



Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Chief - Bureau of Air Regulation
THROUGH: Al Linero, Manager of Air Permitting South 
FROM: Jeff Koerner, Air Permitting South 
DATE: November 15, 2004
SUBJECT: Draft Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
New White Sugar Dryer

Attached for your review are the following items:

- Intent to Issue Revised Air Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The P.E. certification briefly summarizes the proposed permit project. The Technical Evaluation and Preliminary Determination provide a detailed description of the project, rationale, and conclusion. Day #74 is January 3, 2005. I recommend your approval of the attached Draft Permit for this project.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

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

Draft Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
Clewiston Sugar Mill and Refinery
New White Sugar Dryer No. 2

PROJECT DESCRIPTION

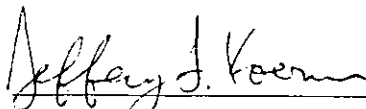
U.S. Sugar Corporation (U.S. Sugar) operates an existing sugar mill and refinery in Clewiston, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. U.S. Sugar proposes to install a second white sugar dryer that will increase the refinery's potential production capacity from 2200 tons per day to 2250 tons per day. The existing Clewiston sugar mill and 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 emissions standard of 0.005 grains per dscf represents BACT for particulate matter emissions from the new sugar dryer. The standard allows for the installation of either a fabric filter or the high efficiency cyclone collectors/wet scrubber combination as proposed by the applicant with a design control efficiency of ~ 99.9%. In making this determination, the Department considered the overall removal efficiencies of the two systems, the nature of the particulate matter emitted (sugar), the application of the control equipment (sugar dryer), U.S. Sugar's actual operating experience with a fabric filter on the existing dryer, and the fact that there is an economic incentive to recover and recycle the sugar back into 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 of 1 µg/m³ based on an annual average. 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.

Previously issued Permit No. PSD-FL-272A limits daily sugar production to 2200 tons per day. The new sugar dryer will allow a slight increase in the daily sugar production from 2200 to 2250 tons per day. The net emissions increases from relaxing this limit were included in the review of the current PSD air permit project. Therefore, the draft permit revises Condition 2 (Section III, Subsection F) of Permit No. PSD-FL-272A and increases the limit on daily sugar production to 2250 tons per day.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).



Jeffery F. Koerner, P.E.
Registration Number: 49441

11-15-04

(Date)



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

November 16, 2004

Mr. William A. Raiola, V.P. of Sugar Processing Operations
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Re: Draft Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery
New White Sugar Dryer No. 2

Dear Mr. Raiola:

On September 9, 2004, U.S. Sugar submitted an application to add a second white sugar dryer at the Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "Draft Permit", "Written Notice of Intent to Issue Air Permit", and "Public Notice of Intent to Issue Air Permit".

The "Technical Evaluation and Preliminary Determination" summarizes the Bureau of Air Regulation's technical review of the application and provides the rationale for making the preliminary determination to issue a draft permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Jeff Koerner, at 850/921-9536.

Sincerely,

A handwritten signature in cursive script that reads "Trina Vielhauer".

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

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

Authorized Representative:

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

Draft Air Permit No. PSD-FL-346
Project No. 0510003-026-AC
Clewiston Sugar Mill and Refinery
New White Sugar Dryer No. 2
Hendry County, Florida

Facility Location: U.S. 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 at the existing refinery, which will allow a slight increase in the refinery's production capacity from 2200 tons per day to 2250 tons per day. This change will allow the refinery to realize full production potential. The dryer emits particulate matter, which will be controlled by a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. The overall control efficiency of this combination will be greater than 99.9%. Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination".

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.

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 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 applicable 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.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Air Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the address or phone number listed above. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

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

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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://tlhora6.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.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

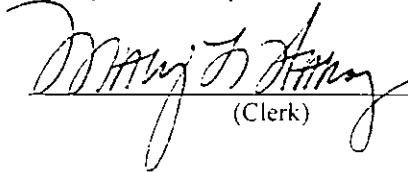
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11/18/04 to the persons listed below.

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

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED. on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

11/18/04

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Project No. 0510003-026-AC / Draft Air Permit No. PSD-FL-346
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. Raiola, 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 ($1 \mu\text{g}/\text{m}^3$). 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 $68.5 \mu\text{g}/\text{m}^3$ based on a 24-hour average. This is well below the state and federal Ambient Air Quality Standard for particulate matter of $150 \mu\text{g}/\text{m}^3$ 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.

