Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

April 1, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Draft Air Permit No. 0510003-018-AC
United States Sugar Corporation, Clewiston Sugar Mill and Refinery
Boilers 4 and 7, Modified Oil Firing Systems

Dear Mr. Raiola:

Enclosed is one copy of the draft permit to modify the oil firing systems of existing Clewiston Boilers 4 and 7. The Department's "Technical Evaluation and Preliminary Determination", "Intent to Issue Permit", and the "Public Notice of Intent to Issue Permit" are also included.

The "Public Notice of Intent to Issue Permit" must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, Administrator of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Jeff Koerner at 850/921-9536.

Sincerely,

for Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) [illegible] C. Date of Delivery 4/7/3

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

7001 0320 0001 3692 6617

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

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Sent To
William A. Raiola
Street, Apt. No.; or PO Box No. Ponce DeLeon Avenue
City, State, ZIP+4
Clewiston, FL 33440

7001 0320 0001 3692 6617

PS Form 3800, January 2001 See Reverse for Instructions

In the Matter of an
Application for Air Permit by:

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

Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems
Hendry County, Florida

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

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of Draft Permit attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below. The applicant, United States Sugar Corporation, applied on October 11, 2002 (Boiler 7) and December 20, 2002 (Boiler 4) to the Department for permits to modify the oil firing systems for these existing units. The existing Clewiston plant is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to perform proposed work. The Department intends to issue this air construction permit based on the belief that the applicant has provided reasonable assurances to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) and (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of the Public Notice of Intent to Issue Air Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S. however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of

receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, 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 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 Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

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

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

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

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

Executed in Tallahassee, Florida.

for Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit package (including the Public Notice of Intent to Issue Air Construction Permit, 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 4/3/03 to the persons listed:

Mr. William A. Raiola, USSC*
Mr. David Buff, Golder Associates
Mr. Ron Blackburn, SD
Ms. Jeanneane Gettle, EPA Region 4

Clerk Stamp

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

Victoria Gibson (Clerk) / April 3, 2003 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0510003-018-AC

United States Sugar Corporation
Clewiston Sugar Mill and Refinery
Clewiston Boilers 4 and 7 – Modified Oil Firing Systems

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the United States Sugar Corporation that authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The applicant's authorized representative is Mr. William A. Raiola, V.P. of Sugar Processing Operations. The applicant's mailing address is: Clewiston Sugar Mill and Refinery, United States Sugar Corporation, 111 Ponce DeLeon Avenue, Clewiston, FL 33440.

The United States Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery in Hendry County, Florida. Boilers 4 and 7 fire bagasse as the primary fuel to produce steam for the plant's operations. Bagasse is the fibrous vegetative matter remaining from sugarcane after the milling process. Fuel oil is fired as a supplemental and alternate fuel. The applicant proposes to modify the existing oil firing systems of Boilers 4 and 7. Boiler 4 will begin firing distillate oil containing less than 0.4% sulfur by weight. Boiler 7 will continue to fire distillate oil containing less than 0.05% sulfur by weight. The project will increase the maximum heat input rates from 225 to 326 MMBtu per hour for Boiler 4 and from 250 to 326 MMBtu per hour for Boiler 7. Oil firing will be restricted to 500,000 gallons per year for Boiler 4 and 4,500,000 for Boiler 7. Both boilers are subject to Subpart Db of 40 CFR 60, which is a federal New Source Performance Standard for boilers.

The applicant estimates that the project has the potential to result in the following increases in actual emissions: 16 tons of carbon monoxide per year; 39 tons of nitrogen oxides per year; 6.7 tons of particulate matter per year; 1.4 tons of sulfuric acid mist per year; 16.8 tons of sulfur dioxide per year; and 1 ton of volatile organic compounds per year. These levels are below the significant emission rates that would require a preconstruction review in accordance with the Prevention of Significant Deterioration of Air Quality (Rule 62-212.400, F.A.C.). Therefore, the resulting project requires a minor source air construction permit. The draft permit includes conditions limiting nitrogen oxide emissions, visible emissions from the stack, fuel oil sulfur content, and fuel oil usage. The draft permit will supplement all previously issued air construction and operation permits for these boilers.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time

period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, 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 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 Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 S. Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400
Telephone: 850/488-0114

Department of Environmental Protection
South District Office
Air Resources Section
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901-3381
Telephone: 239/332-6975

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

PROJECT

Draft Air Construction Permit No. 0510003-018-AC
Clewiston Boiler Nos. 4/7 – Modified Oil Firing Systems

COUNTY

Hendry County

APPLICANT

United States Sugar Corporation
Clewiston Sugar Mill and Refinery
ARMS Facility ID No. 0510003

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

April 1, 2003

(Filename: TEPD 0510003-018-AC.doc)

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

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

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

Processing Schedule

Over a three-month period, the Department received separate applications for Boiler 7 (initial Project No. 0510003-018-AC) and Boiler 4 (initial Project No. 0510003-019-AC). Due to the timing of these applications, the Department considers the requests to be a single project. The proposals will be merged into Project No. 0510003-018-AC and processed as a single permit request. The following summarizes the processing schedule.

10/11/02 BAR received an application to modify Boiler 7.

10/22/02 BAR requested additional information.

12/20/02 BAR received application to modify Boiler 4 and the requested information for the Boiler 7.

01/15/03 BAR requested additional information on both boilers and combined the projects.

02/24/03 BAR received the requested information; application complete.

Facility Description and Location

The United States Sugar Corporation (USSC) operates the existing Clewiston Sugar Mill and Refinery at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

Standard Industrial Classification Code (SIC)

SIC Nos. 2061, 2062 – Sugarcane processing and refining

Regulatory Categories

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 source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The existing facility operates units subject to the New Source Performance Standards of 40 CFR 60.

Project Description

The applicant proposes the following changes to the existing boilers:

- *Boiler No. 4*: The applicant proposes to replace the existing oil firing system with a new system consisting of the following equipment: two multi-stage combustion low-NOx burners with flame scanner, fuel/steam valve train, steam-atomized center-fired oil gun, ignitor and flame proving rod; multi-burner windbox; fuel oil pump set; and burner management control system. The purpose of the project is to improve operational reliability during the cane-milling season should there be an interruption of the primary fuel, which is bagasse. Boiler No. 4 is also a backup boiler during the off-crop season. The modification would increase the short-term maximum oil-firing rate from 1500 to 2417 gallons per hour (225 to 326 MMBtu per hour).

The current long-term oil-firing limit will remain at 500,000 gallons per year. The steam rate due only to oil firing would increase from approximately 150,000 to 225,000 lb/hr. The proposal would also lower the fuel sulfur content from 0.70% to 0.40% sulfur by weight. The modification will not affect the firing of bagasse.

