




Florida Department of Environmental Protection

Memorandum

TO: Trina Vielhauer, Chief 
Bureau of Air Regulation

THROUGH: Al Linero, Program Manager  7/13
Air Permitting South

FROM: Jeff Koerner, Air Permitting South 

DATE: July 13, 2004

SUBJECT: Draft Air Permit No. 0990026-008-AC
Sugar Cane Growers Cooperative of Florida, Glades Sugar House
Addition of Natural Gas to Boilers 4 and 5

Attached for your review are the following items:

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

The draft permit authorizes the modification of existing oil burners in Boilers 4 and 5 to accommodate natural gas as a startup and supplemental fuel. The existing sugar mill boilers operate at the Glades Sugar House, which is located on West Sugar Road in Belle Glade, Palm Beach County, Florida. The draft permit is a minor source air construction permit to authorize the modification. As conditioned by the draft permit, the project does not trigger PSD preconstruction review or new NSPS Subpart Db requirements.

The Technical Evaluation and Preliminary Determination provides a detailed description of the project, rule applicability, and emissions standards. The P.E. certification briefly summarizes the proposed project. Day #74 is August 19, 2004. I recommend your approval of the attached Draft Permit for this project.

Attachments



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

July 21, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jose F. Alvarez, Sr. Vice President – Planning Operations
Sugar Cane Growers Cooperative of Florida
Airport Road, P.O. Box 666
Belle Glade, Florida 33430-0666

Re: Draft Air Permit No. 0990026-008-AC
Sugar Cane Growers Cooperative of Florida, Glades Sugar House
Addition of Natural Gas to Boilers 4 and 5

Dear Mr. Alvarez:

Enclosed is one copy of the draft permit to modify the existing oil burners in Boilers 4 and 5 to accommodate natural gas as an additional startup and supplementary fuel. The existing sugar mill boilers operate at the Glades Sugar House, which is located on West Sugar Road in Belle Glade, Palm Beach County, Florida. 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 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, Program Manager of Air Permitting South, at the above letterhead address. If you have any other questions, please contact Jeff Koerner at 850/921-9536.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an
Application for Air Permit by:

Sugar Cane Growers Cooperative of Florida
Airport Road, P.O. Box 666
Belle Glade, Florida 33430-0666

Draft Air Permit No. 0990026-008-AC
Glades Sugar House, Boilers 4 and 5
Addition of Natural Gas
Palm Beach County, Florida

Authorized Representative:

Mr. Jose F. Alvarez, Sr. Vice President – Planning 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, Sugar Cane Growers Cooperative of Florida, applied on December 8, 2003 to the Department for a permit to modify the existing oil burners in Boilers 4 and 5 to accommodate natural gas as an additional supplementary fuel. The existing sugar mill boilers operate at the Glades Sugar House, which is located on West Sugar Road in Belle Glade, Palm Beach County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-210, and 62-212, 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 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.

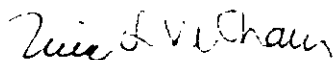
In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal 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.



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 7/21/04 to the persons listed:

- Mr. Jose F. Alvarez*, Sugar Cane Growers Cooperative of Florida
- Ms. Kathy Lockhart, Sugar Cane Growers Cooperative of Florida
- Mr. David Buff, Golder Associates Inc.
- Mr. Ron Blackburn, SD
- Mr. James Stormer, PBCHD
- Mr. Gregg Worley, EPA Region 4
- Mr. John Bunyak, NPS

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.

Mary D. Henry
(Clerk)

7/21/04
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0990026-008-AC

Sugar Cane Growers Cooperative of Florida
Glades Sugar House
Addition of Natural Gas to Existing Boilers 4 and 5

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Sugar Cane Growers Cooperative of Florida (applicant) to modify the existing oil burners in Boilers 4 and 5 to accommodate natural gas as an additional supplementary fuel. The existing sugar mill boilers operate at the Glades Sugar House, which is located on West Sugar Road in Belle Glade, Palm Beach County, Florida. The applicant's authorized representative is Mr. Jose F. Alvarez, Vice President Planning and Plant Operations. The applicant's mailing address is: Sugar Cane Growers Cooperative of Florida, Post Office Box 666, Belle Glade, Florida 33430-0666.