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(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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Mediation: Mediation is not available in this proceeding.

(Public Notice to be Published in the Newspaper)

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Project No. 0510003-026-AC
Air Permit No. PSD-FL-346
Clewiston Sugar Mill and Refinery
ARMS Facility ID No. 0510003
New White Sugar Dryer No. 2 (EU-029)

COUNTY

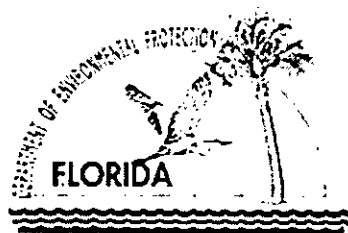
Hendry County

APPLICANT

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

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting South Program
2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399-2400



November 15, 2004

1. GENERAL PROJECT INFORMATION

General Facility Information

The United States Sugar Corporation (U.S. Sugar) operates the existing Clewiston sugar mill (SIC No. 2061) and refinery (SIC No. 2062), which are located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar.

“Bagasse” is the fibrous material remaining from sugarcane after milling. It is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. The primary air pollution sources in the mill consist of five existing boilers that fire bagasse and fuel oil. A sixth boiler (Boiler 8) is being constructed. Boiler 3 will be permanently shutdown once Boiler 8 is in operation. Particulate matter emissions are controlled with wet scrubbers (Boilers 1 – 4) as well as wet cyclone collectors/electrostatic precipitators (Boilers 7 and 8). Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regenerative furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. The existing sugar mill and refinery are regulated according the following classifications:

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

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

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

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

Project Description

On September 9, 2004, the Department received an application to install a new white sugar dryer. On September 27, 2004, the Department requested additional information. On October 22, 2004 the Department received additional information making the application complete.

U.S. Sugar plans to install a second white sugar dryer in the refinery. The new unit will be a fluidized bed-type dryer/cooler manufactured by BMA (or equivalent) 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. Sugar with a moisture content of approximately 1.5% by weight will enter the dryer between 120° - 140° F and be suspended 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. Sugar will exit the dryer with a moisture content of approximately 0.03% by weight and a temperature between 92° F - 102° F. The refined sugar is then transferred to the conditioning silos. No fuel will be fired and no other new process equipment is being added.

Due to the large volume of sugar being processed and the fluidized bed system, sugar particles will carryover into the dryer exhaust. The applicant proposes to control these particulate matter emissions with a set of four cyclone collectors followed by a wet scrubber. Captured sugar will be recycled back to the process. Exhaust at 110° F will leave a stack approximately 78 feet above ground level with a with a volumetric flow rate of 96,000 acfm. The rectangular stack will be 7.0 feet by 6.0 feet. The pressure drop across the wet scrubber will be continuously monitored.

2. APPLICABLE REGULATIONS

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

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

Federal Regulations

The Environmental Protection Agency establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies the National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on specific pollutants. Part 63 identifies National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on the Maximum Achievable Control Technology (MACT) for given source categories. No federal regulations were identified as applicable for this project.

General PSD Applicability

The Department regulates major air pollution facilities in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant, or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories (Table 62-212.400-1, F.A.C.), or 5 tons per year of lead.

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in Table 62-212.400-2, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for the Project

The existing Clewiston sugar mill and refinery is located in an area that is currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or otherwise designated as unclassifiable. The actual and potential annual emissions of several pollutants from the facility are greater than the applicability thresholds defined above. Therefore, the sugar mill and refinery is an existing PSD-major facility as defined in Rule 62-212.400, F.A.C.

Particulate matter emissions from the new sugar dryer alone (18.4 tons/year) trigger PSD preconstruction review. However, the addition of the new dryer will also result in a slight maximum daily sugar production increase (2200 tons per day to 2250 tons per day). This change will make it possible for the refinery to realize its full production potential. Therefore, the applicant also evaluated the potential emissions increases from the existing refinery activities in the net emissions increases for the project. Existing refinery activities include: a granular carbon regenerative furnace (GCRF); miscellaneous alcohol usage; two additional sugar dryers, two bagging systems, several screening and distribution systems, and other miscellaneous particulate matter sources.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The refinery activities were last reviewed and permitted in 2001 as part of the Boiler 4 modification/expansion project. Potential VOC emissions from alcohol usage are minimal – a maximum of 15 tons per year. The only combustion source is the GCRF, which controls emissions with an afterburner and wet scrubber. Controlled potential annual emissions from the GCRF are well below the PSD significant emissions rates. All other refinery activities are miscellaneous particulate matter sources, which are controlled by fabric filters.