- *Boiler No. 7*: The applicant proposes the following changes to the existing oil firing system: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace existing two oil pumps. The modified system will perform more like modern register burners, which are designed with significant reduction in register draft loss for the same required combustion air flow. The two new fuel oil pumps will provide sufficient fuel flow and pressure to increase the oil firing rate from 1839 to 2311 gallons per hour (approximately 250 to 326 MMBtu per hour). This will result in an increase in steam production due to oil firing from 175,000 to 225,000 lb/hour. Finally, the applicant proposes to reduce the maximum annual fuel consumption limit from 4,788,800 to 4,500,000 gallons per year, which results in an annual capacity factor of less than 10% and continues to exempt this unit from the NOx emission limits specified in 40CFR 60.44b(d).

2. APPLICABLE REGULATIONS

State 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 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.

Chapter	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations Rule 62-212.300. General Preconstruction Review Requirements Rule 62-212.400. Prevention of Significant Deterioration (PSD)
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards Rule 62-296.405. Fossil Fuel Fired Steam Generators With > 250 MMBtu Per Hour Heat Input Rate Rule 62-296.406. Fossil Fuel Fired Steam Generators With < 250 MMBtu Per Hour Heat Input Rate Rule 62-296.410. Carbonaceous Fuel Burning Equipment
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

Rule 62-296.405, F.A.C. applies to new and existing fossil fuel fired steam generators with a maximum heat input rate greater than 250 MMBtu per hour. An existing emissions unit is defined as a unit that was in existence, in operation, or under construction, or had received a permit to begin construction prior to January 18, 1972. All other units are considered new units and are subject to the applicable federal New Source Performance Standards (NSPS Subparts D or Da) for such boilers.

Rule 62-296.406, F.A.C. applies to new and existing fossil fuel fired steam generators with a maximum heat input rate of less than 250 MMBtu per hour unless exempt from permitting (Rule 62-210.300(3), F.A.C.) or considered insignificant (Rule 62-213.300(2)(a)1 or 62-213.430(6)(b), F.A.C.). The standards apply unless otherwise specified by rule, or by order or permit issued prior to July 15,1989. This rule requires BACT determinations for particulate matter and sulfur dioxide.

Rule 62-296.410, F.A.C. applies to new and existing carbonaceous fuel burning equipment. An existing emissions unit is defined a unit for which a valid Department operation or construction permit was issued prior to July 1, 1974. All other units are considered new units.

Boiler No. 4 – Applicability of State Emissions Standards

Based on the application, Boiler No. 4 was originally constructed at an out-of-state power plant prior to 1970. It was refurbished and initially installed at the Clewiston Mill as specified by air construction Permit No. AC26-80930 (PSD-FL-100), which was issued on January 14, 1985. This permit was issued in accordance with Rule 62-212.400, F.A.C., which made BACT determinations for carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and volatile organic compounds. Rule 62-296.405, F.A.C. did not apply because the maximum heat input rate (225 MMBtu per hour) did not exceed 250 MMBtu per hour. Although the maximum heat input rate from oil firing is currently less than 250 MMBtu per hour, Rule 62-296.406, F.A.C. does not apply because the unit was permitted before July 15, 1989. Nevertheless, BACT determinations were made for emissions of particulate matter and sulfur dioxide during the original permitting of this unit.

Based on the requested modification, the maximum heat input rate will increase to 326 MMBtu per hour and this unit will now be subject to Rule 62-296.405, F.A.C. Rule 62-210.200(120), F.A.C. defines an *existing emissions unit* as, "An emissions unit which was in existence, in operation, or under construction, or had received a permit to begin construction prior to January 18, 1972." Therefore, Boiler No. 4 is subject to the standards for nitrogen oxides, particulate matter, sulfur dioxide, and visible emissions specified for existing emissions units in Rule 62-296.405, F.A.C. Boiler No. 4 remains subject to Rule 62-296.410, F.A.C. for carbonaceous fuel burning equipment.

Boiler No. 7 – Applicability of State Emissions Standards

Boiler No. 7 was originally constructed at the Clewiston Mill as a new unit pursuant to Permit No. PSD-FL-208 issued on February 2, 1995. This permit was issued in accordance with Rule 62-212.400, F.A.C., which made BACT determinations for carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, sulfuric acid mist, and volatile organic compounds. Rule 62-296.405, F.A.C. did not apply because the maximum heat input rate did not exceed 250 MMBtu per hour. Rule 62-296.406, F.A.C. did apply and BACT determinations were made for emissions of particulate matter and sulfur dioxide. Based on the requested modification, the maximum heat input rate will increase to 326 MMBtu per hour and this unit will now be subject to Rule 62-296.406, F.A.C. as a new unit, which requires compliance with NSPS Subpart D. Boiler No. 7 remains subject to Rule 62-296.410, F.A.C. for carbonaceous fuel burning equipment.

Federal Regulations

This project is also subject to the applicable federal air quality regulations as established by the EPA in the following sections of the Code of Federal Regulations (CFR).

Title 40, CFR	Description
Part 60	Subpart A. General Provisions for NSPS Sources
	NSPS Subpart D. Fossil-Fuel-Fired Steam Generators (After August 17, 1971)
	NSPS Subpart Db. Industrial-Commercial-Institutional Steam Generating Units (After June 19, 1984)
	Applicable Appendices

NSPS Subpart D applies to each fossil fuel fired steam generator with a maximum heat input rate greater than 250 MMBtu per hour and for which construction commenced after August 17, 1971.

NSPS Subpart Db applies to each steam generator that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity greater than 100 MMBtu per hour.

Boiler No. 4 – Applicability of Federal NSPS Standards

As mentioned previously, the application states that Boiler No. 4 was originally constructed at an out-of-state power plant prior to 1970 with four oil guns. For initial installation at the Clewiston Mill in 1985, the boiler was refurbished and the heat input rate from oil physically reduced to 225 MMBtu per hour. The BACT determination for that project states that, "... the steam generator to be installed by the applicant was constructed prior to the NSPS applicability date of June 19, 1984, and therefore, the proposed emission standards of Subpart Db would not apply." The request to modify the unit will increase the heat input rate to 326 MMBtu per hour and lower the maximum fuel sulfur content. Due to the new burner system and lower fuel sulfur, the applicant maintains that the project is not an NSPS modification because there will be no increase in emissions.

