

Golder Associates Inc.

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



October 20, 1999

9937515

Florida Department of Environmental Protection
New Source Review Section
2600 Blair Stone Road
Tallahassee, FL

Attention: Jeffery Koerner, P.E.

RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – PSD PERMIT
APPLICATION FOR BOILER NO. 4 AND THE SUGAR REFINERY AT THE
CLEWISTON MILL
INFORMATION SUBMITTAL NO. 5

Dear Mr. Koerner:

Based on my conversations last week with Cleve Holladay, and Stan Krivo at EPA Region 4, regarding U.S. Sugar's PSD permit application to modify operation of Boiler No. 4 and expand the sugar refinery operation, a few additional questions have been raised in regards to approval of the ISC-PRIME model for the Clewiston mill. The purpose of this letter is to respond to these questions. The questions and our response are provided below.

1. Attached is a diagram showing the location of the Boiler No. 4 stack and other stacks at U.S. Sugar in relation to buildings. A scale is provided on the diagram. Please use this diagram in conjunction with Attachment UC-FE-2 included in the permit application form, and with building information presented in Section 6.0 of the PSD report (page 6-13 and Table 6-13).
2. Regarding baseline emissions used for Boiler No. 4 in the significant impact analysis, the following information is provided. Attached is Table A (filename: Blr4sig.xls) which summarizes the baseline emissions used in the significant impact analysis. All baseline emissions are based on the actual emission factors for Boiler No. 4 obtained from source testing (refer Appendix B, Table B-1). The emission factors used in this table are the same as those used to calculate the current actual annual emissions for PSD source applicability (see table 3-3 of PSD report). For all but NO_x , the boiler heat input rate used to calculate the baseline emissions were based on actual historical boiler operation, and was 546 MMBtu/hr for the 24-hour averaging time (for PM/PM_{10}), and 600 MMBtu/hr for the 1-hour averaging time. For SO_2 , it was conservatively assumed that no fuel oil burning was occurring, and that the SO_2 was solely due to bagasse firing. In the case of NO_x , the baseline emissions were conservatively based on the actual annual baseline NO_x emissions (70.6 TPY from Table 3-3) and then dividing by 8,760 hr/yr. This would

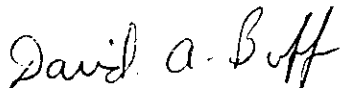
render the baseline NO_x emissions lower as actual operation has been only 160 days/yr (3,840 hr/yr) or less.

3. The CO and PM₁₀ emissions used in the AAQS/PSD modeling for other boilers at U.S. Sugar Clewiston were shown in Table 6-4 of the PSD report. These emissions should match the model input files. For PM₁₀ emissions, the emissions are based on the permit limits for PM for each boiler. For CO, the emission factors are based on actual CO test data available for each boiler (a revised Table 6-4 was forwarded to Jeff Koerner at FDEP on Sep. 22, 1999).
4. All other questions should be addressed by Steve Mark's e-mail to Cleve Holladay and Stan Krivo dated Oct. 14, 1999. Steve has placed all model input/output data onto the Golder FTP site.

Thank you for consideration of this information. Please call or e-mail me if you have any additional questions.

Sincerely,

GOLDER ASSOCIATES INC.



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

DB/jkk

Enclosures

cc: Don Griffin
Bill Wehrum
Stan Krivo, EPA Region IV

\\GATORBAIT\NDP\Projects\99\9937\9937515a\05\#051tr.doc

cc: SFD
EPA
NPS
File
C. Holladay, BAR

Table A. Baseline Emissions Used in the Significant Impact Analysis for Clewiston Boiler No. 4

