



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

NOV 30 1994

4APT-AEB

Mr. Clair H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental
Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
DEC 5 1994
Bureau of
Air Regulation

SUBJ: United States Sugar Corporation (USSC), Clewiston, Hendry
County, Florida (PSD-FL-208)

Dear Mr. Fancy:

This is to acknowledge receipt of your preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the major modification to the above referenced sugar cane processing facility by your letter dated October 24, 1994. The proposed project consists of the addition of a new 738 mm BTU/hr bagasse/fuel oil fired spreader stoker/vibrating grate boiler at the Clewiston mill. As discussed between Mr. Martin Costello of your staff and Mr. Stan Kukier of my staff on November 3, 1994, we have reviewed the package as submitted and have no adverse comments regarding the Best Available Control Technology (BACT) determination.

We agree that electrostatic precipitator (ESP) technology may be recommended as BACT for control of boiler particulate and beryllium emissions. The 0.04 lb/mm BTU particulate matter (PM) emission limit is significantly lower than the 0.15 and 0.1 lb/mm BTU PM emission limits proposed in the original PM BACT determination for bagasse and No. 6 fuel oil firing, respectively. The use of very low-sulfur No. 2 fuel oil (≤ 0.05 percent sulfur by weight) may be considered representative of BACT for control of sulfur dioxide (SO_2) and sulfuric acid mist emissions. We also agree that good combustion practices may be recommended as BACT for Boiler No. 7 carbon monoxide (CO) and volatile organic compound (VOC) emissions. The use of low-nitrogen No. 2 fuel oil (≤ 0.015 percent nitrogen by weight), overfire air, and good combustion practices may be considered BACT for control of boiler nitrogen oxides (NO_x) emissions. The boiler will also be equipped with low- NO_x burner technology. The heat input provided by the No. 2 fuel oil will not exceed ten percent of the total annual heat input to the new Clewiston No. 7 boiler. The maximum fuel oil sulfur and nitrogen contents originally proposed by USSC were 0.5 and 0.3 weight percent,

respectively. Boiler No. 7 will not be operated as a cogeneration unit.

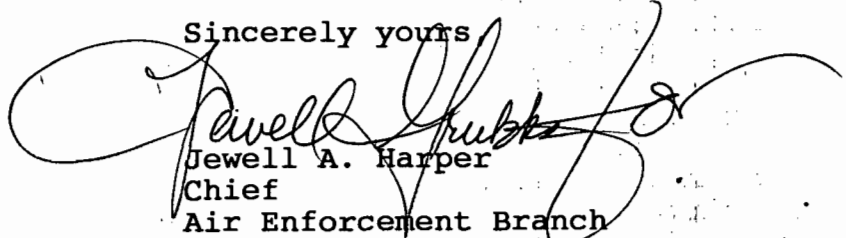
However, as discussed between Ms. Teresa Heron of your staff and Mr. Stan Kukier of my staff on November 8, 1994, we have the following comments related to cost effectiveness and emissions netting.

1. Page 10 of a letter dated February 22, 1994, from Mr. Peter Kroll of ICF Kaiser Engineers, Inc., to Mr. John Brown of your staff, indicates that the United States Environmental Protection Agency (USEPA) has set an upper \$/ton of NO_x removed limit on cost effectiveness for evaluating NO_x emission control technologies. This is incorrect. USEPA - Region 4 does not have predetermined limits for cost effectiveness when evaluating the feasibility of control technologies for any criteria pollutant. All BACT determinations are made strictly on a case-by-case basis.
2. Additional information must be provided by the applicant before an analysis of the emissions netting calculations may be completed. In order to correctly determine the net emissions increase of any criteria pollutant for PSD applicability, it is necessary to include all source-wide creditable and contemporaneous emissions increases and decreases in the netting calculations. Table 2 on page 2 of the BACT determination includes only emissions decreases associated with the proposed operation of Boiler Nos. 5 and 6 in a standby mode. A source may not selectively decide which applicable source specific emissions increases and decreases to include in the netting calculations. Creditable and contemporaneous emissions increases and decreases associated with the operation of Boiler Nos. 1, 2, 3, and 4 must be included. The applicant must also clarify the basis of all criteria pollutant emissions increases and decreases. Decreases are creditable reductions in actual emissions from an emissions unit that are, or can be made, federally enforceable. An emissions increase or decrease is creditable only if it has not been previously relied upon in issuing a PSD permit for USSC, and the permit is still in effect when the increases in actual criteria pollutant emissions from the addition of Boiler No. 7 occur. It is also unclear from information provided in the preliminary determination package if all criteria pollutant emissions limitations contained in existing operating permits for all USSC Clewiston facility emissions units are federally enforceable.

The proposed No. 7 boiler will be subject to the requirements of 40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

Thank you for the opportunity to comment on this package. If you have any questions, please contact Mr. Stan Kukier of my staff at (404) 347-3555, voice mail box extension 4143.

Sincerely yours



Jewell A. Harper
Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: J. Newton
C. Holladay
D. Knowles, SOist,
D. Bunyak, NPS
D. Buff, KBN
CHF/SB

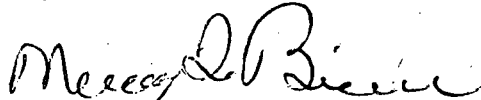
Mr. John C. Brown
November 3, 1994
Page 3

2. On page 4, in line 5 of the first paragraph under the heading "V.1 control Technology Review," the statement should be corrected to read "existing bagasse fired Boilers No. 5 and No. 6," since Boilers No. 5 and 6 are exclusively bagasse fired boilers. Neither one of these boilers burns fuel oil.

Again, we thank you for the opportunity of providing these comments with the hope that our reasons for requesting specific changes are sufficiently clear and understandable. If you have any questions or want to discuss these comments, please call me at (813) 983-8121 or Bob Van Voorhees at (202) 508-6014. We look forward to receiving the final permit and to working with the Department during the commissioning and testing process for this boiler.

Very truly yours,

UNITED STATES SUGAR CORPORATION



Murray T. Brinson
Vice President
Sugar Processing

MTB:jt

CC: Mr. C. H. Fancy, P.E. ✓
Mr. David Knowles
Mr. Robert Van Voorhees
Mr. David Buff
Mr. Peter Briggs
Mr. Donald Griffin

J. Nelson
C. Holladay
G. Harper, EPA
G. Bumpah, WPS

BRYAN CAVE

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

(202) 508-6000

FACSIMILE: (202) 508-6200

ST. LOUIS, MISSOURI
LOS ANGELES, CALIFORNIA
NEW YORK, NEW YORK
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RIYADH, SAUDI ARABIA
FRANKFURT AM MAIN, GERMANY

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

September 9, 1994

Teresa M. Heron
Florida Department of
Environmental Protection
Bureau of Air Regulation
111 South Magnolia
Suite 4
Tallahassee, FL 32301

**Re: Comments on Draft Permit and BACT Determination for
United States Sugar Corp. -- Clewiston Boiler No. 7**

Dear Ms. Heron:

Thank you for providing us the opportunity to review the draft PSD permit and BACT determination for Clewiston Boiler No. 7. We have found this opportunity for review extremely helpful. Having the opportunity to review these drafts now should save a significant amount of our time and yours by allowing us to identify and resolve concerns that we may have over the detailed provisions of the permit at this preliminary stage without having to resort to the hearing process later.

