

Golder Associates Inc.

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



December 20, 2004

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

Attention: Mr. Jeff Koerner, P.E.

Re: Project No. 0510003-026-AC
U. S. Sugar Corporation – Clewiston Sugar Mill and Refinery
New Sugar Dryer No. 2
Draft Air Construction Permit

Dear Mr. Koerner:

United States Sugar Corporation (U.S. Sugar) and Golder Associates Inc. have received the Department's draft air construction permit no. 0510003-026-AC, dated November 16, 2004. We have reviewed the draft permit and developed comments. The comments are presented below.

1. Page 5 of 8, Section 3.A., Specific Condition 2. Air Pollution Control Equipment

This condition states in part "To comply with this requirement, the permittee shall submit the final design requirements and manufacturer's specifications sheets to the Department within 90 days of final selection."

It is noted that the information submitted with the permit application represents the final design requirements and includes the final manufacturer's specifications sheets. Therefore, this condition has already been satisfied, and it is requested therefore that this condition be revised accordingly.

2. Page 6 of 8, Section 3.A., Specific Condition 4. Wet Scrubber

This condition requires that the wet scrubber operating parameters be based on a 1-hour average. It is requested that the averaging time be changed to "3-hour block average", consistent with the averaging time of the particulate matter test method (EPA Method 5), as well as Compliance Assurance Monitoring (CAM) requirements. Also, it is requested that the stated minimum pressure drop and scrubber water recirculation flow rate be allowed to be revised based on the compliance testing. Suggested wording is as follows:

Unless the permittee demonstrates through compliance testing that lower minimum scrubber operating parameters can achieve the particulate matter emission limit specified in Condition 5, the pressure differential across the wet shall be maintained above 6 inches water column based on a 3-hour average, and the scrubber water recirculation flow rate shall be maintained above 500 gallons per minute based on a 3-hour average. Any request to revise these minimum scrubber operating parameters shall be made in writing, as an operating change under Rule 62-213.410, provided the required 7-day notice is submitted to the Department and U.S. Environmental Protection Agency (EPA).

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RECEIVED

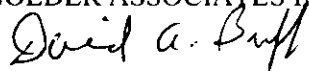
DEC 22 2004

BUREAU OF AIR REGULATION

If you have any questions regarding this request, please call me at (352)336-5600 or email me at dbuff@golder.com.

Sincerely,

GOLDER ASSOCIATES INC.



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

cc: Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. Ron Blackburn, DEP South District Office
Mr. James Stormer, PBCHD

Y:\Projects\2004\0437583 USSC Scrubber\4.4.1\122004-583.doc



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

December 2, 2004

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

RECEIVED

DEC 13 2004

RE: United States Sugar Corporation, Clewiston Refinery
Hendry County, Florida
White Sugar Dryer – Air Permit No. PSD-FL-346
File No. 0510003-026AC

BUREAU OF AIR REGULATION

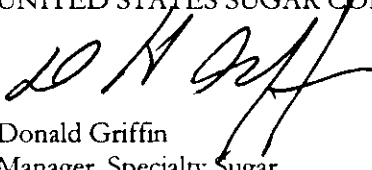
Gentlemen:

We are enclosing Affidavit of Publication certifying that the "Public Notice of Intent to Issue Air Permit" of reference was published in the legal section of the December 2, 2004 issue of *The Clewiston News*.

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

Sincerely,

UNITED STATES SUGAR CORPORATION


Donald Griffin
Manager, Specialty Sugar

DG:jt
Enclosure

Cc: Michael Low
Peter Briggs
David Buff

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DEC 07 2004

D.E.P. - SOUTH DISTRICT

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 Associate 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 public notice of intent to issue air permit. Ad # S37237

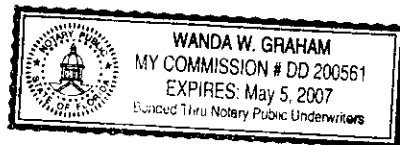
_____ in the _____ court, was published in said newspaper in the issue(s) of December 2, 2004.