The applicant operates an existing sugar mill and boiling house where sugar cane is milled and pressed. The raw juice is clarified, crystallized, and centrifuged. Steam requirements are furnished by six boilers that fire bagasse as the primary fuel. Bagasse is the fibrous, vegetative material remaining after sugarcane is milled. Each boiler also fires No. 6 fuel oil as a startup and supplementary fuel. The combustion of fuels results in emissions of carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and volatile organic compounds. The applicant proposes to modify the existing oil burners for Boilers 4 and 5 to also accommodate natural gas as an additional startup and supplementary fuel.

Boilers 4 and 5 were originally constructed in the 1970s and are not currently subject to Subpart Db of the federal New Source Performance Standards (NSPS). The burner project is not considered an NSPS modification because it will not increase the hourly emission rates of pollutants regulated by Subpart Db. In addition, the cost of the burner modifications is well below 50% of the capital cost to replace a unit and is therefore not considered "reconstruction" as defined by the NSPS. Therefore, the project does not trigger the Subpart Db requirements.

The existing plant is a major facility in accordance Rule 62-212.400, F.A.C., the preconstruction review program for the Prevention of Significant Deterioration (PSD) of Air Quality. As restricted by the proposed conditions of the draft permit, all emissions increases from the project will be less than the PSD significant emission rates and the project is not subject to PSD preconstruction review. Therefore, the burner modification will be authorized in a minor source air construction permit.

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

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

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:

Dept. 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

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

Palm Beach County Health Department
Air Pollution Control Section
(901 Evernia Street)
P.O. Box 29
West Palm Beach, Florida 33402
Telephone: 561/355-3070

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. 0990026-008-AC
Addition of Natural Gas to Boilers 4 and 5

COUNTY

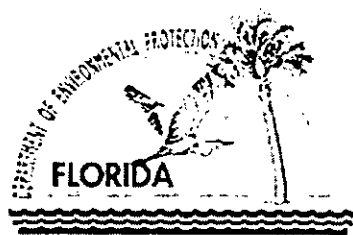
Palm Beach County

APPLICANT

Sugar Cane Growers Cooperative of Florida
Glades Sugar House
ARMS Facility ID No. 0990026

**PERMITTING
AUTHORITY**

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



July 12, 2004

{Filename: 0990026-008-AC - TEPD}

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Sugar Cane Growers Cooperative of Florida
Airport Road, P.O. Box 666
Belle Glade, Florida 33430-0666

Authorized Representative:

Mr. Jose F. Alvarez, Sr. Vice President – Planning Operations

Processing Schedule

12/08/03 South District received the application for a minor air construction permit.
01/07/04 South District requested additional information.
02/17/04 Application was transferred to the Bureau of Air Regulation in Tallahassee for processing.
02/23/04 Received additional information from applicant.
03/05/04 Bureau of Air Regulation requested additional information.
06/07/04 Department received additional information; application complete.

Facility Description and Location

The existing facility (Glades Sugar House) consists of a sugar mill and boiling house where sugar cane is milled and pressed. The raw juice is clarified, crystallized, and centrifuged. Steam requirements are furnished by six boilers that fire bagasse as the primary fuel. Bagasse is the fibrous, vegetative material remaining after the sugarcane milling process. Each boiler also fires No. 6 fuel oil as a startup and supplementary fuel. The existing sugar mill is located on West Sugar Road in Belle Glade, Palm Beach County, Florida. The UTM coordinates are Zone 17, 534.9 km East, and 2953.3 km North. 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 No. 2061 – Raw Sugar Processing.