Enclosed for your consideration are comments on the draft documents. We have suggested a number of revisions and have tried in each case to explain the reasons for suggesting a revision.

In some cases, our review of the data and requirements has led to a conclusion that different emission limits are warranted. This is especially true for particulate matter and carbon monoxide, where the adoption of an ESP to control particulate matter and the redesign of the boiler to control carbon monoxide has resulted in such substantial reductions of the emissions of these pollutants (below the emission levels for the boilers that will be replaced) that PSD analysis is no longer required. In these cases, we have opted for less stringent emission limits because of our concerns, based on discussions

BRYAN CAVE

Teresa M. Heron
September 9, 1994
Page 2

with equipment manufacturers, over the ability of the control technology to meet the more stringent limits. In both cases, the data support adoption of the less stringent emission limits that we have proposed.

In addition, U.S. Sugar is requesting the Department's approval of an alternative monitoring approach for opacity. In light of the infrequency with which Boiler No. 7 will be burning No. 2 fuel oil and in light of the low ash content of No. 2 fuel oil emissions, U.S. Sugar hereby requests pursuant to 40 C.F.R. § 60.13(i) that the Department establish and approve an alternative monitoring requirement for opacity -- namely, a requirement that a video camera be installed and focused on the stack for Boiler No. 7 and that the camera be operated when No. 2 fuel oil is burned in the boiler.

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

Enclosures

cc: Murray Brinson
Peter Briggs
Donald Griffin



December 21, 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

RE: U.S. Sugar Corporation
Clewiston Boiler No. 7
DEP File No. AC26-238006; PSD-FL-208
Hendry County -AP

Dear Mr. Linero:

United States Sugar Corporation (U.S. Sugar) recently obtained a non-PSD air construction permit from the South District Office to expand their existing Clewiston sugar mill. This construction permit (0510003-001-AC), issued by the South district office on October 25, 1996, was based on permit was issued based on the associated construction permit application which presented maximum PM/PM10 emissions as 14.0 TPY.

Since the original construction permit was issued, U.S. Sugar's final design engineering of the plant has resulted in some changes to the plant. This has resulted in some changes in emissions along with some additional sources. Total maximum PM/PM10 emissions now are 18.0 TPY from the new mill expansion.

In order to accommodate this increase in PM/PM10 emissions from the new mill expansion, and maintain non-PSD applicability, U.S. Sugar desires to obtain emissions offsets from the new Boiler No. 7, which has not yet started operations. Startup of Boiler No. 7 is planned for January, 1997.

According to the Florida PSD rules (Rule 62-212.400, F.A.C.), modifications to major facilities do not require PSD review if the modification would not result in a significant net emissions increase [Rule 62-212.400(2)(d)4., F.A.C.]. For PM, the significant emission rate is 25 TPY; for PM10 it is 15 TPY. The net emissions increase is determined by summing the increase in emissions from the modification itself (i.e., the new mill expansion), and any contemporaneous creditable increases or decreases in the actual emissions of the facility.

The requested total PM10 emissions from the mill expansion are now 18.0 TPY. Standing alone, this increase in emissions exceeds the PSD significant emission rate for PM10 of 15 TPY. To avoid PSD review, a contemporaneous net decreases in emissions of 3.0 TPY or more is required. The contemporaneous emission offsets will be obtained from Boiler No. 7 by reducing the boiler's permitted operating days.

Since Boiler No. 7 has not yet begun normal operations, the actual emissions of Boiler No. 7 equals the boiler's potential emissions [Rule 62-210.200(12)(b), F.A.C.]. Therefore, the decrease in actual emissions from Boiler No. 7 is equal to the decrease in its potential emissions. To provide the offset, Boiler No. 7

16101A/13

6241 Northwest 23rd Street
Suite 500
Gainesville, Florida 32653-1500
352-336-5600 FAX 352-336-6803

5405 West Cypress Street
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road
Suite 105
Boca Raton, Florida 33487
407-994-9910 FAX 407-994-9393

7785 Baymeadows Way
Suite 105
Jacksonville, Florida 32256
904-739-5600 FAX 904-739-7777

1616 P Street NW
Suite 350
Washington, DC 20036
202-462-1100 FAX 202-462-2270



operating hours will be limited to 8,400 hr/yr (equivalent to 350 days per year at 24 hrs/day). The offset in PM10 emissions is calculated as follows:

Current permitted PM10 emissions = 97.0 TPY

Proposed revised permitted PM10 emissions =
 $22.14 \text{ lb/hr} \times 8,400 \text{ hr/yr} \div 2,000 \text{ lb/ton} = 93.0 \text{ TPY}$

Emissions offset = 97.0 TPY - 93.0 TPY = 4.0 TPY

Net increase in PM10 emissions due to project:

Sugar Processing Facility	18.0 TPY
Boiler No. 7 offsets	<u>-4.0 TPY</u>
Net increase	14.0 TPY

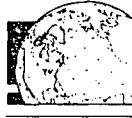
The net increase in emissions for PM10 will be less than 15 TPY, and therefore PSD review does not apply to the revised mill expansion. It is also noted that the net increase in new PM/PM10 emissions is equal to the increase in emissions presented in the original application for the sugar processing facility (14.0 TPY):

The planned changes to the plant, and the associated increase in emissions, is being requested through the South District office. Mr. David Knowles of the South District has been advised of our plans, and is in agreement with our approach to use emission offsets from Boiler No. 7. Revisions to the construction permit for the mill expansion are being submitted concurrently with this request to your office concerning Boiler No. 7.