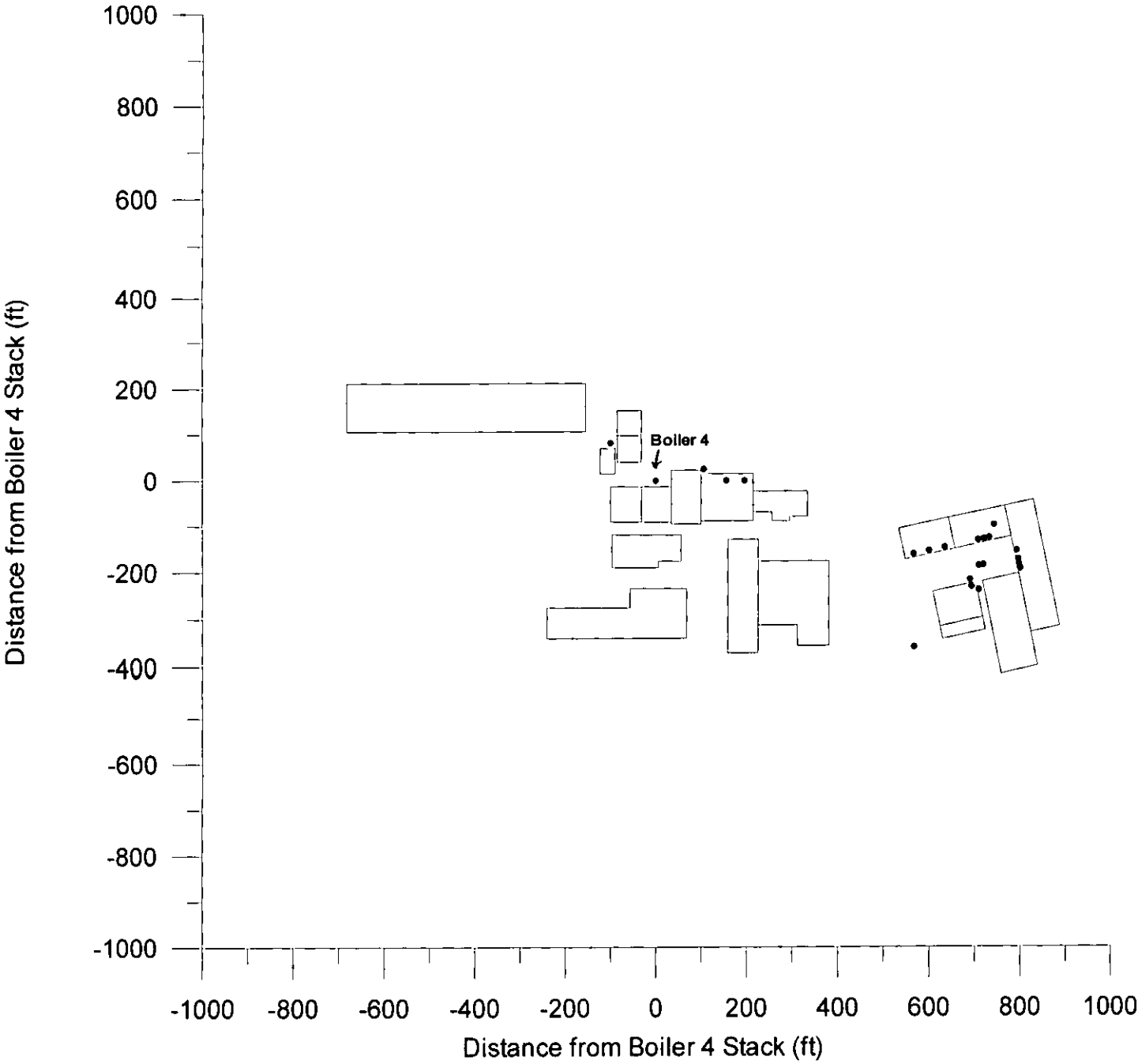
Pollutant	Emission Factor (a)	Heat Input (b) (MMBtu/hr)	Emissions	
			(lb/hr)	(g/s)
Particulate Matter (PM)	0.12 lb/MMBtu	546	65.5	8.26
PM ₁₀	0.112 lb/MMBtu	546	61.2	7.71
Sulfur Dioxide	0.008 lb/MMBtu	600	4.8	0.60
Nitrogen Oxides	0.082 lb/MMBtu	(c)	16.2	2.04
Carbon Monoxide	6.36 lb/MMBtu	600	3816.0	480.82

(a) Based on source test data from Boiler No. 4.