The Department notes the following two excerpts from EPA guidance concerning physical changes and the NSPS regulations:

> "... The change in emission rate associated with a physical or operational change is determined by comparing the hourly emissions at maximum capacity prior to the change with the hourly emissions at maximum capacity after the change. As required in 40 C.F.R. § 60.14(b)(2), when determining whether a physical or operational change will result in an increase in emission rate, all operating parameters which may affect emissions must be held constant to the maximum feasible degree. Therefore, any prospective changes in fuel or raw materials accompanying the physical or operational change are not considered in determining the maximum capacity after the change occurs." [1]
>
> And
>
> "... Restrictions of this nature are acceptable for netting transactions under the Act's PSD provisions. However, ... because the will of Congress is so clear that lower-sulfur fuels alone will not suffice to comply with NSPS, it would be inconsistent with the legislative intent for EPA to allow sources to use lower sulfur fuel to avoid coverage of NSPS ..." [2]

Given EPA's interpretation of the federal regulations, the project constitutes a modification because hourly emissions of sulfur dioxide will increase along with the increased oil firing rate. Therefore, Boiler No. 4 will become subject to NSPS Subpart Db.

Boiler No. 7 – Applicability of Federal NSPS Standards

Increasing the heat input to 326 MMBtu per hour subjects this unit to Rule 62-296.405, F.A.C., which requires compliance with NSPS Subpart D. Potential emissions from Boiler No. 7 will also increase along with the increased fuel firing rate. This is considered a modification as defined by 40 CFR 60.14 and subjects this unit to Subpart Db. However, Boiler No. 7 was originally constructed in accordance with NSPS Subpart Db, which regulates boilers with a heat input greater than 100 MMBtu per hour and that were constructed, reconstructed, of modified after June 19, 1984. Paragraph (f) of 40 CFR 60.40b states that any unit subject to NSPS Subpart Db and commencing construction, modification, or reconstruction after June 19, 1986 is not also subject to NSPS Subpart D. Therefore, Boiler No. 7 remains subject only to the requirements of NSPS subpart Db.

General PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as defined in Rule 62-212.400, F.A.C. A PSD review is required only for areas currently in attainment with the National Ambient Air Quality Standard (AAQS) or for 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 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 Project

The facility is a PSD major source of air pollution located in an area that is currently in attainment (or designated as "unclassifiable") for all pollutants with a corresponding National Ambient Air Quality Standard (NAAQS). Boiler No. 4 was constructed at the Clewiston Mill in accordance with PSD Permit No. PSD-FL-100 issued in 1985 and was subject to BACT determinations for carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and volatile organic compounds. Boiler No. 4 underwent a PSD modification in 2000/2001 subject to Permit No. PSD-FL-272. Boiler No. 7 was constructed at the Clewiston Mill in accordance with PSD Permit No. PSD-FL-208 issued in 1995 and was subject to BACT determinations for carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, sulfuric acid mist, and volatile organic compounds.

The following table shows the applicant's estimated maximum emissions increases that will result form this project.

Table 2A. Emissions Increases Resulting from the Project

Pollutant*	Boiler No. 4			Boiler No. 7			Project		
	Past Actual TPY	Future Potential TPY	Increase TPY	Past Actual TPY	Future Potential TPY	Increase TPY	Total Increase TPY	PSD SER TPY	PSD?
CO	0.5	1.3	0.9	4.9	20.0	15.1	16	100	No
NOx	4.2	6.0	1.8	23.6	60.8	37.2	39	40	No
PM	0.9	0.5	- 0.4	2.0	9.1	7.1	6.7	25	No
PM_{10}	0.8	0.3	- 0.5	1.7	9.1	7.4	6.9	15	No
SAM	0.4	0.6	0.2	0.3	1.5	1.2	1.4	7	No
SO_2	5.3	14.2	8.9	7.3	15.2	7.9	16.8	40	No
VOC	0.03	0.05	0.02	0.2	1.2	1.0	1	40	No

* The applicant estimates that total potential emissions of mercury and lead would be less than 1 pound per year for Boiler No. 4 and less than 2 pounds per year for Boiler No. 7.

The above analysis considers only the oil firing capacity of each boiler. The capacity to fire bagasse will not be affected by the project. Based on the applicant's estimated emissions increases, the project to modify the oil firing systems of Boilers 4 and 7 do not trigger PSD preconstruction review.

3. DRAFT PERMIT CONDITIONS

Boiler 4(Emission Unit No. 009)

The following table summarizes the rule applicability and current emissions standards related to oil firing for this unit.

Table 3A. Applicable Emissions Standards for Boiler 4, Oil Firing

Pollutant	Regulation	Emission Standard
NOx	40 CFR 60.44b(l)(1)	NOx standard of 0.20 lb/MMBtu is not applicable because the annual capacity factor for oil from this unit is restricted to less than 10%.
PM	Permit No. PSD-FL-272A (BACT)	0.10 lb/MMBtu
	Rule 62-296.405, F.A.C.	0.10 lb/MMBtu
	Rule 62-296.410, F.A.C.	0.10 lb/MMBtu
	40 CFR 60.43b(c)	PM standard of 0.10 lb/MMBtu is not applicable because unit does not use "conventional" or "emerging" technologies to reduce SO_2 emissions as defined in 40 CFR 60.41b.
SO_2	Current AC permit request	Fuel oil ≤ 0.40% sulfur by weight
	Rule 62-296.405, F.A.C.	2.75 lb/MMBtu
	40 CFR 60.42b(j)	0.50 lb/MMBtu (oil ≤ 0.50% sulfur by weight)
Opacity	Permit No. PSD-FL-272A (BACT)	Opacity ≤ 20%, except for one 2-minute period per hour ≤ 40%
	Rule 62-296.405, F.A.C.	Opacity ≤ 20%, except for one 2-minute period per hour ≤ 40%
	Rule 62-296.410, F.A.C.	Opacity ≤ 30%, except for one 2-minute period per hour ≤ 40%
	40 CFR 60.43b(f)	Opacity ≤ 20%, except for one 6-minute period per hour ≤ 27%

Note that previous permits did not limit emissions of carbon monoxide, nitrogen oxides or volatile organic compounds when firing oil. As restricted by the existing permits, oil firing contributes little to these emissions compared to firing the primary fuel of bagasse. Currently, Boiler 4 is limited to a maximum 24-hour average heat input rate of 600 MMBtu per hour and a maximum annual oil-firing rate of 500,000 gallons per year. This would be a maximum annual heat input rate from distillate oil of:

$$\text{Annual } HI_{(oil)} = 500{,}000 \text{ gal/year} \times 135{,}000 \text{ Btu/gal} \times 1 \text{ MMBtu}/10^{+06} \text{ Btu} = 67{,}500 \text{ MMBtu/year}$$

This represents less than 2% of the annual maximum capacity on oil. So, the restriction on oil firing ensures that the boiler will not exceed a 10% annual capacity factor limitation. In accordance with 40 CFR 60.44b(l)(1), this limitation allows this boiler to avoid the potential Subpart Db NOx limit of 0.20 lb/MMBtu.

Based on these rule requirements, the following conditions will be included in the Draft Permit.