The table below presents the revised allowable emissions for Boiler No. 7 based on the decrease in allowable operating hours to 8,400 hr/yr:

ALLOWABLE EMISSIONS

Pollutant	Bagasse			No.2 Fuel Oil		
	lb/MMBtu	lbs/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr
Particulate Matter (PM)	0.03	22	93	0.03	7.5	9.7
PM ₁₀	0.03	22	93	0.03	7.5	9.7
Sulfur Dioxide	0.17	125	527	0.05	12.5	16.10
Nitrogen Oxides	0.25	185	775	0.2	50.0	64.40
Carbon Monoxide	0.70	516	2,170	0.066	16.5	21.25
Volatile Organic Compounds	0.212	157	657	0.004	1.0	1.29
Sulfuric Acid Mist	0.017	13	53	0.005	1.25	1.60



These changes should be incorporated into a construction permit modification for Boiler No. 7. Specific Condition 1 of the construction permit should be revised to incorporate these revised allowable emissions, as well as the decreased maximum operating hours.

The creditable emission offsets due to this reduction in maximum operating hours is documented below, based on the allowable emissions in the original permit, and the revised allowables shown above:

PM/PM10: 97 TPY - 93 TPY = 4.0 TPY

Sulfur dioxide: 550 TPY - 527 TPY = 23 TPY

Nitrogen oxides: 809 TPY - 775 TPY = 34 TPY

Carbon monoxide: 2,262 TPY - 2,170 TPY = 92 TPY

Volatile organic compounds: 685 TPY - 657 TPY = 28 TPY

Enclosed is permit modification fee of \$250. It is believed that this change to Boiler No. 7 would not require a public notice, since allowable emissions are being decreased.

If you have any comments or questions concerning this request, or desire additional information, please contact me directly.

Sincerely,

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

DB/arz

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

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3. Article Addressed to: Mr. Murray J. Brinson US Sugar Corp. P O Box 1207 Clewiston, FL 33440-1207		4a. Article Number P 265 659 488	
		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 11-17-97	
5. Received By: (Print Name)		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) X <i>[Signature]</i>			
PS Form 3811, December 1994		Domestic Return Receipt	

Thank you for using Return Receipt Service.

P 265 659 488

US Postal Service
Receipt for Certified Mail
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Sent to	
<i>Murray Brinson</i>	
Street & Number	
<i>US Sugar Corp</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>11-14-97</i>
<i>0510003-006-AC</i>	
<i>Boiler # 7</i>	

PS Form 3800, April, 1995

Fold at line over top of envelope to

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- The Return Receipt will show to whom the article was delivered and the date delivered.

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

Consult postmaster for fee.

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

4a. Article Number
P 265 659 480

4b. Service Type

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

7. Date of Delivery
11-3-97

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)
 X *Murray Brunson*

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

P 265 659 480

US Postal Service
Receipt for Certified Mail

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Sent to	
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	10-31-97
0510003-005-AE P50-FL-208	

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no green
card returned

P 265 659 445

US Postal Service

Receipt for Certified Mail

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Sent to Murry J. Burison	
Street & Number US Sugar Corp	
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	9-4-97
0510003-003-AC	
CB # 7	

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2. Restricted Delivery

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3. Article Addressed to:

David A. Buff, P.E.
 Golden Assoc.
 6241 NW 23rd St Suite 500
 Gainesville, FL 32653-1500

4a. Article Number

P 265 659 156

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

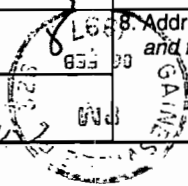
2-6-97

5. Received-By: (Print Name)

6. Signature: (Addressee or Agent)

X Diana Weaver

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



PS Form 3811, December 1994

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P 265 659 156

US Postal Service

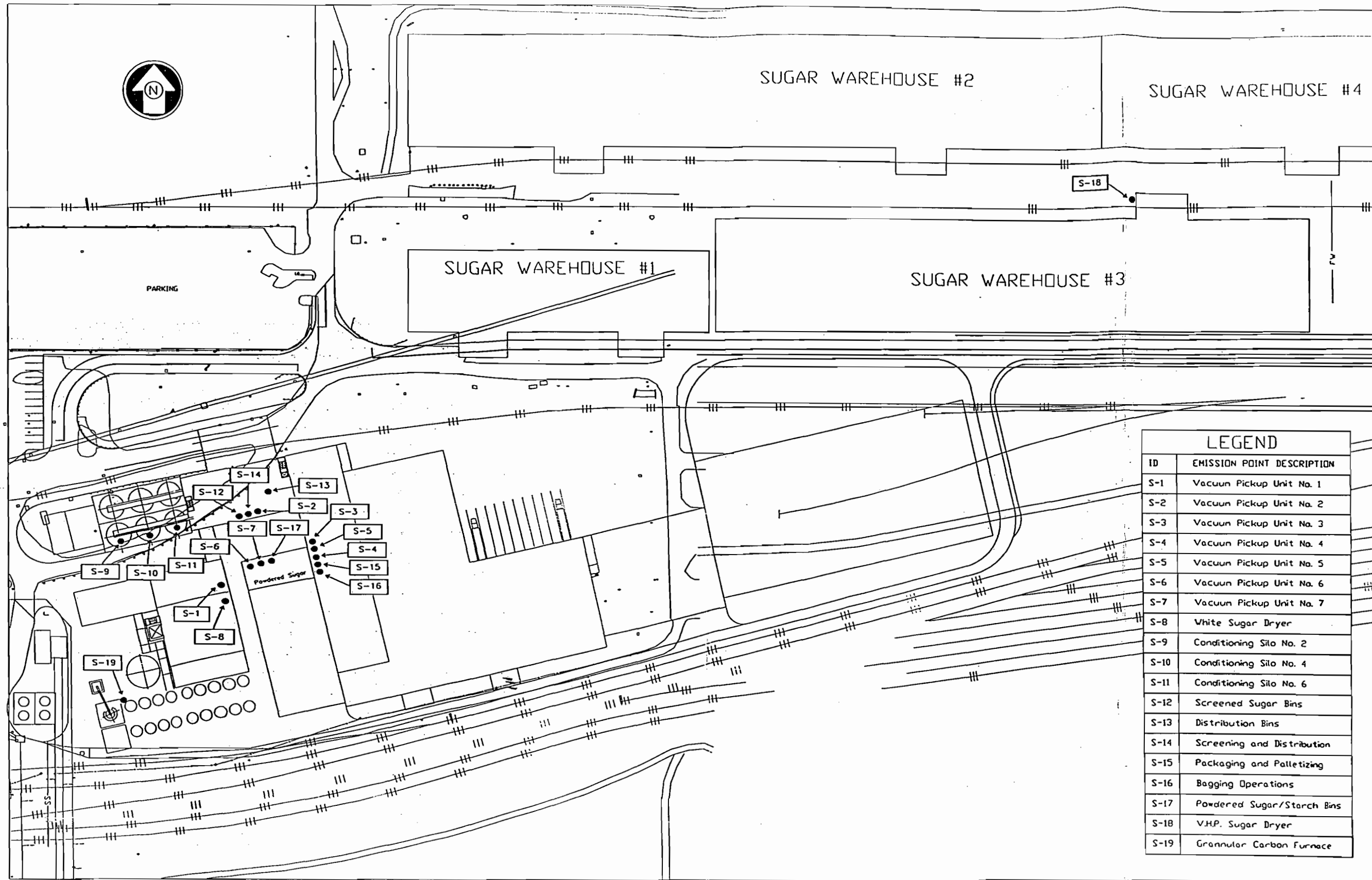
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David Buff	
Street & Number	
Golden Assoc	
Post Office, State, & ZIP Code	
Gainesville, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	2-4-97