Regulatory Categories

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

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

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

PSD: The existing facility is a PSD-major facility 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 existing sugar mill boilers fire bagasse as the primary fuel and No. 6 fuel oil as a startup and supplemental fuel. Natural gas is expected to be available within the next few years. The applicant requests authorization to modify the existing Peabody oil-fired burners to accommodate the firing of natural gas including, but not limited to, a new diffuser and new gas gun with supports. Only one of the existing four oil burners will be modified for Boiler 4. All three existing oil burners will be modified for Boiler 5. The design capacity of each modified burner is 100 MMBtu per hour for gas firing. The existing maximum heat input rates for oil firing are 393 MMBtu/hour for Boiler 4 and 302 MMBtu/hour for Boiler 5. The maximum heat input rates and design oil firing rates will remain unchanged. The preliminary design specifications for the modified burners are 0.17 lb/MMBtu for carbon monoxide emissions and 0.20 lb/MMBtu for nitrogen oxide emissions.

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.

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

Applicability of New Source Performance Standards (NSPS)

NSPS Subpart Db applies to steam generating units (boilers) with a design heat input rate of 100 MMBtu per hour or greater that were constructed, reconstructed, or modified after June 19, 1984. Boilers 4 and 5 were constructed before this date and are not currently subject to this regulation. Based on available information, the proposed project is not a "modification" in terms of the NSPS because the physical changes to the burners will not result in increased hourly emissions of NO_x, SO₂, or PM, which are the pollutants regulated under NSPS Subpart Db. In addition, the costs of the burner modifications are well below the 50% replacement cost criteria that would trigger "reconstruction" under the NSPS requirements. Therefore, the project does not trigger the NSPS Subpart Db requirements. Supporting calculations are provided in Table 4 of Attachment A.

Applicability of National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Although EPA signed a final rule in February of 2004 to regulate hazardous air pollutants from industrial boilers (NESHAP Subpart DDDDD), the compliance dates have not yet been determined. Nevertheless, this project would not be subject to these new requirements because the costs of the burner modifications are also well below the 50% replacement cost criteria that would trigger "reconstruction" under the NESHAP requirements.

Applicability of Rule 62-296.405, F.A.C. (Fossil Fuel Fired Boilers > 100 MMBtu/hour)

The project will not result in any increases to the maximum fossil fuel heat input rate, so the project will not change the status of these units with respect to Rule 62-296.405, F.A.C.

PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required only in areas currently in attainment with the National Ambient Air Quality Standard (AAQS) or areas designated as "unclassifiable" for a given pollutant. A new 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.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in Table 62-212.400-2, F.A.C. Emissions increases 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.

Natural gas will typically be fired in place of fuel oil. Therefore, it is reasonable to compare the past actual annual emissions from oil firing to the future potential annual emissions from gas firing to determine whether there will be a significant emissions increase due to the project. Based on Annual Operating Reports previously submitted by the applicant, the highest 2-year average oil firing rate is 154,099 MMBtu/year. Initially, the applicant requested maximum annual heat input rates for firing natural gas of 260,000 MMBtu/year for Boiler 4 and 780,000 MMBtu/year for Boiler 5. Based on this initial request, the project would result in a significant increase in NO_x emissions of about 80 tons per year. The applicant later requested a permit limit of 632 million scf of gas (632,000 MMBtu/year) from both boilers combined. Based on the revised request, the project does not trigger PSD preconstruction review. See Tables 5 and 6 of Attachment A for supporting calculations and comparisons. Therefore, the permit will include an operating restriction of 632 million scf of gas firing during any consecutive 12 months for the two boilers combined. This restriction will be subject to the "source obligation" requirements of Rule 62-212.400(2)(g), F.A.C.

3. PERMIT CONDITIONS

As a clean fuel, the firing of natural gas will result in reduced emissions of PM and SO₂ and only a very slight increase of VOC. Based on vendor specifications and the requested annual heat input restriction, CO emissions are estimated to be about half of the PSD significant emission rate of 100 tons per year while NO_x emissions are just below the PSD significant emission rate of 40 tons per year. Natural gas will occasionally be used as a startup fuel, but will typically be co-fired with bagasse as a supplemental fuel. The draft permit includes the following specifications:

- Description of the burner modifications for Boiler 4 and 5;
- Authorization to fire natural gas as a permitted fuel for Boilers 4 and 5;
- Specification of 100 MMBtu/hour of gas firing as the maximum heat input rate from each modified burner;
- Restriction of \leq 632 million scf of gas firing for any consecutive 12 months from both boilers combined;
- Specification of 0.20 lb/MMBtu as the NO_x emissions standard for gas firing;
- Requirement for an initial test on Boiler 5 to demonstrate compliance with the NO_x standard; and
- Requirement to monitor the natural gas consumption rate.