Affiant further says that the said Clewiston News is a newspaper published at Clewiston, in said Hendry County, continuously published in said Hendry County, Florida, each week, and has been entered as periodicals matter at the post office in Clewiston, in said Hendry County, Florida, for a period of one year next preceding the first publication says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Tracy Whirls
Tracy Whirls

Sworn to and subscribed before me this 2nd day of December 2004

Wanda W. Graham
Wanda W. Graham Notary Public



PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Project No. 0510003-026-AC / Draft Air Permit No. PSD-FL-343
United States Sugar Corporation, Clewiston Sugar Mill and Refinery
Hendry County, Florida

Applicant: The applicant for this project is the United States Sugar Corporation. The applicant's authorized representative is Mr. William A. Raio-la, V.P. of Sugar Processing Operations. The applicant's mailing address is the Clewiston Sugar Mill and Refinery, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

Facility Location: The United States Sugar Corporation operates an existing sugar mill and refinery in Clewiston at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

Project: The applicant proposes to install a second white sugar dryer, which will increase the refinery's potential production capacity from 2200 tons per day to 2250 tons per day. The existing Clewiston sugar mill refinery is a major facility in accordance with Rule 62-212.400, F.A.C., the regulatory program for the Prevention of Significant Deterioration (PSD) of Air Quality. The existing facility is located in Hendry County, which is an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. Annual potential particulate matter (PM₁₀) emissions are estimated to be greater than 15 tons per year. Therefore, the project is subject to PSD preconstruction review, which requires a determination of the Best Available Control Technology (BACT) and an ambient air quality analysis.

The Department concluded that an emission standard of 0.005 grains per dry standard cubic feet of exhaust represents BACT for particulate matter emissions from the new sugar dryer. The draft permit requires the installation of a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. Captured sugar will be recycled back to the process. After control, the project will emit approximately 18 tons per year of particulate matter.

The applicant's air quality modeling analysis showed that emissions from the project would not exceed the PSD significant impact level for particulate matter based on an annual average (1 µg/m³). The applicant's refined air quality modeling analysis showed that emissions from the project combined with other nearby sources would result in a maximum predicted impact of 68.5 µg/m³ based on a 24-hour average. This is well below the state and federal Ambient Air Quality Standard for particulate matter of 150 µg/m³ based on a 24-hour average. The applicant provided reasonable assurance that the project will comply with all applicable air quality regulations and will not cause or contribute to a violation of the state and federal Ambient Air Quality Standard for particulate matter.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114 and fax number is 850/921-9533.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. A copy of the complete project file is also available at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-3381. The South District's telephone number is 239/332-6975.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the Draft Permit for a period of thirty (30) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://flhraq.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the Draft Permit, the Permitting Authority will issue a Revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

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

Golder Associates Inc.

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www.golder.com



October 19, 2004

0437583

Florida Department of Environmental Regulation
Air Permitting South Program
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399-2400

RECEIVED

OCT 22 2004

BUREAU OF AIR REGULATION

Attention: Mr. Jeff Koerner, P.E.

RE: PROJECT NO. 0510003-026-AC
REQUEST FOR ADDITIONAL INFORMATION #1
U. S. SUGAR CORPORATION – CLEWISTON SUGAR MILL AND REFINERY
NEW SUGAR DRYER NO. 2

Dear Mr. Koerner:

United States Sugar Corporation (U.S. Sugar) and Golder Associates Inc. have received the Department's request for information (RAI) dated September 27, 2004, regarding the above referenced air construction permit application. We have reviewed the RAI and developed responses to each of the Department's comments. The responses are presented below, in the same order as they appear in the RAI letter.

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

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

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

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

Response: The above description and details are correct, with the exception that the dryer/cooler manufacturer is BMA.