PS Form 3800, April 1995



Attachment UC-FE-2B
Mill Expansion Plot Plan

Source: United States Sugar Corporation



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

4a. Article Number
 P 265 659 146

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

7. Date of Delivery
 1/13/97

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)
 X *Karen Allen*

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

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P 265 659 146

US Postal Service
Receipt for Certified Mail
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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	\$

PS Form 3800, April 1995

Postmark or Date
 1-10-97
 PSD-FI-208 / CB No. 7

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENT PROTECTION
 NOTICE OF INTENT TO ISSUE PERMIT
 AC26-238006
 PSD-FL-208

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit to the U.S. Sugar Corporation, P.O. Box 1207, Clewiston, Florida 33440, to install a 738 MMBtu/hr bagasse/fuel oil fired boiler. The No. 2 fuel oil (maximum 0.05% sulfur content and 0.015% nitrogen content, by weight) fired in the new Boiler No. 7 will be limited to 10% of the total potential heat input to the boiler in any calendar year. The proposed facility will be located at the U.S. Sugar Corporation's sugar mill on W.C. Owens Avenue and Clewiston Street, Clewiston, Hendry County, Florida. The increased emissions from the boiler will be offset by the reduction in emissions from the existing boilers (No. 5 and No. 6). Boilers No. 5 and No. 6 will be on standby when the new Boiler No. 7 is in operation. The project is subject to review under the Prevention of Significant Deterioration (PSD) regulations for the following pollutants: sulfur dioxide, nitrogen oxides, volatile organic compounds, sulfuric acid mist and beryllium. A determination of Best Available Control Technology (BACT) was required for these pollutants. The maximum predicted PSD Class II sulfur dioxide increments consumed by all sources, including this project, after this project is constructed are the following: 3.96 ug/m³, annual average, or 20% of the available annual increment of 20 ug/m³; 36.7 ug/m³, 24-hour average, or 40% of the available 24-hour increment of 91 ug/m³; and 203 ug/m³, 3-hour average, or 40% of the available 3 hour increment of 512 ug/m³. The maximum predicted PSD Class I sulfur dioxide increments consumed are the following: 0.39 ug/m³, annual average, or 20% of the available annual increment of 2.0 ug/m³; 3.82 ug/m³, 24 hour average, or 76% of the available 24 hour increment of 5.0 ug/m³; and 22.1 ug/m³, 3 hour average, or 88% of the available 3 hour increment of 25 ug/m³. The maximum predicted PSD Class II nitrogen dioxide increment consumed is 2.24 ug/m³ annual average, or 9% of the available increment of 25 ug/m³. The maximum predicted PSD Class I nitrogen dioxide increment consumed is 0.17 ug/m³, annual average, or 7% of the available increment of 2.5 ug/m³. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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; (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 Ave., Ste. 364 Fort Myers, Florida 33901

Any person may send written comments on the proposed action to Mr. John Brown at the Department's Tallahassee address. 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 requests must be submitted within 30 days of this notice.

CN 94-500
 November 2, 1994

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 _____

November 2, 1994

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 2nd day

of November, A.D. 19 94

B K Christensen

Notary Public

OFFICIAL NOTARY SEAL
 B K CHRISTIANSEN
 NOTARY PUBLIC STATE OF FLORIDA
 COMMISSION NO. CC289381
 MY COMMISSION EXP. JUNE 27, 1997

Lyons Printing

Accordingly, the sentence should be deleted [or, at the very most, U. S. Sugar could be asked to provide notice to the Department if it ever does supply electricity at a rate that exceeds 25 MW. This would allow the Department to assess whether or not it wants to assert at that time that the boiler was, in fact, constructed with the intent of supplying electricity at such a rate to any utility power distribution system.]

{NOTE: There is a third alternative -- namely, requesting that the sentence be revised to read: "Not more than 25 MW electricity output shall be supplied to any utility power distribution system." If this boiler is incapable of generating 75 MW, that limitation should be completely sufficient.}

C. Specific Condition No. 14 should be revised to provide that stack tests be performed "no later than 180 operating days after initial (I) startup." It is necessary to state this requirement in terms of operating days because U. S. Sugar operates its boilers on a seasonal basis only during the sugar cane crop harvesting season. Initially, Boiler No. 7 will also be operated on a seasonal basis. Thus, it is quite possible that the boiler will be started up during the latter portion of the 1996-97 crop season, but will not achieve maximum capacity until sometime during the 1997-98 crop season. To allow for this contingency, the 180-day requirement should be stated in terms of operating days.

D. Specific Condition No. 18 should be revised to read as follows:

*9 month period
is a good argument
for keeping the 180 days
down - preferable to
when winds are
strong*

"Visible emission from the bagasse handling systems shall not exceed 10 percent opacity over any 6 minute period as measured by EPA Reference Method 9, provided, however, that this visible emissions limit shall not apply during periods of high winds (wind speed of 18 miles per hour or greater) if reasonable precautions (covered conveyors, windbreaks, and the height of drop points are minimized) to control fugitive emissions have been taken. The company shall maintain a meteorological instrument to record the wind speed at the plant which shall be located at its Research Center, about one mile "south" of the Clewiston Mill.

This is the exact wording of the requirement as it appears in the current permit for Clewiston Boiler No. 4. Since the same bagasse handling system will be used for both boilers, and since this is the established requirement under which U. S. Sugar and the Department have operated in the past, the same provision should be retained for purposes of consistency. There is no evidence suggesting that this provision has not been adequate to satisfy the Department's requirements.

E. Several corrections should be noted for the Technical Evaluation and Preliminary Determination.

1. On page 3, in line 10 of the paragraph under the heading "III.1 Background Information," the reference should be to No. 6 fuel oil, rather than No. 2 fuel oil, since No. 6 fuel oil is the only fuel oil currently burned in the existing boilers.

