner, PBCHD

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 Mr. Murray Brinson
 Vice President, Sugar Processing
 United States Sugar Corporation
 Post Office Box 1207
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4a. Article Number
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4b. Service Type

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6. Signature (Agent)
J. P. Holligan

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Florida Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

March 3, 1994

Mr. Murray T. Brinson
Vice President Sugar Processing
United States Sugar Corporation
Post Office Drawer 1207
Clewiston, FL 33440

FILE

Re: Hendry County -- AP
Clewiston Boiler No. 4
DEP File No. AO26-223258

Dear Mr. Brinson:

Thank you for meeting with the Department on several occasions to discuss the status of U.S. Sugar's pending application for an operation permit for Clewiston Boiler No. 4. As you may recall, U.S. Sugar (by letter dated December 15, 1992) requested the South District Office of the Department to increase the federally enforceable emission limit for carbon monoxide by approximately 16,800 tons per year. The South District (by letters dated January 12, 1993, and August 24, 1993) informed U.S. Sugar that it must apply, with the appropriate application fee, to the Bureau of Air Regulation in Tallahassee for an updated PSD permit to authorize the increase.

On the basis of a phone conversation with Ms. Teresa Heron of the Bureau of Air Regulation in Tallahassee, it is our understanding that U.S. Sugar has not yet filed an application for an updated PSD permit for Clewiston Boiler No. 4. The South District continues suspension of the processing of your operation permit application. Please provide us with the date that you expect to file an application for an updated PSD permit for Clewiston Boiler No. 4. We would appreciate receiving this information by March 31, 1994.

Thank you for your assistance in this matter. **If you have any questions regarding this letter, please contact Gary Maier at (813) 332-6975.**

Sincerely,

Ronald D. Blackburn
Acting Director of
District Management

RDB/GM/gm

cc: Robert F. Van Voorhees

RECEIVED

APR 04 1994

Bureau of
Air Regulation

BRYAN CAVE

ST. LOUIS, MISSOURI
LOS ANGELES, CALIFORNIA
NEW YORK, NEW YORK
PHOENIX, ARIZONA
KANSAS CITY, MISSOURI

700 THIRTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-3960
(202) 508-6000
FACSIMILE: (202) 508-6200

IRVINE, CALIFORNIA
SANTA MONICA, CALIFORNIA
OVERLAND PARK, KANSAS
LONDON, ENGLAND
RIYADH, SAUDI ARABIA
FRANKFURT AM MAIN, GERMANY

ROBERT F. VAN VOORHEES
DIRECT DIAL NUMBER
(202) 508-6014

March 30, 1994

Ronald D. Blackburn
Acting Director of District Management
Florida Department of Environmental
Protection
South District
2295 Victoria Avenue
Fort Myers, FL 33901

Re: Hendry County - AP Clewiston Boiler No. 4
DEP File No. A026-223258

Dear Mr. Blackburn:

In response to your letter of March 3, 1994, I am writing to confirm that the United States Sugar Corporation ("U.S. Sugar") will be filing an application for modification of the PSD permit for Clewiston Boiler No. 4. The sole purpose of this modification application will be to seek an adjustment in the carbon monoxide emission factor in order to complete the process initiated by the Department and U.S. Sugar in 1989 to "determine a reasonable CO emission factor for boilers of this type."

In filing this modification application, U.S. Sugar will not be seeking to increase carbon monoxide emissions from its boiler, but simply to restate the emission level specified in the PSD permit to reflect accurately the actual emission levels resulting from implementation of the best available control technology as approved by the Department and EPA in the original PSD permit.

U.S. Sugar intends to file this application as soon as it is feasible to do so, which should be no later than April 8, 1994. Based on our discussions with the South District, it is our understanding that processing of the pending operation permit renewal application will be suspended until modification of the PSD permit for Clewiston Boiler No. 4 has been completed. Based on my discussions with Teresa Heron and Preston Lewis, we expect

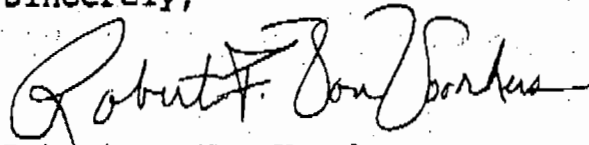
BRYAN CAVE

Richard D. Blackburn
Acting Director of District Management
March 30, 1994
Page 2

that this PSD permit modification will be processed in conjunction with the pending permit application for Clewiston Boiler No. 7.

Please feel free to contact me if you have any questions about the status of the PSD modification application.