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

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

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

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

Response: The above data is correct. The sugar in the dryer/cooler has the following properties: Mean aperture (MA) size = 410 microns, with a coefficient of variation (CV) = 47.6%. Theoretically, all particles up to 155 microns will be carried out of the dryer/cooler to the cyclones. The outlet dust loading from the scrubber will not exceed 0.005 grains/cubic foot for particulate greater than 1 micron.

3. What is the rated capacity of existing sugar dryer No. 1 (tons/hour of refined sugar)?

Response: 85 tons per hour.

Please detail the problems and causes of the problems associated with the baghouse on dryer No. 1. What steps have been taken to correct these problems?

Response: The main problems are as follows:

- a) The life cycle of the bags are shorter than they should be. This has resulted from high differential pressures across the baghouse, a direct result of caking and bridging of the bags due to the relative high humidity of the surroundings. To correct this, the dryer and baghouse are not washed until absolutely necessary and the air is heated prior to it entering the dryer.
- b) The air enters from one end of the dryer only. Hence, the first row of bags at this end is consistently being worn down due to the sandblasting effect of the sugar.
- c) The studs that hold the secondary venturi in place with the bags become broken and allow dust to enter the air side of the baghouse flow. Attempts to rectify this have been made by washing away sugar accumulations and welding new studs in place of the broken ones.

How many bags does the existing particulate control device have?

Response: The baghouse has the capacity for 600 bags.

What is the cost of a single bag?

Response: Approximately \$60.

What is the labor cost for the replacement of a bag?

Response: This varies based on the number of bags being replaced at any one time. If a single bag has to be replaced, the labor cost is \$102. However, on average over the past 5 years 1,224 bags have been replaced per year, with an average labor cost of about \$15,500 per year. These costs include two total bag change outs per year during planned outages, as well as the unplanned replacements when a bag fails. The labor costs per bag are much lower during the planned change outs.

When problems occur, how many bags are replaced on average?

Response: Normally one (1) to two (2) bags when a bag failure occurs. However, as described above, a complete change out of bags is performed twice a year.

What is the down time for such a bag replacement?

Response: On average, downtime is 4 hours each time the dryer/cooler must be taken out of service for one or two bag replacement.

Must the refinery operations be shut down for such replacements?

Response: Yes, the white sugar dryer has to be shutdown and liquidated, all pans (crystallizers) put on hold, and steam production cut back to minimize blowoff.

How many bags have been replaced during each of the past two years?

Response: An average of 1,224 bags per year over the last 5 years. The yearly cost of bags for this purpose has averaged \$75,000 over the last 5 years.

4. **Based on the application, U.S. Sugar is requesting the following production restrictions: No more than 2,000 tons of refined sugar per day and no more than 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2,250 tons of refined sugar per day and no more than 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. These restrictions will replace those in Condition 2 in Section III F of Permit No. PSD-FL-272A. Is this correct?**

Response: Yes, the above is correct.

5. **Rule 62-212.400(3)(d), F.A.C. states, "Modifications Under Fifty Tons Per Year. If a proposed modification subject to the preconstruction review requirements of this rule would be made to a facility that was in existence on March 1, 1978, and would result in a net emissions increase of each pollutant listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates, of less than 50 tons per year after the application of BACT, such modification shall be exempt from the requirements of Rule 62-212.400(5)(d), (e), (f), and (g), F.A.C., as they relate to any maximum allowable increase for a Class II area." From Rule 62-212.400(5), F.A.C. these are modeling requirements related to: (d) Ambient Impact Analysis, (e) Additional Impact Analysis, (f) Preconstruction Air Quality Monitoring and Analysis, and (g) Post Construction Monitoring.**

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


Response: The requested modeling analysis is attached.

U.S. Sugar is proposing to lower the maximum PM/PM₁₀ emission rate for the new White Sugar Dryer No. 2, to the emission rate being guaranteed by the manufacturer (4.2 lb/hr or 0.0051 gr/dscf). Appropriate portions of the application form and PSD report have been revised to reflect this change and are attached.

If you have any questions regarding this information, please call me at (352)336-5600 or email me at dbuff@golder.com.