*check w/ EPA -
Do they mean
180 oper. days?
✓*

*What is the
basis of the 10%
oper. Rule, Best,
? Does the rule
on BACT address
wind speed?*

*Look into this
w/ MS. Why
should w/s
be a factor.
Does that invalidate
the test method?*

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 mail piece 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, Sugar Processing U.S. Sugar Corporation P. O. Drawer 1207 Clewiston, Florida 33440	4a. Article Number Z 751 859 997	
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) <i>USSC Bryan L. ...</i>		7. Date of Delivery 10-26-94 BJS
8. Addressee's Address (Only if requested and fee is paid)		8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 ★U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

Z 751 859 997



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. P. O. Drawer 1207	
P.O., State and ZIP Code Clewiston, Florida 33440	
Postage ⁴ / ₁₀	\$
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: 10/24/94 AC26-238006 & PSD-FL-208	

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. *Teresa:*

2.

3.

4.

The report looks incomplete. They need to furnish information required pursuant to 62-297.570 (3) i, j, k, l, m, n, o, p, q, r, s, u. We will continue our review once we receive the above requested info.

Thanks,

Ramesh

FROM:

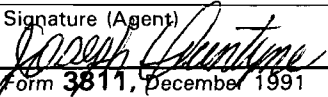
DATE

PHONE

Teresa
the TESTS
probably
should go there
to Mike

J. M.

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, Sugar Processing U.S. Sugar Corporation P. O. Drawer 1207 Clewiston, Florida 33440	4a. Article Number P 872 563 609	
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 3/21/94
8. Addressee's Address (Only if requested and fee is paid)		8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 ☆U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

P 872 563 609



Receipt for Certified Mail

No Insurance Coverage Provided
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Sent to Mr. Murray T. Brinson	
Street and No. P. O. 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: 3/17/94 AC 26-238006 & PSD-FL-208	

PS Form 3800, JUNE 1991



Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

February 28, 1994

Mr. Peter J. Kroll, P.E.
Manager, Air Quality Engineering
ICF Kaiser Engineers, Inc.
Four Gateway Center
Pittsburgh, PA 15222-1207

Re: U. S. Sugar Corporation, Clewiston Mill
Boiler No. 7 - AC 26-238006 & PSD-FL-208

Dear Mr. Kroll:

The National Park Service (NPS) has reviewed U. S. Sugar Clewiston's PSD Class I modeling and air quality related values (AQRV) submittals. The NPS has verbally agreed with the Department that the Class I modeling analysis is complete. At the verbal request of the NPS, the Department is forwarding to you a copy of a recently completed air quality related values (AQRV) Survey for the Everglades National Park. They are requesting that you review this material and contact them directly to receive the most up-to-date information, and to discuss any specific concerns they may have with the AQRV analysis portion of U. S. Sugar Clewiston's application. Please contact Mr. Dee Morse of the National Park Service at (303) 969-2071.

Sincerely,

C. H. Fancy

Chief

Bureau of Air Regulation

CHF/cgh

Enclosure

cc: Murray Brinson, U. S. Sugar (with enclosure)
G. Preston Lewis, P.E., FDEP
Teresa Heron, FDEP

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. *Preston Lewis* ① *James*
2. *② Kelly file*
- 3.
- 4.

For your files!

FROM:

Dave Holladay

DATE

3/3/94

PHONE

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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, Sugar Processing
 U.S. Sugar Corporation
 P. O. Drawer 1207
 Clewiston, FL 33440

4a. Article Number
 P 872 562 572

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)

J. G. Holligan

PS Form 3811, December 1991 *U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

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P 872 562 572



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 (See Reverse)

Sent to Mr. Murray T. Brinson, U.S.	
Street and No. PO Drawer 1207 Sugar Corp.	
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: 10-15-93 Permit: AC26-238006 PSD-FL-208	

PS Form 3800, JUNE 1991

BRYAN CAVE
ACTION SLIP

From **ROBERT F. VAN VOORHEES**
(202) 508-6014

To Teresa Heron Date 09-13-94

For your info See me
 Please handle File
 For your approval Copies ()
 Your comments Return to me

Other/Comments

Please substitute this
corrected letter for the
one you received on Monday
via Federal Express.

*Thanks,
Bob*

Check Sheet

Company Name: United States Sugar Corporation
Permit Number: AC 26-238006
PSD Number: PSD FL-208 0510003
Permit Engineer: Aleon 0510003-003-AC

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Waiver of Department Action
- Department Response
- Other

Cross References:

- AC 26-08930
- AD 26-144701
-

EU = 014

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT or LAER Determination
- Unsigned Permit

Correspondence with:

- EPA
- Park Services
- Other

- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

Final

Determination:

- Final Determination
- Signed Permit
- BACT or LAER Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

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

RECEIVED

JUN 30 1994

Bureau of
Air Regulation

Subject: U. S. Sugar Corporation, Clewiston Mill
Boiler No. 7 - AC 26-238006 and PSD-FL-208

Dear Mr. Brown:

This letter provides supplemental responses of the United States Sugar Corporation (U. S. Sugar) to the Department's March 18, 1994 request for additional information relating to the pending application for a construction permit for Clewiston Boiler No. 7 and augments the preliminary answers provided in Robert F. Van Voorhees' letter, dated June 7, 1994 (Attachment A).

We also enclose a revised Section 5.0, Best Available Control Technology Evaluation (Attachment B) in accordance with the discussion between the Department and U. S. Sugar on June 8, 1994, and revised Tables 2-8 and 3-3 (Attachment C). Answers to the Department's questions are as follows:

BACT DETERMINATION

Particulate Matter (PM):

1. *Please provide the technical, economic and environmental analysis data for using an electrostatic precipitator (ESP) to control particulate matter emissions.*

RESPONSE TO ITEM 1:

This information is presented in the revised Section 5.0, submitted as Attachment B.

2. *The Department has made contacts with several of the ESP's manufacturers that state that ESP technology is technically feasible for this project. Please explain the basis of your conclusion.*

RESPONSE TO ITEM 2:

We have concluded that ESP technology is technically feasible. The relevant information is presented in the revised section 5.0.

3. *Provide a copy of the final ESP test report (include the wet ESP test data) for the tests conducted with United McGill Corporation Mobile Precipitator System in January 1994.*

RESPONSE TO ITEM 3:

The final ESP test report is still in preparation and will be forwarded upon receipt.