Net emissions increases of carbon monoxide, nitrogen oxides, sulfur dioxide, and volatile organic compounds resulting from the project are well below the PSD significant emission rates. The baseline (past actual) particulate matter emissions from the refinery are estimated to be 13.3 tons per year. After installation of the new sugar dryer, the potential particulate matter emissions from the refinery are estimated to be 38.4 tons per year. The net emissions increase from the project is 25.1 tons per year. Assuming all of the particulate matter is PM₁₀, this is greater than the PSD significant emission rate of 15 tons per year and the project triggers preconstruction review for particulate matter.

The applicant contends that the review for Best Available Control Technology (BACT) is applied only to the new white sugar dryer because the other refinery equipment will not undergo a physical modification or a change in the method of operation. The Department does not agree with this interpretation. Nevertheless, the Department does agree to focus the BACT review on emissions from the new sugar dryer because the bulk of the emissions increases are from this new unit and the other refinery sources are already well controlled.

The applicant also cited Rule 62-212.400(3)(d), which states, "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." These referenced paragraphs relate to the following air quality modeling requirements: (d) Ambient Impact Analysis; (e) Additional Impact Analyses; (f) Pre-construction Air Quality Monitoring and Analysis; and (g) Post-construction Monitoring. The applicant states that the project is not subject to the PSD air quality modeling requirements because the facility was in existence prior to March 1, 1978. However, impacts with regard to the state and federal Ambient Air Quality Standards and federal Class I areas must still be reviewed.

3. PROJECT REVIEW

Applicant's Proposal

The dryer is relatively large (85 tons/hour) and consists of a fluidized bed to provide as much contact area as possible to drive off moisture. Therefore, it is expected that substantial amounts of sugar particles will carryover into the dryer exhaust (14 grains per dscf of inlet gas or 11,760 lb/hour). To control these emissions, the applicant identified the following equipment as technically feasible for the project and ranked each according to control efficiency.

1. Fabric Filters (> 99%);
2. Electrostatic Precipitators (> 99%);
3. Wet Scrubbers (50% to 95%);
4. Cyclones (60% to 99%);
5. Mechanically-aided Separators (20% to 30%);
6. Momentum Separators (10% to 20%);
7. Settling Chambers (< 10%); and
8. Elutriators (< 10%).

Although control efficiencies for the above equipment are dependent on particle size, fabric filters and ESPs are generally recognized as the top control technologies for particulate matter. The applicant contends that ESPs are specific to the makeup of the dust being controlled and there is no known installation of an ESP for controlling

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

sugar particles. For existing white sugar dryer No. 1, U.S. Sugar installed a fabric filter. This system resulted in good control, but high downtime for the refinery due to excessive bag wear. Therefore, the applicant proposes the following combination of controls for the new sugar dryer.

- An Entoleter, LLC Model 6600 cyclone collection system consisting of a set of four parallel high efficiency cyclones will be installed to remove particulate matter directly from the sugar dryer exhaust. The design removal efficiency is 99% based on the following inlet conditions: inlet temperature of 110° F; inlet flow rate of 105,000 acfm; inlet dust loading of 14 grains per dscf of inlet gas (11,760 lb/hour); and a pressure drop across the cyclone collectors of 6 inches of water column.
- An Entoleter, LLC Centrifield Vortex Model 1500 wet scrubbing system will be installed to remove additional particulate matter from the new cyclone collection system. The design removal efficiency is 96% based on the following inlet conditions: inlet temperature of 113° F; inlet flow rate of 105,000 acfm; inlet dust loading of 0.14 grains per dscf of inlet gas (118 lb/hour); a scrubber water recirculation flow rate of 500 gpm; a scrubber make-up water flow rate of 12 gpm; and a pressure drop of 6 inches of water column.

Based on the equipment manufacturer's guarantee (Entoleter LLC), the following table summarizes the expected maximum emissions rates and removal efficiencies.