The project proposes to modify three burners for Boiler 5, but only a single burner for Boiler 4. Therefore, a single test for Boiler 5 is considered sufficient to demonstrate NO_x emissions from the modified burners.

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.

ATTACHMENT A
Emissions and Calculations

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 1. Boiler Specifications

Specifications	Boiler 4	Boiler 5
Boiler		
Steam Production Rate, lb/hour (24-hr avg.)	300,000	230,000
Max. Heat Input Rate, MMBtu/hr (24-hr avg.)	572	439
Hours of Operation	7296	7296
Fuel Oil Specifications		
Number of Burners	4	3
Heat Input Rate, MMBtu/hour/burner	98.3	100.7
Total Heat Input Rate, MMBtu	393	302
Natural Gas Specifications		
Number of Burners	1	3
Heat Input Rate, MMBtu/hour/burner	100	100
Total Heat Input Rate, MMBtu	100	300

Note: The total maximum heat input rate to each boiler will not increase.

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 2. Fuel Oil Emission Factors and Actual Consumption

No. 6 Fuel Oil

151 MMBtu/1000 gallons

8.2 lb/gallon

2.4 % sulfur by weight

Emission Rates

Pollutant	EF lb/1000 gal	Equivalent lb/MMBtu	Emission Factor (EF) Reference
CO	5	0.033	AP-42, Table 1.3-1
NOx	47	0.311	AP-42, Table 1.3-1
PM	15.1	0.100	PM Limit of 0.10 lb/MMBtu
SO ₂	393.6	2.607	Stoichiometry
VOC	0.28	0.002	AP-42, Table 1.3-3

Fuel Oil Usage (ARMS Data)

Year	Boiler 4 (x 1000 gallons)			Boiler 5 (x 1000 gallons)			Total
	No. 6	Used Oil	Total	No. 6	Used Oil	Total	
1998	421.56	0	421.56	375.84	0	375.84	797.4
1999	157.9	0	157.9	0	0	0	157.9
2000	610.33	6.62	616.95	442	4.79	446.79	1063.74
2001	520.65	6.11	526.76	389.96	4.58	394.54	921.3
2002	594.16	6.27	600.43	372.48	4.4	376.88	977.31

Highest 2-year average, 2000/2002 (gallons/year) = **1,020,525**

Highest 2-year average 2000/2002 (MMBtu/year) = **154099.3**

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 3. Natural Gas Emission Factors

Natural Gas

1000 MMBtu/MMcf

0.045 lb gas/cf

0.1 grains of S/cf gas

0.03 % sulfur by weight

Pollutant	EF lb/MMcf	Equivalent lb/MMBtu	Emission Factor (EF) Reference
CO	166	0.166	Vendor
NOx	200	0.200	Vendor
PM	7.6	0.008	AP-42, Table 1.4-2
SO ₂	0.6	0.001	Stoichiometry
VOC	5.5	0.006	AP-42, Table 1.4-2

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 4. NSPS Subpart Db Applicability

Boiler 4

100 MMBtu/hour on gas

98.3 MMBtu/hour on oil

Pollutant	No. 6 Fuel Oil		Natural Gas		Hourly Increase?	NSPS Pollutant?
	EF lb/MMBtu	Emission Rate lb/hr	EF lb/MMBtu	Emission Rate lb/hr		
CO	0.033	3.3	0.166	16.6	Yes	No
NOx	0.311	30.6	0.200	20.0	No	Yes
PM	0.100	9.8	0.008	0.8	No	Yes
SO ₂	2.607	256.2	0.001	0.1	No	Yes
VOC	0.002	0.2	0.006	0.6	Yes	No