Sincerely,



Robert F. Van Voorhees

cc: Gary Maier
William H. Congdon
Teresa Heron
Murray T. Brinson
Peter B. Briggs
David A. Buff
Peter Kroll

72890.01

Z 333 618 094

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	
Murray Brunson	
Street & Number	
45 Susan	
Post Office, State, & ZIP Code	
Clewiston FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	4-8-99
0510003-007-AC	
050-FL-217 B	

PS Form 3800, April 1995

Fold at line over top of envelope to

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

Is your RETURN ADDRESS completed on the reverse side?

3. Article Addressed to:
 Mr. Murray S. Brunson, Sr. V.P.
 U.S. Sugar Corp.
 PO Box 1207
 Clewiston, FL
 33440-1207

4a. Article Number
Z 333 618 094

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of Delivery
4-12-99 JGA

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Andrew Sales

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

The Clewiston News

Published Weekly

Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida

County of Hendry

Before the undersigned authority, personally appeared Kerry R. Faunce, who on oath says he is the Publisher of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement, being a _____ notice _____

in the matter of intent

_____ in the _____ court, was published in

said newspaper in the issues of _____

March 24, 1999

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

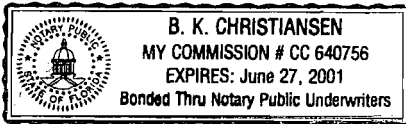
Kerry R. Faunce

Sworn to and subscribed before me this 25th day

of March, A.D. 19 99.

BkChristiansen

Notary Public



PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. AC26-248809 (PSD-FL-217)
U.S. Sugar Corporation Clewiston Facility
Hendry County.

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to U.S. Sugar Corporation, for the No. 4 Boiler at its Clewiston Facility in Hendry County, Florida. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are: U.S. Sugar Corporation, Post Office Box 1207, Clewiston, Florida 33440-1207.

U.S. Sugar Corporation requested a clarification of a condition in its existing construction permit that limits usage of the No. 4 Boiler to 160 days per season and 3840 hours per year. The Company requests that this conditions be interpreted to allow operation for 3840 hours per calendar year, consistent with other conditions in its permit. The Department agrees as long as the unit operates only during the recognized sugar season (which staddles two calendar years) as indicated in all relevant applications, permits, and reports to date. It is possible, as a result of this change, that the unit might actually operate less in a calendar year if there is an early end to one season and a late start to the next season. The results is that in the long run the two methods are probably equivalent.

The Department has determined that the change will not result in actual emissions increases and will not cause or contribute to a violation of ambient air quality standards.

The Department will issue the FINAL permit modification with the attached conditions unless a response received in accordance with 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 Construction Permit Modification." Written comments should be provided to the Department Bureau of Air Regulation at 2600 Blair Stone Road, Mall 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 if filed pursuant to Section 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 Section 120.569 and 120.57 of the Florida Statutes. 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 the notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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 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, as well as the rules and statutes which entitle the petitioner to relief; (f) A demand for relief.

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.

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:

- Dept. of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 488-0114
Fax: (850) 922-6979
- Palm Beach Co. Health Department
901 Evernia Street
Post Office Box 29
West Palm Beach, Florida 33401
Telephone: (561) 355-3070
Fax: (813) 464-4420
- Dept. of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902-2549
Telephone: (941) 332-6969

The complete project file includes the application, technical evaluation, Draft Permit Modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call (850) 488-0114, for additional information.
CN 99-143

March 24, 1999

Z 333 618 086

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to <i>Murray Brunson</i>	
Street & Number <i>US Sugar</i>	
Post Office, State, & ZIP Code <i>Clewiston, FL</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>3-22-99</i>
<i>0510003-007-AC</i> <i>P50-FL-217B</i>	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Murray J. Brunson
US Sugar Corp
P O Box 1207
Clewiston, FL
33440-1207

4a. Article Number
Z 333 618 086

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
3-24-99 BY

5. Received By: (Print Name)

8. Addressee's Address (Only if Requested and fee is paid)

6. Signature: (Addressee or Agent)
X Andrea Sales

Thank you for using Return Receipt Service.

P 263 585 194

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Sr. Vice Pres., Mr. Murray T. Brinson/Sugar Processin	
Street & Number United States Sugar Corp./P.O.Box 1207	
Post Office, State, & ZIP Code Clewiston, FL 33440-1207	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Boiler # 4 3-12-99 PSD-FI-217	

PS Form 3800, April 1995

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Murray T. Brinson
Sr. Vice-Pres., Sugar Processing
United States Sugar Corp.
P. O. Box 1207
Clewiston, FL 33440-1207

4a. Article Number
P 263-585-194

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
3-18-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

3. Signature: (Addressee or Agent)
X Andrea Salis

Is your RETN?