4. *Provide a comparison of the design characteristic of the test ESP and ESPs used in other high conductivity ash applications. For example, an ESP was specified in the BACT determination to control particulate emissions from a circulating fluidized bed 338 MMBtu/hr boiler firing bagasse at the Puunene Mill, Hawaiian Commercial & Sugar Company, Limited. The emission limit when firing bagasse in the boiler was specified as 0.03 lb/MMBtu.*

RESPONSE TO ITEM 4:

U. S. Sugar has concluded that an ESP is a feasible control technology for the proposed boiler. Accordingly, we understand that the requested information is not needed and that it will not be necessary for the Department to carry out a detailed comparison between the ESP now proposed for Clewis-ton Boiler No. 7 and the ESP proposed for installation on the proposed cogeneration boiler at Puuene Mill. Nor would it be possible for us to provide sufficiently detailed engineering information on an ESP for the Puuene mill since that project is not proceeding at present. The proposed boiler authorized by the PSD permit issued by the Hawaii Department of Health to Hawaiian Commercial & Sugar Company, Limited (HC&S) has never been constructed. Moreover, based on our discussions with the Puunene Mill, it is our understanding that HC&S has suspended indefinitely any plans to construct the boiler. As far as we know, there has been no final selection of the ESP that would be installed if the project ever moves forward. In addition, any direct comparison would be complicated by the planned operational difference between the two boilers.

For example, the Puunene Mill was proposed and permitted as an electric power cogeneration boiler burning a fuel mixture of coal and bagasse.

5. *What is the maximum removal efficiency an ESP vendor will guarantee for Boiler No. 7?*

RESPONSE TO ITEM 5:

Based on our discussions with you and your staff, and on the requests for additional information that we have received from the Department, we have held discussions with a number of ESP manufacturers regarding their ability to provide an ESP capable of meeting the 0.03 lb/MMBtu emission limit specified by the Department. At least one vendor has stated that it would guarantee an outlet dust concentration not to exceed 0.03 lb/MMBtu, which would reflect a collection efficiency of 98.52% based on the vendor's projected inlet dust loading of 0.64 gr/ACF and estimated outlet dust loading of 0.095 gr/ACF.

Nitrogen Oxides (NO_x):

6. *The equipment proposed appears to be consistent with other applications which utilize Selective Non Catalytic Reduction (SNCR). However, several costs appear to be either new or higher than other applications - namely the licensing fee, start-up and testing, the model study and annual operating costs. Provide a detailed cost analysis including a copy of the vendor quote for all equipment, tasks included in the performance test and justification for the annual operating labor cost. SNCR installation was specified in the BACT determination for the Puunene Mill boiler.*

RESPONSE TO ITEM 6:

Information responsive to this question was provided in the June 7, 1994 letter from Robert F. Van Voorhees and appended as Attachment A. In addition, the technical and economic feasibility considerations for an SNCR unit are addressed in the revised Section 5.0, submitted as Attachment B to this letter.

Carbon Monoxide (CO):

7. *The Department is taking into consideration the Boiler No. 4 stack test CO emission data. However, you need to evaluate the CO emission rates using the 0.35 lb/MMBtu standard (as in the Okeelanta Power Limited Partnership's permit).*

Your company and Okeelanta power are proposing good combustion practices as a control technology to reduce CO and VOC emissions. As such, we fail to understand your rationale for proposing the higher emission limit for this project. Your proposed CO emissions limit is 30 times higher than the Okeelanta project burning biomass fuel.

RESPONSE TO ITEM 7:

As noted in our June 7, 1994 response, U. S. Sugar is prepared to accept a determination that BACT for carbon monoxide emissions from this boiler is good combustion practices and, based on the representations of boiler manufacturers, a determination that the boiler will be capable of achieving an emission limit of 0.35 lb/MMBtu for carbon monoxide.

General:

8. *Submit appropriate updated tables (Tables 2-3, 2-4, 2-5, and 2-6) showing the revised emission limits for the affected pollutants.*

RESPONSE TO ITEM 8:

Updated Tables 2-3, 2-4 and 2-5 were submitted with the June 7, 1994 letter from Robert F. Van Voorhees as Attachments B, C and D. From our review of the analysis of the emissions reflected in Table 2-6 and our discussion of this assessment with your staff on June 8, we seem to be in agreement that it is not necessary to revise the table. Table 2-6 assesses the potential for the new boiler to emit certain chemicals of concern to the Department -- chemicals which could be toxic if emitted in high enough concentrations. The basis for concluding that it is unnecessary to revise Table 2-6 is that the analysis already presented in the original PSD application demonstrated that the new boiler will not emit any of these chemicals in concentrations that could cause any concern. Thus, the original application projected worst-case annual, 24-hour, and 3-hour scenarios for such emissions that are now far above any emissions that could conceivably occur from the new boiler. Yet these emission scenarios did not pose any concern under the Department's No-Threat Level (NTL) guidelines. The worst case estimates originally presented in Table 2-6 showed that emissions would remain safely below any levels that might prompt concern.

Since then, U. S. Sugar and the Department have discussed and U. S. Sugar has proposed to accept more stringent emission rates and to redesign the proposed boiler and to install additional air pollution control equipment. Specifically, U. S. Sugar will increase substantially the size of the boiler to improve residence time and cause more complete combustion, will use cleaner, lower-sulfur diesel fuel, and will install an ESP on the boiler. These changes will result in substantially lower emission levels than were reflected in Table 2-6. With the reduced emission rates that will result from boiler design improvements and additional pollution control equipment that U. S. Sugar has proposed to adopt, there is an ever greater degree of certainty that the FDEP NTLs will not be exceeded by the proposed project. Therefore, it should be unnecessary to recalculate the emission estimates provided in Table 2-6 only to arrive at lower, even safer emission estimates.

Air Quality Related Values (AQRV):

9. *On February 28, 1994, the Department sent you a letter with a copy of an AQRV survey for the Everglades National Park. This survey was done by the National Park Service (NPS). In order to complete your AQRV analysis, please review the survey, contact Dee Morse of the NPS, coordinate with him any specific concerns the NPS may have with your AQRV analysis, and respond to these concerns, if any. Please provide the Department a copy of your response.*

RESPONSE TO ITEM 9:

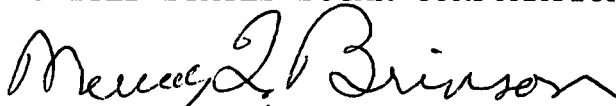
The requested information on Air Quality Related Values was submitted to you and the National Park Service under separate cover by Peter Kroll of ICF Kaiser Engineers, Inc., on May 10, 1994. On June 13, 1994, Cleve Holladay informed U. S. Sugar's counsel, Peter Oppenheimer, that FDEP and the National Park Service are satisfied with the revised AQRV survey submitted by Peter Kroll on May 10, 1994.

John C. Brown, Jr.
June 27, 1994
Page 6

This should provide all the remaining information necessary to complete your review and approval of the construction permit application for Clewiston Boiler No. 7.