- The permittee is authorized to replace the existing oil firing system with the following: two multi-stage combustion low-NOx burners with flame scanner, fuel/steam valve train, steam-atomized center-fired oil gun with ignitor, and flame proving rod; a multi-burner windbox; a fuel oil pump set; and a burner management control system. The maximum heat input rate shall not exceed 326 MMBtu per hour of heat input from distillate oil firing. The permittee shall conduct a performance test to validate the designed maximum heat input rate when firing only oil. *{Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design]

- Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.40% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rule 62-296.405, F.A.C.; 40 CFR 60.42b(j)]

- No more than 2417 gallons of distillate oil shall be fired per hour and no more than 500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Note: Compliance with the annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1).}* [Design; Permit No. PSD-FL-272A; Rule 62-212.400, F.A.C.; 40 CFR 60.44b(l)(1)]

- Emissions of particulate matter shall not exceed 0.10 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. Because this unit fires very low sulfur distillate oil with considerably restricted oil usage, a separate test for particulate matter when firing oil is not required. If oil is co-fired with bagasse during the required annual compliance test, the particulate standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. *{Note: This boiler fires very low sulfur (≤ 0.5% sulfur by weight) distillate oil. For such low sulfur fuels, the particulate matter standard of 40 CFR 60.43b(b) does not apply because this unit does not use "conventional" or "emerging" technology to control sulfur dioxide emissions. The BACT determination in Permit No. PSD-FL-272A did not require initial or subsequent testing for particulate matter when firing only distillate oil.}* [Permit No. PSD-FL-272A; Rules 62-296.405 and 62-296.410, F.A.C.]

- Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: The standard is necessary to ensure that the project does not result in a PSD significant increase for NOx emissions.}* [Rules 62-4.070(3) and 62-212.400, F.A.C.]

- Visible emissions shall not exceed 20% opacity (6-minute average) except for one 6-minute period per hour of not more than 27% opacity as determined by EPA Method 9. This standard applies at all times except during periods of startup, shutdown, or malfunction. *{Note: This standard is equivalent to 20% opacity except for one 2-minute period per hour of not more than 40% opacity.}* [Permit No. PSD-FL-272A; Rule 62-296.405, F.A.C.; Rule 62-296.410, F.A.C.; 40 CFR 60.43b(f)]

- The permittee shall comply with the continuous opacity monitoring requirements of §60.48b and §60.49b in 40 CFR 60. *{Note: In lieu of continuous opacity monitoring for Boiler No. 7, an Alternate Sampling Procedure was previously approved after construction of Boiler 7. The permittee has indicated that a similar request will be made for Boiler 4 prior to commercial startup.}*

- The permittee shall conduct initial tests to demonstrate compliance with the nitrogen oxides and opacity standards. Thereafter, annual compliance tests are required for opacity and prior to permit renewal for nitrogen oxides. [Rule 62-297.310(7)(a), F.A.C.]

- The permit conditions supplement all other conditions in valid air construction and operation permits.

Boiler 7 (Emission Unit No. 014)

The following table summarizes rule applicability and current emissions standards related to oil firing.

Table 3B. Applicable Emissions Standards for Boiler 7, Oil Firing

Pollutant	Regulation	Emission Standard
CO	Permit No. PSD-FL-208(BACT)	0.066 lb/MMBtu
NOx	Permit No. PSD-FL-208(BACT)	0.20 lb/MMBtu Distillate oil ≤ 0.015% nitrogen by weight (ASTM D4629)
	40 CFR 60.44b(l)(1)	NOx standard of 0.20 lb/MMBtu is not applicable because the annual capacity factor for oil from this unit is restricted to less than 10%.
Opacity	Permit No. PSD-FL-208(BACT) ASP No. 95-B-01 dated 04/11/96	Opacity ≤ 20%, except for one 6-minute period per hour ≤ 27%
	Rule 62-296.405, F.A.C.	Opacity ≤ 20%, except for one 2-minute period per hour ≤ 40%
	Rule 62-296.410, F.A.C.	Opacity ≤ 30%, except for one 2-minute period per hour ≤ 40%
	40 CFR 60.43b	Opacity ≤ 20%, except for one 6-minute period per hour ≤ 27%
PM	Permit No. PSD-FL-208(BACT)	0.03 lb/MMBtu
	Rule 62-296.405, F.A.C.	0.10 lb/MMBtu
	Rule 62-296.410, F.A.C.	0.10 lb/MMBtu
	40 CFR 60.43b	0.10 lb/MMBtu

SAM	Permit No. PSD-FL-208(BACT)	0.005 lb/MMBtu
SO_2	Permit No. PSD-FL-208(BACT)	0.05 lb/MMBtu Oil ≤ 0.05% sulfur by weight
	Rule 62-296.405, F.A.C.	Oil ≤ 0.5% sulfur by weight (0.5 lb/MMBtu)
	40 CFR 60.42b(j)	Oil ≤ 0.5% sulfur by weight (0.5 lb/MMBtu)
VOC	Permit No. PSD-FL-208(BACT)	0.004 lb/MMBtu

Boiler 7 is limited to a maximum 24-hour average heat input rate of 738 MMBtu per hour. This unit is currently limited to an annual capacity factor of 10% or less. This would be a maximum annual heat input rate from distillate oil of:

Annual HI = 738 MMBtu/hour x 8760 hours x 0.10 = 646,488 MMBtu/year

Based on a fuel heating value of 135 MMBtu/1000 gallons, the maximum annual fuel consumption would be:

Annual FC = 646,488 MMBtu/year x 1000 gallons/135 MMBtu = 4,788,800 gallons per year

So, the requested limit of 4,500,000 gallons in any consecutive 12-month period ensures that the boiler will not exceed the 10% annual capacity factor limitation. In accordance with 40 CFR 60.44b(l)(1), this limitation allows this boiler to avoid the potential Subpart Db NOx limit of 0.20 lb/MMBtu.

Based on these rule requirements, the following conditions will be included in the Draft Permit.

- The permittee is authorized to modify the existing oil firing system as follows: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace existing two oil pumps. The maximum heat input rate shall not exceed 326 MMBtu per hour of heat input from distillate oil firing. The permittee shall conduct a performance test to validate the designed maximum heat input rate when firing only oil. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design]

- Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The nitrogen content of the distillate oil shall not exceed 0.015% nitrogen by weight as determined by ASTM Method D4629 or equivalent methods approved by the Department. [Permit No. PSD-FL-208; Rule 62-296.405, F.A.C.; 40 CFR 60.42b(j)]

- No more than 2311 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1).}* [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; 40 CFR 60.44b(l)(1)]

- Emissions of particulate matter (PM/PM_{10}) shall not exceed 0.03 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Methods 5 or 17. Because this unit fires ultra-low sulfur distillate oil, a separate test for particulate matter when firing oil is not required. If oil is co-fired with bagasse during the required annual compliance test, the particulate standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. *{Note: This boiler fires very low sulfur distillate oil (≤ 0.5% sulfur by weight). For such low sulfur fuels, the particulate matter standard of 40 CFR 60.43b(b) does not apply because this unit does not use "conventional" or "emerging" technology to control sulfur dioxide emissions. The BACT determination in Permit No. PSD-FL-208 did not require initial or subsequent testing for particulate matter when firing distillate oil.}* [Permit No. PSD-FL-208; Rules 62-296.405 and 62-296.410, F.A.C.]

- Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: The standard is necessary to ensure that the project does not result in a PSD significant increase for NOx emissions.}* [Permit No. PSD-FL-208; Rule 62-4.070(3), F.A.C.]
- Visible emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity, as determined by EPA Method 9. This standard applies at all times except during periods of startup, shutdown, or malfunction. *{Note: This standard is equivalent to 20% opacity except for one 2-minute period per hour of not more than 40% opacity.}* [Permit No. PSD-FL-272A; Rule 62-296.405, F.A.C.; Rule 62-296.410, F.A.C.; 40 CFR 60.43b(f)]
- Due to the increased hourly oil firing rate and requested restriction on annual oil usage, it will be necessary to revise the maximum emission rates.

Pollutant	BACT Standard lb/MMBtu	Maximum Emission Rates	
		lb/hour	tons/year
Carbon Monoxide (CO)	0.066	21.5	20.05
Nitrogen Oxides (NOx)	0.20	65.2	60.75
Particulate Matter (PM/PM10)	0.03	9.8	9.11
Sulfuric Acid Mist (SAM)	0.005	1.6	1.52
Sulfur Dioxide (SO_2)	0.05	16.3	15.19
Volatile Organic Compounds (VOC)	0.004	1.3	1.22

- The permittee shall conduct initial tests to demonstrate compliance with the nitrogen oxides and opacity standards. Thereafter, annual compliance tests are required for opacity and prior to permit renewal for nitrogen oxides.
- The permit conditions supplement all other conditions in valid air construction and operation permits.

4. PRELIMINARY DETERMINATION

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. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. 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.

5. REFERENCES

1. EPA Region 4 letter to the North Carolina Department of Environment and Natural Resources dated August 8, 2002 regarding PPG Industries in Lexington, North Carolina; page 6
2. Letter from EPA to the Wisconsin Electric Power Company dated February 15, 1989 regarding PSD and NSPS issues related to the proposed life extension project; pages 10-11

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. 0510003-018-AC
Facility ID No. 0510003
SIC Nos. 2061, 2062
Permit Expires: December 31, 2003

PROJECT AND LOCATION

This permit authorizes modification of the oil firing systems for Boilers 4 and 7 at the existing Clewiston Sugar Mill and Refinery located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The UTM coordinates are Zone 17, 506.1 km East, and 2956.9 km North.

STATEMENT OF BASIS

This air pollution construction 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 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. This permit supplements all previously issued air construction and operation permits for this emissions unit.

SPECIFIC CONDITIONS

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

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The United States Sugar Corporation (USSC) operates the existing Clewiston sugar mill and refinery in Hendry County, Florida. Sugarcane is harvested from nearby fields and transported to the mill by truck. 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.

The primary air pollution sources are the five existing boilers firing bagasse and fuel oil. Particulate matter emissions are controlled with wet scrubbers for Boilers 1 through 4 and with an electrostatic precipitator for Boiler 7. Other air pollution sources in the refinery include a fluidized bed dryer/cooler, a granular carbon regeneration furnace, conditioning silos with dust collectors, vacuum systems, sugar/starch bins, conveyors, and a packaging system. This permit authorizes modification of the oil firing systems for Boilers 4 and 7, which will increase the maximum heat input rates and provide greater operational reliability. It supplements all previously issued air construction and operation permits for these emissions units.

REGULATORY CLASSIFICATION

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

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

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

PSD: The facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates some units subject to the New Source Performance Standards in 40 CFR 60.

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.

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901-3381.

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 the above address.

3. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units 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, the Florida Administrative Code, the Code of Federal Regulations, and any previously issued valid air permits. 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.]

4. 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.]

5. 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. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

6. 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.]

7. Title V Permit: This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules and conditions of the permit. A Title V operation permit is required for regular operation. 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 require by law. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. Boiler No. 4

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
009	Boiler 4 is a traveling grate boiler manufactured by Foster Wheeler with a maximum steam production rate of 300,000 pounds per hour at 750° F and 600 psig. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a Type D, Size 200 Joy Turbulaire wet impingement scrubber. Exhaust gases exit a 150 feet tall stack at 160° F with an approximate flow rate of 281,000 acfm.

EQUIPMENT

1. Oil Firing Upgrade: The permittee is authorized to replace the existing oil firing system with the following general equipment: two multi-stage combustion low-NOx burners with flame scanner, fuel/steam valve train, steam-atomized center-fired oil gun with ignitor and flame proving rod; a multi-burner windbox; a fuel oil pump set; and a burner management control system. [Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.40% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. [Applicant Request; Rules 62-212.400 and 62-296.405, F.A.C.; 40 CFR 60.42b(j)]

3. Permitted Capacity, Oil Firing: The maximum heat input rate shall not exceed 326 MMBtu per hour of heat input from distillate oil firing. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design; Rule 62-120.200(PTE), F.A.C.]

4. Oil Firing Restrictions: No more than 2417 gallons of distillate oil shall be fired during any hour and no more than 500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1). The annual limit also provided the basis for an earlier determination of BACT for SO_2 emissions in Permit No. PSD-FL-272A.}* [Design; Permit No. PSD-FL-272A; Rule 62-212.400, F.A.C.; 40 CFR 60.44b(l)(1)]

EMISSIONS STANDARDS

5. PM Emissions: Emissions of particulate matter (PM) shall not exceed 0.10 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 5. [Permit No. PSD-FL-272A; Rules 62-296.405 and 62-296.410, F.A.C.]

6. Visible Emissions: When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity as determined by EPA Method 9. [Permit No. PSD-FL-272A; Rules 62-296.406 and 62-296.410; 40 CFR 60.43b(f)]

7. NOx Emissions: Emissions of nitrogen oxides (NOx) shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.}* [Rules 62-4.070(3) and 62-212.400, F.A.C.]

EMISSIONS PERFORMANCE TESTING

8. Initial Capacity Tests: Within 90 days of first fire on oil with the modified system, the permittee shall

conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]

9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content *{Note: Performed as necessary to support other required methods.}*
5	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions
9	Visual Determination of the Opacity of Emissions
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates *{Note: Performed as necessary to support other required methods.}*

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Appendix SC of Section 4 of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. Initial Compliance Tests: Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires very low sulfur distillate oil with considerably restricted oil usage, an initial test for particulate matter when firing only oil is not required. [Permit No. PSD-FL-272A; and Rules 62-4.070(3) and 62-297.310(7)(a), F.A.C.]