Sincerely,

GOLDER ASSOCIATES INC.



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

cc: Mr. Don Griffin, USSC
Mr. Peter Briggs, USSC
Mr. Ron Blackburn, DEP South District Office
Mr. James Stormer, PBCHD

RA1102004-583

**REVISED PAGES OF
APPLICATION FOR AIR PERMIT – LONG FORM**

EMISSIONS UNIT INFORMATION

Section [1] of [1]
 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
 Particulate Matter Total - PM

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 8.77 lb/hour 38.40 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 0	
8. Calculation of Emissions: See Tables 2-1 through 2-4 of PSD report.			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [1]
 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

Page [1] of [4]
 Particulate Matter Total - PM

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.63 lb/hr	4. Equivalent Allowable Emissions: 1.63 lb/hour 7.12 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to VHP Sugar Dryer (EU 015) (Point ID S-11). As a surrogate parameter for PM, VE Must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 2 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.43 lb/hr	4. Equivalent Allowable Emissions: 1.43 lb/hour 6.28 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to existing White Sugar Dryer No. 1 (EU 016) (Point ID S-10). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 3 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.7 lb/hr	4. Equivalent Allowable Emissions: 0.7 lb/hour 3.07 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Granular Carbon Regeneration Furnace (EU 017) (Point ID S-12).	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]
 Sugar Processing Operations

Page [1] of [4]
 Particulate Matter Total - PM

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 4 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 4.20 lb/hr	4. Equivalent Allowable Emissions: 4.20 lb/hour 18.38 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Proposed permit limit. Applies to new White Sugar Dryer (Point ID S-13).	

Allowable Emissions Allowable Emissions 5 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.19 lb/hr	4. Equivalent Allowable Emissions: 0.19 lb/hour 0.84 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Vacuum Systems (EU 018). As a surrogate parameter for PM, VE must be less that 5% opacity (Point IDs S-1, S-2, S-3).	

Allowable Emissions Allowable Emissions 6 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.17 lb/hr	4. Equivalent Allowable Emissions: 0.17 lb/hour 0.74 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Conditioning Silos (EU 019) (Point IDs S-7, S-8, S-9).	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]
 Sugar Processing Operations

Page [1] of [4]
 Particulate Matter Total - PM

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 7 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/hr	4. Equivalent Allowable Emissions: 0.25 lb/hour 1.07 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Screening and Distribution (EU 020) (Point IDs S-5, S-6). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 8 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.21 lb/hr	4. Equivalent Allowable Emissions: 0.21 lb/hour 0.90 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Packing Baghouse (EU 022) (Point ID S-4). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
 Sugar Processing Operations

POLLUTANT DETAIL INFORMATION

Page [2] of [4]
 Particulate Matter - PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 8.70 lb/hour 38.10 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 0	
8. Calculation of Emissions: See Tables 2-1 through 2-4 of PSD report.			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]
 Sugar Processing Operations

Page [2] of [4]
 Particulate Matter - PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.63 lb/hr	4. Equivalent Allowable Emissions: 1.63 lb/hour 7.12 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to VHP Sugar Dryer (EU 015) (Point ID S-11). As a surrogate parameter for PM, VE Must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 2 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.43 lb/hr	4. Equivalent Allowable Emissions: 1.43 lb/hour 6.28 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to existing White Sugar Dryer No. 1 (EU 016) (Point ID S-10). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 3 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.63 lb/hr	4. Equivalent Allowable Emissions: 0.63 lb/hour 2.76 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Granular Carbon Regeneration Furnace (EU 017) (Point ID S-12).	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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 Particulate Matter - PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 4 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 4.20 lb/hr	4. Equivalent Allowable Emissions: 4.20 lb/hour 18.38 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Proposed permit limit. Applies to new White Sugar Dryer (Point ID S-13).	