Sincerely,

UNITED STATES SUGAR CORPORATION



Murray T. Brinson
Vice President
Sugar Processing

MTB:jt

Enclosures

cc: G. Preston Lewis, P.E., FDEP
Douglas G. Outlaw, P.E., FDEP
Teresa M. Heron, FDEP
Cleve G. Holladay, FDEP
William H. Congdon, Esq., FDEP
Peter Kroll, P.E., ICF Kaiser
Robert F. Van Voorhees, Esq., Bryan Cave
Peter Briggs, USSC
Peter Barquin, USSC
Donald Griffin, USSC



United States Department of the Interior

NATIONAL PARK SERVICE

Southeast Regional Office
75 Spring Street, S.W.
Atlanta, Georgia 30303

IN REPLY REFER TO:

N16 (SER-ODN)

JUN 28 1994

Mr. Clair Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

JUL 06 1994

Bureau of
Air Regulation

Dear Mr. Fancy:

We have reviewed the Prevention of Significant Deterioration permit application for U.S. Sugar Corporation's (U.S. Sugar) sugar mill near Clewiston, Florida. U.S. Sugar is proposing to install a new bagasse and fuel-oil-fired boiler (boiler 7) at its Clewiston mill. In addition, U.S. Sugar is proposing to raise the stacks of existing boilers to 150 feet above grade. The Clewiston mill is located approximately 102 km north of the Everglades National Park (Everglades), a Class I air quality area administered by the National Park Service.

The addition of boiler 7 will result in a significant increase in emissions of nitrogen oxide (NO_x), sulfur dioxide (SO_2), particulate matter, volatile organic compounds, and carbon monoxide. Based on our review of the permit application, we deem it complete and do not anticipate that the proposed project will have a significant impact on sensitive resources at the park. However, we do have the following comments concerning the best available control technology (BACT) and modeling analyses.

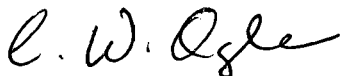
The BACT analysis appears to be complete; however, please note that there are two bagasse boiler control determinations in the RACT/BACT/LAER Clearinghouse database which require more stringent controls than U.S. Sugar is proposing. Both companies will use fluidized bed combustor technology, which may be a viable option for U.S. Sugar. The Thermo Electron Delano Energy Company in California will use limestone injection to control SO_2 emissions, and Thermal De NO_x to minimize NO_x emissions. The Hawaiian Commerce and Sugar Company, Ltd., will use sorbent injection to control SO_2 , selective noncatalytic reduction (SNCR) to control NO_x , and a cyclone and ESP to control particulate matter to 0.03 pounds per million BTU. These are two more companies (besides Okeelanta) which should be compared to U.S. Sugar's proposal during the BACT determination.

Based on U.S. Sugar's analyses, we agree that the emissions from boiler 7, and the proposed increases in stack heights, will not cause or contribute to Class I increment or National Ambient Air Quality Standard violations at the Everglades.

As we requested, U.S. Sugar used our Everglades Air Quality Related Values (AQRV) survey to address potential impacts on sensitive resources at the park. On May 10, 1994, U.S. Sugar submitted to you a revised Section 7.0, "Additional Impact Analysis," as an amendment to the permit application. We feel this amendment adequately addresses potential impacts on sensitive resources at the Everglades. However, we needed to redo U.S. Sugar's Level I visibility screening analysis for the Everglades. In the model analysis, U.S. Sugar used the ozone data from the Everglades' AQRV survey. The results showed that the proposed project passed the Level I screening test for the park. However, as stated in our April 26, 1994, letter to you, there was an error with the ozone data in the Everglades' AQRV survey. Therefore, we performed a Level I visibility screening analysis using the correct ozone data and found that the proposed project still passes the Level I screening test. Therefore, we do not anticipate emissions from boiler 7 to result in visible plume impacts at the Everglades.

We appreciate receiving this application early in the review process. Please provide us a copy of your analysis and draft permit upon completion for our review. In the meantime, if you have any questions regarding our comments, please contact Dee Morse of our Air Quality Division in Denver at 303/969-2071.

Sincerely,



FOR James W. Coleman, Jr.
Regional Director
Southeast Region

- cc: J. Harper
- C. Holladay
- D. Knowles, SF Dist.
- J. Harper, EPA
- M. Bunson, US Sugar

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RECEIVED

June 7, 1994

JUN 09 1994

Bureau of
Air Regulation

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: U.S. Sugar Corporation, Clewiston Mill
Boiler No. 7 - AC 26-238006 & PSD-FL-208

Dear Mr. Brown:

This letter responds to your letter dated March 18, 1994, requesting additional information to complete review of our pending application for a permit to construct Boiler No. 7 at the Clewiston Mill in Hendry County, Florida. Since receiving your letter and since the meeting with you and your staff on March 28, 1994, we have conducted detailed discussions with additional potential boiler manufacturers and air emissions control equipment vendors. Based on these discussions, United States Sugar Corporation (U.S. Sugar) provides the following additional information in response to your requests:

BACT DETERMINATION

Particulate Matter (PM):

1. Please provide the technical, economic and environmental analysis data for using an electrostatic precipitator (ESP) to control particulate matter emissions.
2. The Department has made contacts with several of the ESP's manufacturers that state that ESP technology is technically feasible for this project. Please explain the basis of your conclusion.
3. Provide a copy of the final ESP test report (include the wet ESP test data) for the tests conducted with United McGill Corporation Mobile Precipitator System in January 1994.

BRYAN CAVE

John C. Brown, Jr., P.E.
June 7, 1994
Page 2

4. Provide a comparison of the design characteristic of the test ESP and ESPs used in other high conductivity ash applications. For example, an ESP was specified in the BACT determination to control particulate emissions from a circulating fluidized bed 338 MMBtu/hr boiler firing bagasse at the Puene Mill, Hawaiian Commercial & Sugar Company, Limited. The emission limit when firing bagasse in the boiler was specified as 0.03 lb/MMBtu.
5. What is the maximum removal efficiency an ESP vendor will guarantee for Boiler No. 7?

RESPONSE TO ITEMS 1-5:

Although we still have serious concerns about the capability of this technology to operate on a bagasse boiler, U.S. Sugar is prepared, based on representations made to the company by control technology manufacturers and vendors, accept a determination that BACT for particulate matter for this boiler is an electrostatic precipitator (ESP) capable of achieving an emission limit of 0.03 lb/MMBtu for particulate matter when firing bagasse in the boiler.

Nitrogen Oxides (NO_x):

6. The equipment proposed appears to be consistent with other applications which utilize Selective Non Catalytic Reduction (SNCR). However, several costs appear to be either new or higher than other applications - namely the licensing fee, start-up and testing, the model study and annual operating costs. Provide a detailed cost analysis including a copy of the vendor quote for all equipment, tasks included in the performance test and justification for the annual operating labor cost. SNCR installation was specified in the BACT determination for the Puene Mill boiler.