(b) Based on maximum steam rates actually reached in operation for Boiler No. 4.

(c) Based on baseline NOx emissions of 70.9 TPY, assuming 8,760 hr/yr operation.

US Sugar Corp - Clewiston Mill



Golder Associates Inc.

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

RECEIVED

OCT 25 1999



BUREAU OF AIR REGULATION

October 20, 1999

9937515

Florida Department of Environmental Protection
New Source Review Section
2600 Blair Stone Road
Tallahassee, FL

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RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – PSD PERMIT
APPLICATION FOR BOILER NO. 4 AND THE SUGAR REFINERY AT THE
CLEWISTON MILL
INFORMATION SUBMITTAL NO. 4

Dear Mr. Koerner:

Based on my conversations this week with Cleve Holladay regarding U.S. Sugar's PSD permit application to modify operation of Boiler No. 4 and expand the sugar refinery operation, a few additional questions have been raised. The purpose of this letter is to respond to these questions. The questions and our response are provided below.

1. In regards to Section 4.0 of the PSD report, the question was raised concerning the background ambient concentration selected for carbon monoxide (CO). In Section 4.2.3 of the PSD report, it was stated that West Palm Beach CO monitoring data was not considered to be representative of the Clewiston area due to the distance from Clewiston to West Palm Beach, and also because of the significant mobile traffic in West Palm Beach compared to Clewiston. The West Palm Beach data was then used for the CO background concentration. Of the three CO monitoring stations operating in 1997, the station with the lowest second-highest 1-hour and 8-hour CO concentration was used.

I would like to clarify that it was not intended that the West Palm Beach data was not sufficient to use for a background CO concentration. It was intended to state that the West Palm Beach data could in fact be used as a background station for CO, since it would provide a very conservative estimate of background CO in the Clewiston area. Since the West Palm Beach CO data is heavily impacted by mobile traffic, this data would provide a very conservative estimate of background CO concentrations expected to exist in Clewiston. Due to this difference, even use of the lowest of the three CO monitoring stations would provide a conservative estimate of the background concentration.

2. A question was raised regarding Section 7.0, Additional Impact Analysis, in relation to addressing the impacts of the project due to anticipated growth. Since the proposed project is only for the increase in annual steam production (operating time) for the boiler, it is not anticipated that any new employees will be hired by U.S. Sugar as a result of this project. No new construction will take place, except for a new fuel oil tank. The impact on the work force will be minimal. A slight increase in truck traffic entering and leaving the site may result due to increased sugar production, although most of the sugar product is transported by rail.

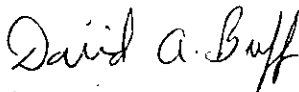
In summary, no significant impacts due to associated growth are expected due to the proposed project.

3. In regards to a description of vegetation and soils in the vicinity of the Clewiston mill, a description was provided on page 7-1 of the application.

Thank you for consideration of this information. Please call or e-mail me if you have any additional questions.

Sincerely,

GOLDER ASSOCIATES INC.



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

DB/jkk

Enclosures

cc: Don Griffin
Bill Wehrum
Stan Krivo, EPA Region IV
National Park Service

cc: SFD
EPA
NPS
C. Holladay, BAR
File

UNITED STATES SUGAR CORPORATION

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

RECEIVED
October 18, 1999
OCT 19 1999
BUREAU OF AIR REGULATION

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

RE: United States Sugar Corporation, Clewiston Sugar Mill, Hendry County
Draft Permit Modifications No. 051-003-009-AC and No. PSD-FL-272)
Extension of Operating Season for Bagasse Boiler No. 4

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

Gentlemen:

We are enclosing the Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Construction Permit" was duly published in the legal section of the October 13th, 1999 issue of *THE CLEWISTON NEWS*.