Table 3A. Cyclone Collectors/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
High-Efficiency Cyclones	11,760	14	~ 99%	118	0.14
Wet Scrubber	118	0.14	~ 96%	4.2	0.005
Overall	---	---	99.96%	---	---

As shown above, the overall collection efficiency of the proposed equipment is approximately 99.96%. The applicant notes that a fabric filter could be installed to boost the overall efficiency to 99.99% or greater. However, the applicant also noted the following adverse impacts from installing a fabric filter.

Economic Impacts: The following table summarizes the applicant's cost estimates for a fabric filter and the cyclone/wet scrubber combination.

Table 3B. Estimated Control Equipment Costs

Cost	Fabric Filter	Cyclone/Wet Scrubber	Difference
Total Capital Costs	\$831,705	\$676,053	\$155,652
Annualized Costs	\$526,397	\$285,919	\$240,478
Cost Effectiveness	\$10/ton PM removed	\$6/ton PM removed	\$4/ton PM removed

The applicant notes that the difference in annualized costs is about \$240,000 and contends that the additional costs are primarily due to increased maintenance costs related to bag replacements. The cyclone/wet scrubber combination results in particulate matter emissions of 18.4 tons/year and the fabric filter option results in particulate matter emissions of 6.6 tons/year, which is an additional removal of 11.8 tons/year. The incremental cost effectiveness to remove this additional amount is about \$20,000 per ton of additional particulate matter removed.

Energy and Environmental Impacts: The applicant notes that a fabric filter results in lower energy requirements. The applicant believes that no adverse environmental impacts will result from the uses of a

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

cyclone/wet scrubber combination. Neither control system results in a waste stream because the captured sugar is recycled back to the process.

The applicant believes that the additional costs associated with a fabric filter represent an unacceptable economic burden that results in little environmental benefit to the environment (12 tons per year reduction). Therefore, U.S. Sugar proposes the combination of a cyclone collection and wet scrubber system as BACT for this project with the following emissions standard.

PM \leq 0.005 grains per dscf and 4.2 lb/hour

Department's Review

In a reply to the Department's request, the applicant provided the following information with regard to the expected particle size, "The sugar in the dryer/cooler has the following properties: Mean aperture (MA) size = 410 microns, with a coefficient of variation (CV) = 47.76%. 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 matter greater than 1 micron."

Cyclone collection efficiencies are a function of particle size and cyclone design. A 1998 EPA report indicates that single high-efficiency cyclones can remove 5 micron particles with 90% efficiency and higher for larger particles ["Stationary Source Control Techniques Document for Fine Particulate Matter"; EPA Contract No. 68-D-98-026; October 1998; Prepared by EC/R Incorporated]. An EPA fact sheet for cyclones, states that, "The control efficiency ranges for high efficiency single cyclones are 80 to 99 percent for PM, 60 to 95 percent for PM₁₀, and 20 to 70 percent for PM_{2.5}." [EPA-452/F-03-005] Based on the available information and the equipment vendor's guarantee, a control efficiency of 99% for the large sugar particles appears achievable with a high efficiency cyclone.

The Department accepts the applicant's contention that an ESP may not be an appropriate application for the control of sugar particles. A fabric filter is recognized as the top control (99.99% control efficiency), but the cyclone/wet scrubber combination (99.96% overall control efficiency) is within the same approximate range. Based on the information provided, both a fabric filter (\$10/ton of PM removed) and a cyclone/wet scrubber combination (\$6/ton PM removed) are well within the Department's consideration of cost effectiveness. Therefore, the Department discounts the applicant's argument regarding incremental costs between the options.

The applicant provided additional information regarding the existing fabric filter used to control sugar particulate from the existing dryer No. 1.

- The relative high humidity causes caking and bridging of the bags from the sugar particles. The moisture is generated from the drying process as well as from ambient air drawn into fabric filter. This leads to high pressure differentials and velocities resulting in premature bag failure.
- The sugar particles are very abrasive and cause excessive wear, particularly on the first row of bags. Also, the metal studs holding the secondary venturi in place had to be replaced because the abrasive particles eroded the original studs.
- There are 600 bags in the fabric filter and each bag costs \$60. The labor cost to replace an individual bag is about \$102 (much lower for replacing multiple bags). Over the last five years of operation, U.S. Sugar replaced an average of 1224 bags each year resulting in an annual labor cost of approximately \$15,500 and an equipment replacement cost of approximately \$73,000. In addition to the timely replacement of damaged bags, full bag replacements are now scheduled during planned outages twice a year.
- Each time that individual bags are replaced, the sugar dryer must be shut down for about four hours. In the refinery, the crystallizer pans are put on hold and the steam production scaled back to minimize blow off. Based on actual operating costs over the last five years, U.S. Sugar estimates that this loss in production is \$51,000 per day.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department concludes that a control efficiency of 99.96% will represent BACT for particulate matter emissions from the new sugar dryer. The following standards represent the draft Best Available Control Technology for the project.