RESPONSE TO ITEM 6:

Based on the representations of boiler manufacturers, U.S. Sugar is prepared to accept a determination that BACT for this boiler is overfire air, high excess air rates, and good combustion practices capable of achieving an emission limit of 0.20 lb/MMBtu for nitrogen oxides when firing bagasse in the boiler. We have been assured that this emission level can be achieved without requiring the use of Selective Non Catalytic Reduction (SNCR) and without incurring the substantial additional costs associated with the installation and operation of that unit. In support of our cost analysis for the BACT demonstration, we are

BRYAN CAVE

John C. Brown, Jr., P.E.
June 7, 1994
Page 3

enclosing the vendor quote on the SNCR that you requested (Attachment A). We believe the information serves to confirm that the additional cost of an SNCR is unwarranted in light of the capability to achieve a level of 0.20 lb/MMBtu without the SNCR, and especially in light of the other environmental factors associated with the handling of urea in conjunction with the use of an SNCR, as described in our prior submissions.

Carbon Monoxide (CO):

7. The Department is taking into consideration the Boiler No. 4 stack test CO emission data. However, you need to evaluate the CO emission rates using the 0.35 lb/MMBtu standard (as in the Okeelanta Power Limited Partnership's permit).

Your company and Okeelanta power are proposing good combustion practices as a control technology to reduce CO and VOC emissions. As such, we fail to understand your rationale for proposing the higher emission limit for this project. Your proposed CO emissions limit is 30 times higher than the Okeelanta project burning biomass fuel.

RESPONSE TO ITEM 7:

Based on the representations of boiler manufacturers, U.S. Sugar is prepared to accept a determination that BACT for carbon monoxide emissions from this boiler is good combustion practices and that the boiler will be capable of achieving an emission limit of 0.35 lb/MMBtu for carbon monoxide.

General

8. Submit appropriate updated tables (Tables 2-3, 2-4, 2-5, and 2-6) showing the revised emission limits for the affected pollutants.

RESPONSE TO ITEM 8:

Updated Tables 2-3, 2-4, and 2-5 are enclosed for your review (Attachments B, C, and D). We have concluded that it should be unnecessary to provide a revised version of Table 2-6 because the changes in BACT and the resulting emissions levels discussed with the Department and proposed in this letter would only serve to reduce the emission rates estimated in Table 2-6. Under the circumstances it seems unnecessary to go through the additional calculations to estimate more precisely the exact emission levels. We propose that you consider the Table 2-6 in the initial application as valid upper bound estimates of the emission

BRYAN CAVE

John C. Brown, Jr., P.E.
June 7, 1994
Page 4

levels. Thus, these estimates show -- with an even greater degree of certainty in light of the reduced emission rates -- that the FDEP no-threat limits (NTLs) for toxic air pollutants will not be exceeded by the proposed project.

Air Quality Related Values (AQRV)

9. On February 28, 1994, the Department sent you a letter with a copy of an AQRV survey for the Everglades National Park. This survey was done by the National Park Service (NPS). In order to complete your AQRV analysis, please review the survey, contact Des Morse of the NPS, coordinate with him any specific concerns the NPS may have with your AQRV analysis, and respond to these concerns, if any. Please provide the Department a copy of your response.

RESPONSE TO ITEM 9:

The requested information on Air Quality Related Values was submitted to you and to the National Park Service under separate cover by Peter Kroll of ICF Kaiser Engineers, Inc., on May 10, 1994.

This should provide all of the remaining information necessary to complete your review and approval of the construction permit application for Clewiston Boiler No. 7. We look forward to discussing with your staff on June 8, 1994 the steps necessary to complete your determinations and issuance of the necessary permits.

Sincerely,



Robert F. Van Voorhees
Counsel for United States
Sugar Corporation

Enclosures

cc: G. Preston Lewis, P.E. - FDEP
Douglas G. Outlaw, P.E. - FDEP
Teresa M. Heron - FDEP
Cleve G. Holladay - FDEP
William H. Congdon, Esq. - FDEP
Murray Brinson - U.S. Sugar
Peter Barquin - U.S. Sugar
Peter Briggs - U.S. Sugar
Peter Kroll, P.E. - ICF Kaiser

78708.01

D. Knowles
J. Harper, EPA
J. Beatty, NPS

 **ICF KAISER**
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May 10, 1994

Mr. John C. Brown, Jr., P.E.
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Florida Department of Environmental Protection
Twin Towers Office Building
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RECEIVED

MAY 11 1994

Bureau of
Air Regulation

**RE: US Sugar Corporation, Clewiston Mill
Boiler No. 7 - AC 26-238006 & PSD-FL-208**

Dear Mr. Brown:

On behalf of the United States Sugar Corporation (US Sugar), we submit the following enclosed materials in response to the Department's March 18, 1994 request for additional information relating to US Sugar's application for a construction permit for Boiler No. 7 at its Clewiston Mill.

This letter provides our response to the Department's requests for information, item No. 9 related to Air Quality Related Values (AQRVs). We have revised Section 7.0, Additional Impact Analysis (submitted here as Attachment 1), of the PSD permit application in accordance with the Department's February 28 letter and the attached AQRV survey of the Everglades National Park (ENP) conducted by the National Park Service (NPS). We are also forwarding a copy of this directly to Dee Morse of the NPS. We have spoken to Dee Morse and believe that the information provided in this response will satisfy your needs and the needs of the NPS for additional information on this item.

Specifically, the analysis examines the maximum predicted cumulative concentrations of pollutants due to the proposed boiler and other proposed and existing sources and concludes that these concentrations will remain well below levels that could be expected to affect sensitive resources in the ENP. Moreover, as noted in our December 22, 1993 response, the proposed US Sugar boiler No. 7 does not contribute a significant portion (less than 1% of the total) to the ENP Class I receptor with the highest-second-highest SO₂ impact



Mr. John C. Brown, Jr., P.E.
May 10, 1994
Page 2

for any of the five years of meteorological data used in the impact analysis. Thus the concentrations resulting from the cumulative effect of all sources are well below levels that might be expected to cause effects, and the relative contribution of the proposed boiler No. 7 to even those concentrations would be minute.

Please contact me at (412) 497-2024 or Bob Van Voorhees at (202) 508-6014 if you have any questions about the information provided in this response. We look forward to working with you and your staff to assist in your review and approval of this permit application.

Very truly yours,

A handwritten signature in black ink, appearing to read "Peter J. Kroll".

Peter J. Kroll, P.E.
Manager, Air Quality Engineering

cc: G. Preston Lewis P.E, FDEP
Douglas G. Outlaw, P.E., FDEP
Teresa M. Heron, FDEP
Cleve G. Holladay, FDEP
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Robert Van Voorhees, Esq., Bryan Cave

Enclosure