Thank you for using Return Receipt Service.

P 265 659 147

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	
David Buff	
Street Number	
Golden Assoc	
Post Office, State, & ZIP Code	
Gainesville FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-15-97
PSO-FI-217 CB #4	

PS Form 3800, April 1995

Is your RETURN ADDRESS complete on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
David A. Buff PE
Golden Assoc.
6241 NW 23rd St - Suite 500
Gainesville, FL
32653-1500

4a. Article Number
P265 659 147

4b. Service Type

Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
1/21/97

5. Received By: (Print Name)

Malcolm

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

X

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

P 339 251 181

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

PS Form 3800, April 1995

Sent to	
David Buff	
Street & Number	
KBN Engineering + A.S.	
Post Office, State, & ZIP Code	
Gainesville, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	11-20-96

Is your RETURN ADDRESS completed on the reverse side?

SEND

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 David A. Buff, P.E.
 KBN Engineering + A.S.
 6241 NW 23rd St, Suite 500
 Gainesville, FL 32653-1500

4a. Article Number
 P 339 251 181

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 11-22-96

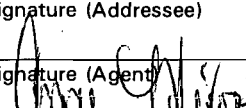
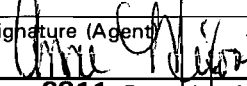
5. Signature (Addressee)
 David A. Buff

6. Signature (Agent)
 [Signature]

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Murray J. Brunson U.S. Sugar Corp PO Drawer 1207 Clewiston, FL 33440		4a. Article Number 2127 633 204	
5. Signature (Addressee) 		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent) 		7. Date of Delivery	
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

2 127 633 204



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sent to		Murray Brunson
Street and No.		U.S. Sugar Corp
P.O., State and ZIP Code		Clewiston, FL
Postage	\$	
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, and Addressee's Address		
TOTAL Postage & Fees	\$	
Postmark or Date		5-396

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Donald Griffin, Proj. Mgr.
 U.S. Sugar Corp.
 P.O. Box 1207
 Clewiston, FL
 33440-1207

4a. Article Number
 Z 127 633 157

4b. Service Type

Registered Insured

Certified COD

Express Mail Return Receipt for Merchandise

7. Date of Delivery
 2-2-94

5. Signature (Addressee)

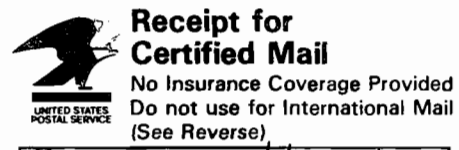
8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
 [Signature]

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 127 633 157



Sent to Donald Griffin	
Street and No. U.S. Sugar Corp	
P.O., State and ZIP Code Clewiston, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-31-96
AC26-248809	
PSD-F127	

PS Form 3800, March 1993

Fold at line over top of

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
*David A Buff, PE
 KBN Eng. + Applied Sciences
 6241 NW 23rd St, 5th Fl
 Gainesville, FL 32653-1500*

4a. Article Number
Z 127 632 560

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
10-30-95

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Z 127 632 560



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to <i>David Buff</i>	
Street and No. <i>KBN</i>	
P.O., State and ZIP Code <i>Gainesville, FL</i>	
Postage	\$
Certified Fee	<i>U.S. Sugar Corp</i>
Special Delivery Fee	<i>Crew Bailer #4</i>
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>10-27-95</i>

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Murray Brunson, V.P.
 U.S. Sugar Corp.
 PO Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 Z 392 979 020

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 8-11-95

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991 U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 979 020



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Send to	Murray Brunson
Street and No.	U.S. Sugar Corp
City, State and ZIP Code	Clewiston, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	AC26-48809 PSD-FI-217 8-9-95

The Clewiston News

Published Weekly

Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida
County of Hendry

RECEIVED
MAR 6 1995

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO
ISSUE PERMIT
AC 26-248809
PSD-FL-217

Before the undersigned authority, personally appeared Richard Hitt, who on oath says he is the Publisher of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement, being a

notice

in the matter of intent

in the

court, was published in

said newspaper in the issues of

March 1, 1995

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

Richard Hitt

Sworn to and subscribed before me this 1st day

of March, A.D. 19 95.