PM \leq 0.005 grains per dscf and 4.2 lb/hour

Opacity \leq 10% based on a 6-minute average excluding water vapor

The above standards are based on the installation of a high efficiency cyclone collector/wet scrubber combination with an overall control efficiency of 99.96%. A fabric filter system would also be effective. In making this determination, the Department considered the overall control efficiencies of the two systems, the nature of the particulate matter emitted (sugar), the application of the control equipment (sugar dryer), U.S. Sugar's actual operating experience with a fabric filter on the existing dryer, and the fact that there is an economic incentive to recover and recycle the sugar.

Previously issued Permit No. PSD-FL-272A limits daily sugar production to 2200 tons per day. The new sugar dryer will allow a slight increase in the daily sugar production from 2200 to 2250 tons per day. The net emissions increases from relaxing this limit were included in the review of the current PSD air permit project. Therefore, the draft permit revises Condition 2 (Section III, Subsection F) of Permit No. PSD-FL-272A and increases the limit on daily sugar production to 2250 tons per day.

4. AIR QUALITY ANALYSIS

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 requirements are: (d) Ambient Impact Analysis, (e) Additional Impact Analysis, (f) Preconstruction Air Quality Monitoring and Analysis, and (g) Post Construction Monitoring.

The PSD significant emission rate for particulate matter (PM₁₀) is 15 tons per year. The project to a new white sugar dryer will result in a net PM₁₀ emissions increase from the refinery sources of about 25 tons per year. The facility was in existence prior to March 1, 1978. Therefore, the project is subject to PSD modeling requirements for PM₁₀, but may be exempt from the modeling requirements as indicated in the above rule.

Although the exemption in Rule 62-212.400(3)(d), F.A.C. does not extend to modeling for Class I impacts, the applicant submitted a request to the National Park Service for a determination of the Class I modeling requirements for the project. Based on the specific details of the project, the National Park Service concluded that a Class I analysis (including a Class I increment analysis and an Air Quality Related Values analysis) would not be required. The Department deferred to the determination made by the National Park Service. Therefore, the applicant must only conduct a modeling analysis to demonstrate that the modification will not cause or contribute to a violation of an Ambient Air Quality Standard for PM₁₀.

Ambient Air Quality Standards (AAQS) Analysis

The applicant is required to perform a Significant Impact Analysis, which models only the impacts from the project. If the predicted impacts are below the PSD Significant Impact Levels specified in Rule 62-204.200(29), F.A.C., the project is not considered significant and no further analysis is required. The applicant used the ISC-PRIME dispersion model. This model was approved by EPA Region 4 for previous projects at the Clewiston mill and must continue to be used for subsequent projects. The model included meteorological surface and upper air data (1987 - 1991) collected by the National Weather Service at the Palm Beach International Airport. The following table summarizes the results of the Significant Impact Analysis.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Table 4A. Summary of Significant Impact Analysis for PM10

Pollutant	Averaging Time	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	PSD Significant Impact Level ($\mu\text{g}/\text{m}^3$)	Baseline Concentrations ($\mu\text{g}/\text{m}^3$)	AAQS ($\mu\text{g}/\text{m}^3$)	Significant Impact?
PM10	Annual	0.88	1	~ 20	50	No
	24-Hour	6.9	5	~ 40	150	Yes

Although the maximum predicted impacts are shown to be well below the respective AAQS and baseline concentrations, the 24-hour predicted impact is above the PSD Significant Impact Level of $5 \mu\text{g}/\text{m}^3$. Therefore, the applicant is required to perform additional refined modeling to further demonstrate compliance with the AAQS. The refined modeling analysis was based on the same model and meteorological data, but included a more detailed receptor grid as well as other sources of PM10 within the vicinity of the plant. The following table summarizes the results of the refined modeling analysis.