Allowable Emissions Allowable Emissions 5 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.19 lb/hr	4. Equivalent Allowable Emissions: 0.19 lb/hour 0.84 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Vacuum Systems (EU 018) (Point IDs S-1, S-2, S-3). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 6 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.17 lb/hr	4. Equivalent Allowable Emissions: 0.17 lb/hour 0.74 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Conditioning Silos (EU 019) (Point IDs S-7, S-8, S-9).	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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 Sugar Processing Operations

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 Particulate Matter - PM₁₀

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 7 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/hr	4. Equivalent Allowable Emissions: 0.25 lb/hour 1.07 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Screening and Distribution (EU 020) (Point IDs S-5, S-6). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions 8 of 8

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.21 lb/hr	4. Equivalent Allowable Emissions: 0.21 lb/hour 0.90 tons/year
5. Method of Compliance: EPA Method 5 or DEP Method 9	
6. Allowable Emissions Comment (Description of Operating Method): Permit No. 0510003-010-AC; PSD-FL-272A. Applies to Packing Baghouse (EU 022) (Point ID S-4). As a surrogate parameter for PM, VE must be less than 5% opacity.	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

REVISED TABLES OF PSD REPORT

Table 1-1. New White Sugar Dryer No. 2 PSD Source Applicability Analysis, U. S. Sugar, Clewiston (Rev.10-18-2004)

Regulated Pollutant	Sugar Refinery Baseline Emissions (TPY)	Sugar Refinery Future Potential Emissions (TPY)	Net Change In Emissions Due to Proposed Project (TPY)	PSD Significant Emission Rate (TPY)	PSD Review Triggered?
Particulate Matter (Total)	13.26	38.40	25.14	25	Yes
Particulate Matter (PM ₁₀)	13.08	38.10	25.02	15	Yes
Sulfur Dioxide	1.05	2.80	1.75	40	No
Nitrogen Oxides	10.13	13.14	3.01	40	No
Carbon Monoxide	10.13	13.14	3.01	100	No
VOC	4.37	19.38	15.01	40	No
Sulfuric Acid Mist	0.064	0.172	0.107	7	No

TPY= tons per year

PM₁₀ = Particulate Matter with aerodynamic diameter less than or equal to 10 microns

VOC = Volatile Organic Compounds

Table 2-1. Future Potential Emissions of Criteria Pollutants from the Sugar Refinery Baghouses at U.S. Sugar Corp., Clewiston
(Rev. 10-18-2004)

Source/Vent Name	EU No.	Source ID	Exhaust	Exhaust	Hours of Operation	PM/PM10 Emissions	
			Grain Loading (gr/dscf)	Gas Flow (dscfm)		(lb/hr) ^a	(TPY)
V.H.P. Sugar Dryer	015	S-11	0.001723	110.042	8,760	1.63	7.12
White Sugar Dryer No. 1	016	S-10	0.00177	94,488	8,760	1.43	6.28
New White Sugar Dryer No. 2		S-13	0.0051	96,000	8,760	4.20	18.38
					TOTAL =	7.26	31.78
<u>Vacuum Systems</u>							
Screening and Distribution Vacuum	018	S-1	0.00754	990	8,760	0.06	0.28
100 lb Bagging Vacuum System	018	S-2	0.00856	872	8,760	0.06	0.28
5 lb Bagging Vacuum System	018	S-3	0.00759	984	8,760	0.06	0.28
					TOTAL =	0.19	0.84
<u>Conditioning Silos</u>							
Conditioning Silo No. 2	019	S-7	0.0025	2,641	8,760	0.06	0.25
Conditioning Silo No. 4	019	S-8	0.0025	2,641	8,760	0.06	0.25
Conditioning Silo No. 6	019	S-9	0.0025	2,641	8,760	0.06	0.25
					TOTAL =	0.17	0.74
<u>Screening and Distribution</u>							
Screening and Distribution #1	020	S-5	0.0025	2,668	8,760	0.06	0.25
Screening and Distribution #2	020	S-6	0.0025	8,775	8,760	0.19	0.82
					TOTAL =	0.25	1.07
<u>Sugar Packaging Baghouse</u>							
Packing Dust Collector	022	S-4	0.0025	9,589	8,760	0.21	0.90
					GRAND TOTAL =	8.07	35.34

^a Based on permit emission limits.