B K Christiansen

Notary Public

OFFICIAL NOTARY SEAL
B K CHRISTIANSEN
NOTARY PUBLIC STATE OF FLORIDA
COMMISSION NO. CC289381
MY COMMISSION EXP. JUNE 27, 1997

Lyons Printing

DEP
SOUTH FLORIDA DISTRICT

The Department of Environmental Protection (Department) gives notice of its intent to issue a construction permit, No. AC 26-248809 / PSD-FL-217, to the United States Sugar Corporation for a modification / increase in the potential / allowable carbon monoxide (CO) emission limit for the existing bagasse / fuel oil fired Boiler No. 4. The boiler is located at the existing sugar mill in Clewiston, Hendry County, Florida. The permit will authorize an increase in the allowable emission rate of CO from 339.1 TPY to 8,818 TPY. The boiler's operation and allowable emissions of all other air pollutants are not changed by this permit. However, the increase in allowable CO emissions is above the significant emission rate and subjects the proposed modification to the Prevention of Significant Deterioration new sources review regulations. The allowable CO emissions are set by a determination of Best Available Control Technology. The maximum predicted CO concentrations from all sources, including the CO emission rate increase requested in the application are: 18,160 ug/m3, 1-hour average, or 45% of the 1-hour ambient air quality standard (AAQS) of 40,000 ug/m3; and, 8,940 ug/m3, 8-hour average, or 89% of the 8-hour AAQS of 10,000 ug/m3. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S. The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed

action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application 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 Tallahassee, Florida 32301 Department of Environmental Protection South District 2295 Victoria Avenue, Suite 364 Ft. Myers, Florida 33901

Any person may send written comments on the proposed action to Mr. A.A. Linero at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person (s). Such request must be submitted within 30 days of this notice.

BEST AVAILABLE COPY

MAY 31 2006

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Murray T. Brinson
 V.P. of Sugar Process.
 U.S. Sugar Corp.
 P.O. Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 Z 751 860 020

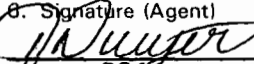
4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 FEB 13 1995

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)


Thank you for using Return Receipt Service.

Z 751 860 020



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sent to Murray T. Brinson	
Street and No. U.S. Sugar	
P.O., State and ZIP Code Clewiston, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	AC 26-248809 PSD-FL-217 2-9-95

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. Murray T. Brinson
 Vice President of Sugar Processing
 United States Sugar Corporation
 Post Office Drawer 1207
 Clewiston, Florida 33440

4a. Article Number
 Z 751 860 006

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
DEC 12 1994

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

USSC Raymond J. ...

PS Form 3811, December 1991 U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 751 860 006



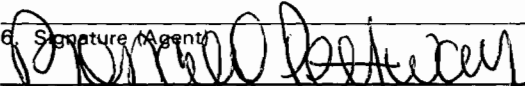
Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Mr. Murray T. Brinson	
Street and No. Post Office Drawer 1207	
P.O., State and ZIP Code Clewiston, Florida 33440	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 12/06/94 U.S. Sugar Corp., Clewiston Mill Boiler No. 4	

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Murray T. Brinson Vice President of Sugar Processing U.S. Sugar Corporation P. O. Drawer 1207 Clewiston, FL 33440		4a. Article Number P 872 563 646	
5. Signature (Addressee) 		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent)		8. Addressee's Address (Only if requested and fee is paid)	

RECEIVED

JUL 29 1994

Bureau of Date of Delivery
 Air Regulation 7-2794

Thank you for using Return Receipt Service.

P 872 563 646



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, JUNE 1991

Sent to Mr. Murray T. Brinson	
Street and No. P. O. Drawer 1207	
P.O., State and ZIP Code Clewiston, FL 33440	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 7-29-94 Permit: AC 26-248809 PSD-FL-217	

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

RECEIVED

I also wish to receive the following services (for an extra fee):

1. Addressee's Address

2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to: **Bureau of Air Regulation**
 Mr. Murray Brinson
 Vice President, Sugar Processing
 United States Sugar Corporation
 Post Office Box 1207
 Clewiston, Florida 33440

4a. Article Number
 P 872 563 622

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 4-28-94

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)
J.P. Hollegan

PS Form 3811, December 1991 • U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

P 872 563 622



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, JUNE 1991

Sent to Mr. Murray Brinson	
Street and No. Post Office Box 1207	
P.O., State and ZIP Code Clewiston, FL 33440	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 4/26/94 U.S. Sugar Corp, Boiler #4	

Department of Environmental Regulation
Routing and Transmittal Slip

To: (Name, Office, Location)

General FYI - See attached copy in

1. PRESTON LEWIS - Bureau of Air Regulation

2. MAGNO Tallahassee

Party

3. Mail Station 5505

*file
GPL
4/18*

4.

Remarks:

RE: U.S. Sugar Clewiston Boiler No.4

FYI

From Gary Maier
South District

Date 04/01/94

Phone SC 748-6975