Sincerely,

UNITED STATES SUGAR CORPORATION



Donald Griffin
Project Manager, Specialty Sugar

DG:kcb

Enclosure

cc: South Florida District, FDEP
David Buff, Golder Associates
Murray T. Brinson, USSC
Bill Raiola, USSC
Lisa Gefen, USSC
Peter Briggs, USSC

J. Koerner, BAR
EPA
NPS

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DEP File NO. 051-003-009-AC (PSD-FL-272)

U.S. Sugar Corporation
 Clewiston Sugar Mill and Refinery
 Hendry County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the U.S. Sugar Corporation for the Clewiston Sugar Mill located at W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The applicant's Authorized Representative is Murray T. Brinson, Vice President of U.S. Sugar Corporation. The mailing address is 111 Ponce DeLeon Avenue, Clewiston, FL 33440. The proposed Draft Permit allows a 25% increase in annual heat input for Boiler No. 4, operation of Boiler No. 4 throughout the calendar year, the increase of all refinery operations to full capacity (8760 hours per year). The addition of powered sugar and starch bins and the addition of conditioning silos. A Best Available Control Technology (BACT) determination was required for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), and volatile organic compounds (VOC) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD).

The Department has determined that the only viable control option at this time is good combustion practices to reduce emissions of CO, NOx and VOC from the existing baghouses. The Draft Permit requires the installation and operation of CO and oxygen flue gas process monitors to provide feedback to the boiler operators as an indicator of the combustion efficiency. The existing wet spray impingement scrubber will control emissions of PM/PM10 and SO2. The allowable fuel oil sulfur content was reduced from 1.5% to 0.7% to further control emissions of SAM and SO2 from oil firing. The decolorization process in the refinery operations includes a carbon bed to remove colorant and organic from the process. Particulate matter is controlled by a wet venturi/tray scrubber system. Emissions of VOC are controlled by a direct flame afterburner. All material handling operations are controlled by efficiency baghouses. The maximum potential emissions in tons per year (TPY) will be: 9373 TPY of CO; 277 TPY of NOx; 252 TPY of PM; 17 TPY of SAM; 171 TPY of SO2 and 171 TPY of VOC.

The application included and air quality analysis based on an air dispersion model (SC-Prime) that has not yet been approved by the EPA. The EPA Region 4 office is currently conducting an air quality analysis based on this model for a case-by-case approval on this project. Because of the importance to the applicant in obtaining this permit prior to the new sugar cane harvest, the applicant also submitted an alternate air quality analysis based on the EPA-approved air dispersion model (ISCST3), decreased fuel sulfur content for Boiler Nos. 1 through 4, and a proposed increase of stack heights to 213 feet for Boiler Nos. 1 through 4. The Draft Permit contains conditions that include these and should EPA Region 4 reject the air quality analysis based on the non-approved model.

The results of the alternate air quality impact analysis using the EPA-approved ISCST3 model are presented below. Emissions from the project will not significantly contribute to or exceed any of any state or federal ambient air quality standards. The maximum predicted PSD Class II increments of SO2, and PM10 consumed by all sources in the area, including this project, are as follows:

<u>PSD Class II Increment Consumed (ug/m3)</u>	<u>Allowable Increment (ug/m3)</u>	<u>Percent Increment Consumed</u>
21	31	67
0	17	0
345	512	67
31	91	34
3	20	15

The maximum predicted PSD Class I increments of SO2 in the Everglades National Park, consumed by all sources in the area, including this project, will be as follows:

<u>PSD Class I Increment Consumed (ug/m3)</u>	<u>Allowable Increment (ug/m3)</u>	<u>Percent Increment Consumed</u>
18	25	72
4.1	5	82
0.33	2	17

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 in terms or conditions.

The Department will accept written comments and requests from public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests from public meetings should be provided to the Department's Bureau of Air Regulation, 3900 Commonwealth Boulevard, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a 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 filing of a petition. The procedures for petitioning for a hearing are set forth below.

A hearing is not available in this proceeding.

Any 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, 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 this notice of intent 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 must 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. 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. A motion in compliance with Rule 28106.205 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 the 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, and 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 action; (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 no disputed issues of material fact, the petitioner must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency action.

The applicant also submitted an alternate air quality analysis based on the EPA-approved air dispersion model (ISCST3), decreased fuel sulfur content for Boiler Nos. 1 through 4 (subject to this modification), and a proposed increase of stack heights to 213 feet for Boiler Nos. 1 through 4. The Draft Permit contains conditions that include these and should EPA Region 4 reject the air quality analysis based on the non-approved model.