11. Annual Tests: During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. If oil is co-fired with bagasse during the required annual compliance test, the particulate matter standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Rule 62-297.310(7)(a), F.A.C.]

12. Renewal Tests: The permittee shall conduct a performance test to demonstrate compliance with the nitrogen oxides and visible emissions standards prior to obtaining a renewed operation permit. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3. b or c, F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: did not operate; or, in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. [Rule 62-297.310(7)(a)3, F.A.C.]

13. Opacity Monitoring: The permittee shall comply with the continuous opacity monitoring requirements of §60.48b and §60.49b in 40 CFR 60. See Appendix Db in Section 4 of this permit. [Subpart Db, 40 CFR 60; Rule 62-204.800, F.A.C.]

RECORDS AND REPORTS

14. Test Notification: The permittee shall notify the Compliance Authority in writing at least thirty (30) days prior to any initial NSPS performance tests and at least fifteen (15) days prior to any other required tests.

[Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and 60.8]

15. Test Reports: The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]

16. Oil Firing Records:

    a. *Methods*: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.

    b. *Vendor Analysis*: For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.

    c. *Actual Sampling*: At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.

    d. *Fuel Consumption*: At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

    [Rule 62-4.070(3), F.A.C.; 40 CFR 60.49b]

OTHER APPLICABLE REQUIREMENTS

17. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]

18. NSPS Provisions: Boiler 4 is subject to the applicable portions of Subpart Db of the New Source Performance Standards in 40 CFR 60. A summary of the NSPS Subpart Db requirements is provided in Appendix Db of Section 4 of this permit. [40 CFR 60, Subpart Db; Rule 62-204.800, F.A.C.]

B. Boiler No. 7

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
014	Boiler 7 is an Alpha Conal Model No. ATT-203-18 spreader-stoker, vibrating-grate boiler with a maximum 1-hour steam production rate of 385,000 pounds per hour at 750° F and 600 psig. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by a wet sand separator followed by an ABB electrostatic precipitator. Exhaust gases exit a 225 feet tall stack at 335° F with an average flow rate of 355,000 acfm.

EQUIPMENT

1. Oil Firing Upgrade: The permittee is authorized to modify the existing oil firing system as follows: modify existing oil burners and configure as multi-stage combustion low-NOx burners; modify the fuel/steam valve train to incorporate a constant differential pressure valve; and replace two existing oil pumps. [Design]

PERFORMANCE RESTRICTIONS

2. Oil Specification: Any fuel oil fired in this boiler shall be No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight as determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. The nitrogen content of the distillate oil shall not exceed 0.015% nitrogen by weight as determined by ASTM Method D4629 or equivalent methods approved by the Department. [Permit No. PSD-FL-208; Rules 62-212.400 and 62-296.405, F.A.C.; and 40 CFR 60.42b(j)]

3. Permitted Capacity, Oil Firing: The maximum heat input rate shall not exceed 326 MMBtu per hour of heat input from distillate oil firing. *{Permitting Note: The maximum steam production rate from firing 100% distillate oil is approximately 225,000 lb/hour.}* [Design; Rule 62-120.200(PTE), F.A.C.]

4. Oil Firing Restrictions: No more than 2311 gallons of distillate oil shall be fired per hour and no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period. The permittee shall install, calibrate, operate, and maintain an individual fuel oil flow meter with integrator. *{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NOx standard in accordance with 40 CFR 60.44b(l)(1).}* [Design; Permit No. PSD-FL-208; Rule 62-212.400, F.A.C.; and 40 CFR 60.44b(l)(1)]

EMISSIONS STANDARDS

5. PM Emissions: Emissions of particulate matter (PM) shall not exceed 0.03 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Methods 5 or 17. [Permit No. PSD-FL-208(BACT); Rules 62-296.405, and 62-296.410, F.A.C.]

6. Visible Emissions: When firing distillate oil, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity, as determined by EPA Method 9. [40 CFR 60.43b(f); Permit No. PSD-FL-208(BACT)]

7. NOx Emissions: Emissions of nitrogen oxides shall not exceed 0.20 lb/MMBtu of heat input from the firing of distillate oil as determined by EPA Method 7E. *{Note: Compliance with the standard ensures that the project does not result in a PSD significant increase for NOx emissions.}* [Rule 62-4.070(3), F.A.C.; Permit No. PSD-FL-208(BACT)]

{Permitting Note: The following table summarizes revised maximum emission rates based on the original BACT determinations of Permit No. PSD-FL-208, the limits of this permit, and a heating value of 135,000 Btu per gallon of distillate oil.

Table A. Estimated Maximum Emission Rates

Pollutant	*Original BACT lb/MMBtu**	*Maximum Emission Rates*	
		lb/hour	*tons/year*
CO	*0.066*	*21.5*	*20.05*
NOx	*0.20*	*65.2*	*60.75*
PM	*0.03*	*9.8*	*9.11*
SAM	*0.005*	*1.6*	*1.52*
SO_2	*0.05*	*16.3*	*15.19*
VOC	*0.004*	*1.3*	*1.22*

EMISSIONS PERFORMANCE TESTING

8. Design Capacity Tests: Within 90 days of first fire on oil with the modified system, the permittee shall conduct a 1-hour performance test to validate the designed maximum heat input rate. The test shall be conducted when firing only oil. The oil firing rate (gallons) and steam production rate (lb/hour) shall be recorded for the 1-hour test. The heat input rate shall be calculated based on the recorded oil firing rate and an actual fuel analysis. If the maximum heat input rate for the initial test is less than 90% of the maximum rate specified in this permit, the Department will modify this permit accordingly. The design capacity test may be conducted during one of the other required initial tests. Results of the test shall be submitted to the Department within 45 days of completion. [Rule 62-4.070(3), F.A.C.]

9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content *{Note: Performed as necessary to support other required methods.}*
5 or 17	Determination of Particulate Matter Emissions
7E	Determination of Nitrogen Oxides Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates *{Note: Performed as necessary to support other required methods.}*

The above methods are described 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 for compliance testing without prior written approval from the Department. Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. Initial Compliance Tests: Within 60 days of achieving permitted capacity on oil, but no later than 180 days after first firing oil in the modified system, the permittee shall conduct initial performance tests to demonstrate compliance with the standards for nitrogen oxides and visible emissions. The tests shall be conducted when firing only oil at the permitted capacity. Because this unit fires ultra-low sulfur distillate oil, a separate test for particulate matter when firing only oil is not required. If oil is co-fired with bagasse during the required annual compliance test, the particulate standard shall be prorated based on heat input from each fuel and the corresponding particulate matter standards. [Permit No. PSD-FL-208; Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

11. Annual Tests: During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests to demonstrate compliance with the standards for visible emissions. The test may be conducted when firing bagasse, oil, or a combination of these fuels. [Rule 62-297.310(7)(a), F.A.C.]