Table 4B. Summary of Refined AAQS Modeling Analysis for PM10

Pollutant	Averaging Time	Baseline Concentrations ($\mu\text{g}/\text{m}^3$)	All Modeled Sources ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	AAQS ($\mu\text{g}/\text{m}^3$)
PM10	24-Hour	~ 40	28.5	68.5	150

As shown in the above table, the modeling shows that the project will not cause or contribute to a violation of the state and federal Ambient Air Quality Standard for PM10.

5. PRELIMINARY DETERMINATION

Copies of the application were provided to the EPA Region 4 Office, the National Park Service, and the Department's South District Office. The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit changes. Deborah Nelson is the staff meteorologist responsible for reviewing the ambient air quality analyses. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

{Filename: PSD-FL-346 Sugar Dryer - TEPD}

DRAFT PERMIT

PERMITTEE:

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

Authorized Representative:

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

Clewiston Sugar Mill and Refinery Air Permit No. PSD-FL-346 Project No. 0510003-026-AC Facility ID No. 0510003 SIC Nos. 2061, 2062 Permit Expires: December 31, 2005

FACILITY AND LOCATION

The United States Sugar Corporation operates the existing Clewiston sugar mill and refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and passed through a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery.

STATEMENT OF BASIS

This permit authorizes the construction of a second white sugar dryer (EU-029) with a capacity of 85 tons per hour of sugar. Particulate matter emissions will be controlled with high efficiency cyclone collectors followed by a wet scrubber. The permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

(DRAFT PERMIT)

Michael G. Cooke, Director
Division of Air Resource Management

Effective Date

SECTION 1. GENERAL INFORMATION

PROJECT DESCRIPTION

The United States Sugar Corporation proposes to install a second white sugar dryer No. 2 (EU-029) to support the existing refinery operations. The new dryer will operate in parallel with existing white sugar dryer No. 1 (EU-016). Particulate matter emissions will be controlled by a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. The new sugar dryer will allow a slight increase in the daily sugar production from 2200 to 2250 tons of sugar per day. Therefore, this permit will also revise Condition 2 (Section III, Subsection F) in existing Permit No. PSD-FL-272A accordingly.

REGULATORY CLASSIFICATION

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

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

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

PSD: The existing facility is a PSD-major facility as defined in Rule 62-212.400, F.A.C.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Requirements

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection's Bureau of Air Regulation. The mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.
3. Citation Formats: Appendix A identifies the methods used to cite rules, regulations, and permits.
4. General Conditions: The permittee shall comply with the general conditions specified in Appendix B.
5. Common Requirements: Common regulatory requirements are specified in Appendix C.
6. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
7. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid for any of the following reasons: construction is not commenced within 18 months after issuance of this permit; construction is discontinued for a period of 18 months or more; or construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.; 40 CFR 52.21(r)(2); 40 CFR 51.166(j)(4)]
8. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
9. Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it. [Rule 62-212.400(2)(g), F.A.C.]
10. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rule 62-4.030 and Chapters 62-210 and 62-212, F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

11. **Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]



SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
029	<p>The new white sugar dryer will be a fluidized bed-type dryer/cooler 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. Sugar with a moisture content of approximately 1.5% by weight will enter the dryer between 120° - 140° F and be suspended 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. Sugar will exit the dryer with a moisture content of approximately 0.03% by weight and a temperature between 92° F - 102° F. The refined sugar is then transferred to the conditioning silos. No fuel will be fired and no other new equipment is being added.</p> <p>Particulate matter emissions from the dryer will be controlled by a set of four high efficiency cyclone collectors in parallel followed by a wet scrubber. Exhaust at 110° F will leave a stack approximately 78 feet above ground level with a volumetric flow rate of 96,000 acfm. The rectangular stack will be 7.0 feet by 6.0 feet. The scrubber pressure drop and scrubber water recirculation flow rate will be continuously monitored.</p>

{Permitting Note: The particulate matter emissions standards for the new dryer are established pursuant to Rule 62-212.400, F.A.C (BACT).}