Results of the alternate air quality impact analysis using the EPA-approved ISCST3 model are presented below. Emissions from the project will not significantly contribute to or exceed any state or federal ambient air quality standards. The maximum predicted PSD Class II increments of SO2, and PM10 consumed by all sources in the area, including this project, are as follows:

PSD Class II Increment (ug/m3)	Allowable Increment (ug/m3)	Percent Increment Consumed
21	31	67
0	17	0
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3	20	15

The maximum predicted PSD Class I increments of SO2 in the Everglades National Park, consumed by all sources in the area, including this project, will be as follows:

PSD Class I Increment (ug/m3)	Allowable Increment (ug/m3)	Percent Increment Consumed
18	25	72
4.1	5	82
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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 sign terms or conditions.

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Persons 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, 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 on behalf of 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. Petitions filed by any other person must be filed 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 must 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. 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. A motion in compliance with Rule 28106.205 of the Florida Administrative Code.

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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 required by rule 28-106.301.

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 proposed action. 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.

The project file is available for public inspection during normal business hours, 8 : a.m. to 5 : p.m., Monday through Friday, except legal holidays, at:
 Bureau of Environmental Protection
 Bureau of Air Regulation
 3900 S. Magnolia Drive
 Tallahassee, Florida, 32301
 (850) 488-1143

Regional Office of Environmental Protection
 District Office
 1095 Victoria Avenue
 Tallahassee, Florida 32301-3381
 (904) 332-6975

The project file includes the application, technical evaluations, Draft Permit and the information submitted by the responsible official, exclusive of confidential records under section 111, F.S. Interested persons may contact department's reviewing engineer for this project, Jeff Koerner, New Source Review Section, at 111 South magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call (805) 488-0114, for additional information.

The Clewiston News

Published Weekly Clewiston, Florida

AFFIDAVIT OF PUBLICATION

State of Florida
County of Hendry

Before the undersigned authority, personally appeared Tracy Whirls, who on oath says she is the Managing Editor of the Clewiston News, a weekly newspaper published at Clewiston in Hendry County, Florida, that the attached copy of advertisement, being a notice in

the matter of intent

_____ in the
_____ court, was published in

said newspaper in the issues of October 13, 1999

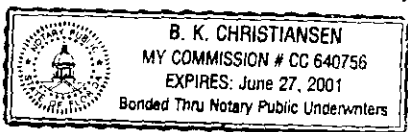
Affiant further says that the said Clewiston News is a newspaper published at Clewiston, in said Hendry County, continuously published in said Hendry County, Florida, each week, and has been entered as a second class mail matter at the post office in Clewiston, in said Hendry County, Florida, for a period 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.

Tracy Whirls

Sworn to and subscribed before me this 13th day
of October, A.D. 19 99

B. K. Christiansen

Notary Public



Lyons Printing

RECEIVED
OCT 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



September 29, 1999

Florida Department of Environmental Protection
New Source Review Section
2600 Blair Stone Road
Tallahassee, FL 32399

Attention: Jeffery Koerner, P.E.

RE: United States Sugar Corporation (U.S. Sugar)
PSD Permit Application for Boiler No. 4 and the Sugar Refinery at the Clewiston Mill
Information Submittal No. 4

Dear Mr. Koerner:

Based on my conversations this week with Cleve Holladay regarding U.S. Sugar's PSD permit application to modify operation of Boiler No. 4 and expand the sugar refinery operation, a few additional questions have been raised. The purpose of this letter is to respond to these questions. The questions and our response is provided below.

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3. In regards to a description of vegetation and soils in the vicinity of the Clewiston mill, a description was provided on page 7-1 of the application.

Thank you for consideration of this information. Please call or e-mail me if you have any additional questions.

Sincerely,

GOLDER ASSOCIATES INC.



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

DB/arz

cc: Don Griffin
Bill Wehrum
Stan Krivo, EPA Region IV
of National Park Service

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cc: Koerner, BAC
Holladay, BAC
EPA
NPS
SD