Note: lb/hr = pounds per hour

TPY = tons per year

Table 2-4. Summary of Potential Future Emissions from Sugar Refinery, U. S. Sugar Corporation, Clewiston (revised 10-18-2004)

Source	EU No.	Source ID	Potential Emissions (TPY)						
			PM	PM ₁₀	SO ₂	NO _x	CO	VOC	SAM
V.H.P. Sugar Dryer	015	S-11	7.12	7.12	0	0	0	0	0
White Sugar Dryer No. 1	016	S-10	6.28	6.28	0	0	0	0	0
New White Sugar Dryer No. 2		S-13	18.38	18.38	0	0	0	0	0
<u>Vacuum Systems</u>									
Screening and Distribution Vacuum	018	S-1	0.28	0.28	0	0	0	0	0
100 lb Bagging Vacuum System	019	S-2	0.28	0.28	0	0	0	0	0
5 lb Bagging Vacuum System	020	S-3	0.28	0.28	0	0	0	0	0
<u>Conditioning Silos</u>									
Conditioning Silo No. 2	019	S-7	0.25	0.25	0	0	0	0	0
Conditioning Silo No. 4	020	S-8	0.25	0.25	0	0	0	0	0
Conditioning Silo No. 6	021	S-9	0.25	0.25	0	0	0	0	0
<u>Screening, Distribution, Packaging, Powdered Sugar/Starch</u>									
Screening and Distribution #1	020	S-5	0.25	0.25	0	0	0	0	0
Screening and Distribution #2	021	S-6	0.82	0.82	0	0	0	0	0
<u>Sugar Packaging Baghouse</u>									
Packing Dust Collector	022	S-4	0.90	0.90	0	0	0	0	0
<u>Granular Carbon Furnace</u>	017	S-12	3.07	2.76	2.80	13.14	13.14	4.38	0.172
<u>Alcohol Usage</u>	021		0	0	0	0	0	15.00	0
TOTAL ALL REFINERY SOURCES			38.40	38.10	2.80	13.14	13.14	19.38	0.172

Table 3-3. New White Sugar Dryer No. 2 PSD Source Applicability Analysis, U.S. Sugar Corporation, Clewiston (Rev. 10-18-2004)

Regulated Pollutant	Baseline Emissions ^a				Future Potential Emissions				Net Change In Emissions Due to Proposed Project (TPY)	PSD Significant Emission Rate (TPY)	PSD Review Triggered?
	Sugar Refinery Baghouses (TPY)	Granular Carbon Furnace (TPY)	Alcohol Usage (TPY)	Total (TPY)	Sugar Refinery Baghouses (TPY)	Granular Carbon Furnace (TPY)	Alcohol Usage (TPY)	Total (TPY)			
Particulate Matter (Total)	11.45	1.82	0	13.26	35.34	3.07	0	38.40	25.14	25	Yes
Particulate Matter (PM ₁₀)	11.45	1.63	0	13.08	35.34	2.76	0	38.10	25.01	15	Yes
Sulfur Dioxide	0	1.05	0	1.05	0	2.80	0	2.80	1.75	40	No
Nitrogen Oxides	0	10.13	0	10.13	0	13.14	0	13.14	3.01	40	No
Carbon Monoxide	0	10.13	0	10.13	0	13.14	0	13.14	3.01	100	No
VOC	0	1.24	3.13	4.37	0	4.38	15.0	19.38	15.01	40	No
Sulfuric Acid Mist	0	0.064	0	0.064	0	0.172	0	0.172	0.107	7	No

^a Actual emissions based on the average emissions for 2002 and 2003.

PM₁₀ = Particulate Matter with aerodynamic diameter less than or equal to 10 microns

VOC = Volatile Organic Compounds

TPY = tons per year