EQUIPMENT

1. New White Sugar Dryer No. 2: The permittee is authorized to construct a new fluidized bed white sugar dryer/cooler (BMA or equivalent) with a rated capacity of 85 tons per hour. Jets of hot conditioned air will be used in the dryer to suspend sugar in a fluidized bed to drive off excess moisture. Low pressure steam will be used to heat the conditioned air; no fuel will be fired. [Design]
2. Air Pollution Control Equipment: To comply with the standards of this permit, the permittee shall install the following air pollution control equipment.
 - a. Cyclone Collectors: In accordance with the manufacturer's recommendations, the permittee shall install, operate, and maintain a set of four high efficiency cyclone collectors (Entoleter, LLC Model 6600 or equivalent) in parallel with a design removal efficiency of at least 99% of the particulate loading from the new white sugar dryer. The design control efficiency is based on the following inlet conditions: inlet temperature of 110° F; inlet flow rate of 105,000 acfm; inlet dust loading of 14 grains per dscf of inlet gas (11,760 lb/hour); and a pressure drop across the cyclone collectors of 6 inches of water column.
 - b. Wet Scrubber: In accordance with the manufacturer's recommendations, the permittee shall install, operate, and maintain a wet scrubber (Entoleter, LLC Centrifield Vortex Model 1500 or equivalent) with a design removal efficiency of at least 96% of the particulate loading from the new cyclone collectors. The design control efficiency is based on the following inlet conditions: inlet temperature of 113° F; inlet flow rate of 105,000 acfm; inlet dust loading of 0.14 grains per dscf of inlet gas (118 lb/hour); a scrubber water recirculation flow rate of 500 gpm; a scrubber make-up water flow rate of 12 gpm; and a pressure drop of 6 inches of water column.

The combined design removal efficiency of the two particulate control devices shall be no less than 99.96% based on the above conditions. 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.

[Design; Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

PERFORMANCE REQUIREMENTS

3. Permitted Capacity: The maximum design capacity of the new sugar dryer is 85 tons per hour of sugar. [Design; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
4. Wet Scrubber: The pressure differential across the wet scrubber shall be maintained above 6 inches of water column based on a 1-hour average. The scrubber water recirculation flow rate shall be maintained above 500 gpm based on a 1-hour average. If either monitored parameter drops below the specified level, the permittee shall investigate, take corrective actions to regain the specified operating level, and record the incident in a written log. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without taking corrective action may be considered circumvention of the air pollution control equipment. [Design; Rule 62-4.070(3), F.A.C.]

EMISSIONS STANDARDS

5. Particulate Matter: As determined by EPA Method 5 stack test, particulate matter emissions shall not exceed 0.005 grains per dscf and 4.2 pounds per hour based on the average of three test runs. [Design; Rule 62-212.400(BACT), F.A.C.]
6. Visible Emissions: Excluding water vapor, visible emissions from the wet scrubber stack shall not exceed 10% opacity. [Rule 62-212.400(BACT), F.A.C.]

TESTING REQUIREMENTS

7. Compliance Stack Tests: The permittee shall conduct an initial stack test to demonstrate compliance with the particulate matter emissions standards within 60 days after achieving the maximum sugar processing rate, but not later than 180 days after initial startup. The permittee shall also conduct subsequent stack tests to demonstrate compliance with the particulate matter emissions standards during the 12-month period prior to the expiration date of any air operation permit. Tests shall be conducted in accordance with EPA Method 5 (particulate emissions), EPA Methods 1 – 4 (as necessary to support EPA Method 5), and EPA Method 9 (visible emissions). The EPA test methods and procedures are specified in Appendix A of 40 CFR 60 and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. In accordance with Rule 62-297.310(2), F.A.C., all tests shall be conducted at permitted capacity. The Department may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. [Rules 62-204.800, 62-212.400(BACT) and 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8; 40 CFR 60, Appendix A]

MONITORING REQUIREMENTS

8. Cyclone Collectors: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain a manometer (or equivalent) to monitor the pressure differential across each cyclone collector. *{Permitting Note: The design pressure differential for the cyclone collectors is 6 inches of water column. Although no periodic records of the pressure differential are required, the devices shall be properly maintained and functional to provide operational data for evaluating problems.}* [Rule 62-4.070(3), F.A.C.]
9. Wet Scrubber Parameters: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, operate and maintain devices to continuously monitor and record the wet scrubber water recirculation rate (gpm) and the pressure differential across the wet scrubber (inches of water column). Records shall be maintained on site and made available upon request. [Design; Rules 62-4.070(3) and 62-

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. White Sugar Dryer No. 2 (EU-029)

212.400(BACT), F.A.C.]