12. Renewal Tests: The permittee shall conduct a performance test to demonstrate compliance with the nitrogen oxides and visible emissions standards prior to obtaining a renewed operation permit. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3. b or c, F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal: did not operate; or, in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. [Rule 62-297.310(7)(a)3, F.A.C.]

13. Opacity Monitoring: Appendix ASP specifies an Alternate Sampling Procedure for monitoring opacity in lieu of the NSPS Subpart Db requirements for continuous opacity monitoring. [Permit No. PSD-FL-208; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

RECORDS AND REPORTS

14. Test Notification: The permittee shall notify the Compliance Authority in writing at least thirty (30) days prior to any initial NSPS performance tests and at least fifteen (15) days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and 60.8]

15. Test Reports: The permittee shall submit reports for all required tests in accordance with the requirements specified in Appendix SC of Section 4 of this permit. For each test run, the report shall also indicate the actual total heat input rate (MMBtu/hour), the actual oil firing rate (gallons/hour), the actual heat input rate from oil (MMBtu/hour), and the steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]

16. Oil Firing Records:

    a. *Methods*: The sulfur content of the fuel oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department.

    b. *Vendor Analysis*: For each fuel oil delivery, the permittee shall record and retain the following information: the date; the gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable.

    c. *Actual Sampling*: At least once during each federal fiscal year, the permittee shall have a representative sample analyzed in accordance with the specified methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.

    d. *Fuel Consumption*: At the end of each month, the permittee shall read and record the amount indicated by the integrator on the fuel oil flow meter. The permittee shall calculate and record the amount of fuel oil fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month.

    [Rule 62-4.070(3), F.A.C.; 40 CFR 60.49b]

OTHER APPLICABLE REQUIREMENTS

17. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for differences with the above conditions, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]

18. NSPS Provisions: Boiler 7 is subject to the applicable portions of Subpart Db of the New Source Performance Standards in 40 CFR 60. A summary of the NSPS Subpart Db requirements is provided in Appendix Db. [40 CFR 60, Subpart Db; Rule 62-204.800, F.A.C.]

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ALTERNATE SAMPLING PROCEDURE FOR OPACITY, BOILER 7

In accordance with Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996, the following conditions are specified in lieu of the requirement for continuous opacity monitoring.

1. Visible Emissions: In lieu of continuous opacity monitoring, the permittee may use the following procedure in order to determine the opacity of emissions when Boiler No. 7 burns No. 2 fuel oil:

   a. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test once per daylight shift during the period that the highest oil firing rate occurs;

   b. An individual who is trained in the use of EPA Reference Method 9 and is currently certified as a visible emissions observer by the State of Florida shall perform a twelve-minute opacity test when the boiler achieves the normal operational load after a cold boiler startup with No. 2 fuel oil;

   c. Required observations shall be made in accordance with the provisions of EPA Reference Method 9;

   d. The observer shall maintain a log, which includes all of the information required by EPA Reference Method 9 for each set of observations and the quantity of No. 2 fuel oil being burned at the time of the observations;

   e. A copy of the observation log shall be submitted to the South District Office of the Department once per calendar quarter if distillate oil was fired during that quarter. Information regarding fuel usage and fuel analysis shall also be submitted to the South district Office on a quarterly basis to verify that the 10 percent annual capacity factor limit is not exceeded;

   f. The permittee shall follow the boiler manufacturer's maintenance schedule and procedures to assure that serviceable components are well maintained, and;

   g. Permittee shall install and operate a continuous opacity monitor if either the annual capacity factor limit of 10 percent for combustion of No. 2 fuel oil is exceeded, or the applicable visible emission limiting standard in 40 CFR 60.43(f) is not regularly complied with when Boiler No. 7 is operated on No. 2 fuel oil.

   [Rules 62-297.401(9), 62-212.400(5), F.A.C., 62-212.400(6), F.A.C., Construction Permit AC26-238006/BACT/PSD-FL-208 dated January 31, 1995, and ASP No. 95-B-01; Administrative Order dated April 1, 1996]

2. COMS: The Department reserves the right to require the permittee to install and operate a continuous opacity monitor pursuant to 40 CFR 60.48b(a), if after investigation, if it is believed that a continuous opacity monitoring system is necessary to more accurately assess the compliance status of the affected source.

   [Permit No. PSD-FL-208 dated January 31, 1995; Alternate Sampling Procedure No. 95-B-01 dated April 1, 1996]

CITATION FORMAT

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 CRF 60.7]

Means: Title 40, Part 60, Section 7

NSPS SUBPART Db REQUIREMENTS FOR BOILERS 4 AND 7

Boilers 4 and 7 (Emission Units 009 and 014) are subject to all applicable portions of the federal New Source Performance Standards specified in Subpart Db or 40 CFR 60. The following is a summary of these requirements supplemented with Department notes.

60.40b Applicability and Delegation of Authority

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

{Department Note: Although the heat input rates of Boilers 4 and 7 exceed 250 MMBtu per hour, the modifications occur after June 19, 1986. Therefore, the modified boilers are subject only to the applicable portions of NSPS Subpart Db.}

60.41b Definitions

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydro-desulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (incorporated by reference - see §60.17).

Emerging technology means any sulfur dioxide control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hour) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m^3 (70,000 Btu/hour-ft^3).

Low heat release rate means a heat release rate of 730,000 J/sec-m^3 (70,000 Btu/hour-ft^3) or less.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Potential sulfur dioxide emission rate means the theoretical sulfur dioxide emissions (ng/J, lb/million Btu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Steam generating unit means a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 0.5 lb/million BTU heat input.

60.42b Standard for Sulfur Dioxide

(j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (2) maintaining fuel receipts as described in §60.49b(r).

{Permitting Note: The permit limits distillate oil for Boilers 4 and 7 to ≤ 0.5% sulfur by weight and requires the permittee to maintain fuel receipts.}

60.43b Standard for Particulate Matter

(b) On and after the date on which the performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce sulfur dioxide emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 0.10 lb/million Btu heat input.

{Permitting Note: The particulate matter standard for oil does not apply because Boilers 4 and 7 do not use "conventional technology" or "emerging technology" to reduce sulfur dioxide emissions as defined in the Subpart.}

(f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

{Permitting Note: The permit includes an equivalent limit for oil firing.}

60.44b Standard for Nitrogen Oxides

(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility which commenced construction, modification, or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following limits:

(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas.