RECORDS AND REPORTS

10. Stack Test Reports: In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: sugar processing rate through the dryer (tons per hour); the scrubber water recirculation rate (gpm); and the pressure differential across the wet scrubber (inches of water column). In addition, the permittee shall record and report the pressure differential across each cyclone collector at the beginning and end of each test run. [Rule 62-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Miscellaneous Particulate Sources (EU-015, 016, 018, 019, 020, 022, and 029)

This section of the permit addresses the following emissions units.

EU No.	Emissions Unit Description
015	VHP sugar dryer with baghouse (S-11)
016	White sugar dryer No. 1 with baghouse (S-10)
018	Vacuum Systems: Screening/distribution vacuum with baghouse (S-1); 100 lb bagging vacuum with baghouse (S-2); 5 lb bagging vacuum with baghouse (S-3)
019	Six conditioning silos with baghouses (S-7, S-8, S-9, S-13, S-14, and S-15)
020	Screening/distribution and powdered sugar/starch bins with baghouses (S-5, S-6, and S-16)
022	Packaging baghouse (S-4)
029	White sugar dryer No. 2 with wet scrubber (S-13)

MODIFIED CONDITION

Condition 2 (Section III, Subsection F) in Permit No. PSD-FL-272A is changed:

From:

2. Production Restrictions: No more than 2000 tons of refined sugar per day nor 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2200 tons of refined sugar per day nor 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. [Applicant Request: Rule 62-210.200 (Definitions - PTE), F.A.C.]

To:

2. Production Restrictions: No more than 2000 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 2250 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. [Applicant Request: Rules 62-210.200 (PTE) and 62-212.400(2)(g), F.A.C., F.A.C.: Air Permit No. PSD-FL-346]

All other conditions in Permit No. PSD-FL-272A shall remain unchanged.

Filename: PSD-FL-346 Sugar Dryer - Draft Permit

SECTION 4. APPENDICES

Contents

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Requirements

SECTION 4. APPENDIX A

Citation Formats

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

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

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

New Permit Numbers

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

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

PSD Permit Numbers

Example: Permit No. PSD-FL-317

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

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

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

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

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7 or §60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX B

General Conditions

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

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and;
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

SECTION 4. APPENDIX B

General Conditions

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (Yes);
 - b. Determination of Prevention of Significant Deterioration (Yes); and
 - c. Compliance with New Source Performance Standards (Not Applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

Common Requirements

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at this facility.}

Definitions

1. **Excess Emissions:** Emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions which occur during startup, shutdown, soot-blowing, load changing or malfunction. [Rule 62-210.200(106), F.A.C.]
2. **Shutdown:** The cessation of the operation of an emissions unit for any purpose. [Rule 62-210.200(231), F.A.C.]
3. **Startup:** The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions. [Rule 62-210.200(246), F.A.C.]
4. **Malfunction:** Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. [Rule 62-210.200(160), F.A.C.]

Emissions and Controls

5. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
6. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
7. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
8. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
9. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
10. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
11. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
12. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as confining, containing, covering, and/or applying water to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

13. **Required Number of Test Runs:** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three

SECTION 4. APPENDIX C

Common Requirements

complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

14. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
15. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
16. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. *Required Sampling Time*. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. *Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.[Rule 62-297.310(4), F.A.C.]
17. Determination of Process Variables
 - a. *Required Equipment*. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. *Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.[Rule 62-297.310(5), F.A.C.]
18. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
19. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]

SECTION 4. APPENDIX C

Common Requirements

20. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
21. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.
 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.
 13. Data related to the required calibration of the test equipment.
 14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.
 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
 20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX C

Common Requirements

RECORDS AND REPORTS

22. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. Information recorded and stored as an electronic file shall be made available within at least three days of a request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
23. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____</p> <p>C. Date of Delivery <u>11/22/04</u></p>
<p>1. Article Addressed to: Mr. William A. Raiola, V.P. of Sugar Processing Operations United States Sugar Corporation Clewiston Sugar Mill and Refinery 111 Ponce DeLeon Avenue Clewiston, Florida 33440</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) : 7000 1670 0013 3109 9212</p>	
<p>PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540</p>	

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TO: **William A. Raiola**
United States Sugar Corporation
Street, Apt. No. or P.O. Box No.
111 Ponce DeLeon Avenue
Clewiston, Florida 33440

PS Form 3800, May 2000

See Reverse for Instructions