{Permitting Note: The permit contains enforceable conditions for Boilers 4 and 7 limiting the annual capacity factors for firing distillate oil to less than 10%.}

60.45b Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

(j) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.46b Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides

(a) The opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction.

(d) To determine compliance with the opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8 using the following procedures and reference methods:

(7) Method 9 is used for determining the opacity of stack emissions.

{Permitting Note: The permit conditions are consistent with these requirements.}

60.47b Emission Monitoring for Sulfur Dioxide

(f) The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

{Permitting Note: The permit contains enforceable conditions for maintaining fuel receipts.}

60.48b Emission Monitoring for Particulate Matter and Nitrogen Oxides

(a) The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

{Permitting Note: The permit requires continuous opacity monitoring to demonstrate compliance for Boiler 4. In lieu of continuous opacity monitoring for Boiler 7, an Alternate Sampling Procedure was previously approved after construction of Boiler 7. The permittee has indicated that a similar request will be made for Boiler 4 prior to commercial startup.}

60.49b Reporting and Recordkeeping Requirements

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §60.42b, §60.43b, and §60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B.

(f) For facilities subject to the opacity standard under §60.43b, the owner or operator shall maintain records of opacity.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.

(1) Any affected facility subject to the opacity standards under §60.43b(e) or to the operating parameter monitoring requirements under §60.13(i)(1).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under §60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which

certify that the oil meets the definition of distillate oil as defined in §60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Quarterly reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the preceding quarter.

{Permitting Note: The permit requires continuous opacity monitoring to demonstrate compliance for Boiler 4. In lieu of continuous opacity monitoring for Boiler 7, an Alternate Sampling Procedure was previously approved after construction of Boiler 7. The permittee has indicated that a similar request will be made for Boiler 4 prior to commercial startup.}

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.

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 (NA);
    b. Determination of Prevention of Significant Deterioration (NA); and
    c. Compliance with New Source Performance Standards (X).

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.

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

EMISSIONS AND CONTROLS

1. 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.]

2. 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.]

3. 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.]

4. 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.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee 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.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

8. 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.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. 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 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.]

11. 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.]

12. 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.]

13. 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.]

14. 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.]

15. 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.

16. 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.]

17. 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.]

18. 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:

a. The type, location, and designation of the emissions unit tested.
b. The facility at which the emissions unit is located.
c. The owner or operator of the emissions unit.
d. 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.
e. 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.
f. 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.
g. 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.
h. The date, starting time and duration of each sampling run.
i. 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.
j. The number of points sampled and configuration and location of the sampling plane.
k. 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.
l. The type, manufacturer and configuration of the sampling equipment used.
m. Data related to the required calibration of the test equipment.
n. Data on the identification, processing and weights of all filters used.
o. Data on the types and amounts of any chemical solutions used.
p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
q. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
r. All measured and calculated data required to be determined by each applicable test procedure for each run.
s. The detailed calculations for one run that relate the collected data to the calculated emission rate.
t. 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.
u. 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.]

RECORDS AND REPORTS

19. 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. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

20. 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.]

P.E. CERTIFICATION STATEMENT

PERMITTEE

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

Draft Air Permit No. 0510003-018-AC
Clewiston Sugar Mill and Refinery
Boilers 4/7, Modified Oil Firing Systems

PROJECT DESCRIPTION

The United States Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery in Hendry County, Florida. Boilers 4 and 7 fire bagasse as the primary fuel to produce steam for the plant's operations. Bagasse is the fibrous vegetative matter remaining from sugarcane after the milling process. Fuel oil is fired as a supplemental and alternate fuel. The applicant proposes to modify the existing oil firing systems of Boilers 4 and 7. Boiler 4 will begin firing distillate oil containing less than 0.4% sulfur by weight. Boiler 7 will continue to fire distillate oil containing less than 0.05% sulfur by weight. The project will increase the maximum heat input rates from 225 to 326 MMBtu per hour for Boiler 4 and from 250 to 326 MMBtu per hour for Boiler 7. Oil firing will be restricted to 500,000 gallons per year for Boiler 4 and 4,500,000 for Boiler 7. Both boilers are subject to Subpart Db of 40 CFR 60, which is a federal New Source Performance Standard for boilers.

The applicant estimates that the project has the potential to result in the following increases in actual emissions: 16 tons of carbon monoxide per year; 39 tons of nitrogen oxides per year; 6.7 tons of particulate matter per year; 1.4 tons of sulfuric acid mist per year; 16.8 tons of sulfur dioxide per year; and 1 ton of volatile organic compounds per year. These levels are below the significant emission rates that would require a preconstruction review in accordance with the Prevention of Significant Deterioration of Air Quality (Rule 62-212.400, F.A.C.). Therefore, the resulting project requires a minor source air construction permit. The draft permit includes conditions limiting nitrogen oxide emissions, visible emissions from the stack, fuel oil sulfur content, and fuel oil usage. The draft permit will supplement all previously issued air construction and operation permits for these boilers.

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 J. Koerner 4-1-03

Jeffery F. Koerner, P.E. (Date)
Registration Number: 49441

Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Chief
Bureau of Air Regulation

THROUGH: Al Linero, Manager
New Source Review Section

FROM: Jeff Koerner, New Source Review Section

DATE: April 1, 2003

SUBJECT: Draft Air Construction Permit No. 0510003-018-AC
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
Boilers 4/7 - Modified Oil Firing Systems

Attached for your review are the following items:

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

The United States Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery in Hendry County, Florida. Boilers 4 and 7 fire bagasse as the primary fuel to produce steam for the plant's operations. Bagasse is the fibrous vegetative matter remaining from sugarcane after the milling process. Fuel oil is fired as a supplemental and alternate fuel.

The applicant proposes to modify the existing oil firing systems of Boilers 4 and 7. Boiler 4 will begin firing distillate oil containing less than 0.4% sulfur by weight. Boiler 7 will continue to fire distillate oil containing less than 0.05% sulfur by weight. The project will increase the maximum heat input rates from 225 to 326 MMBtu per hour for Boiler 4 and from 250 to 326 MMBtu per hour for Boiler 7. Oil firing will be restricted to 500,000 gallons per year for Boiler 4 and 4,500,000 for Boiler 7.

The project was reviewed only for the impacts related to oil firing. The project will not result in PSD-significant emissions increase. Therefore, a minor source air construction permit is appropriate. Both boilers will be subject to Subpart Db of 40 CFR 60, which is a federal New Source Performance Standard for boilers.

The Technical Evaluation and Preliminary Determination provides a detailed description of the project, rule applicability, and permit conditions. The P.E. certification briefly summarizes the proposed project. Day #74 is April 21, 2003. I recommend your approval of the attached Draft Permit for this project.

Attachments