Boiler 5

300 MMBtu/hour on gas

302.1 MMBtu/hour on oil

Pollutant	No. 6 Fuel Oil		Natural Gas		Hourly Increase?	NSPS Pollutant?
	EF lb/MMBtu	Emission Rate lb/hr	EF lb/MMBtu	Emission Rate lb/hr		
CO	0.033	10.0	0.166	49.8	Yes	No
NOx	0.311	94.0	0.200	60.0	No	Yes
PM	0.100	30.2	0.008	2.3	No	Yes
SO ₂	2.607	787.5	0.001	0.2	No	Yes
VOC	0.002	0.6	0.006	1.7	Yes	No

The project does not constitute an NSPS modification because none of the pollutants regulated by NSPS Subpart Db (NO_x, PM, and SO₂) are predicted to increase.

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 5. PSD Applicability - Original Application Request

Boilers 4 and 5

1,020,525 gallons/year of oil (2-year average for 2001-2002)
 151,000 Btu/gallon of oil
 154,099 MMBtu/year from oil (2-year average)
 1,040,000 MMBtu/year from gas (initial request)

Pollutant	No. 6 Fuel Oil		Natural Gas		Project TPY	PSD SER TPY	PSD?
	EF lb/MMBtu	Emission Rate TPY	EF lb/MMBtu	Emission Rate TPY			
CO	0.033	2.6	0.166	86.3	83.8	100	No
NOx	0.311	24.0	0.200	104.0	80.0	40	Yes
PM	0.100	7.7	0.008	4.0	-3.8	25/15	No
SO ₂	2.607	200.8	0.001	0.3	-200.5	40	No
VOC	0.002	0.1	0.006	2.9	2.7	40	No

Notes:

- Based on the following maximum heat input rates:
 Boiler 4: 100 MMBtu/hour x 2600 hour/year = 260,000 MMBtu/year
 Boiler 5: 300 MMBtu/hour x 2600 hour/year = 780,000 MMBtu/year
 Total = 1,040,000 MMBtu/year
- This compares the past actual emissions from oil firing to the future potential emissions from the requested gas firing. Note that "Table 4" in the application compares emissions from "potential" oil firing to future gas firing.
- The applicant later requested a limit on gas firing to avoid PSD review. This is shown in Table 6 of this request.

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

ited
gas firing
report.

**Sugar Cane Growers Cooperative of Florida
Addition of Natural Gas to Boilers 4 and 5**

Table 6. PSD Applicability - Revised Application Request

Boiler 4 and 5

1,020,525 gallons/year of oil (2-year average for 2001-2002)
151,000 Btu/gallon of oil
154,099 MMBtu/year from oil (2-year average for 2001-2002)

1,000 MMBtu/MMcf

632 million scf of gas/year (proposed limit)

632,000 MMBtu/year from gas

Pollutant	No. 6 Fuel Oil		Natural Gas		Project (Difference) TPY	PSD SER TPY	PSD?
	EF lb/MMBtu	Emission Rate TPY	EF lb/MMBtu	Emission Rate TPY			
CO	0.033	2.6	0.166	52.5	49.9	100	No
NOx	0.311	24.0	0.200	63.2	39.2	40	No
PM	0.100	7.7	0.008	2.4	-5.3	25/15	No
SO ₂	2.607	200.8	0.001	0.2	-200.6	40	No
VOC	0.002	0.1	0.006	1.7	1.6	40	No

Notes:

1. The new revised restriction on gas firing (equivalent to 632,000 MMBtu/year) is four times the past actual 2-year average heat input for oil firing.
2. CO emissions increases are less than half of the PSD significant emission rate and VOC emissions increases are very small.

PERMITTEE:

Sugar Cane Growers Cooperative of Florida
Airport Road, P.O. Box 666
Belle Glade, Florida 33430-0666

Authorized Representative:

Mr. Jose F. Alvarez, Sr. Vice President – Planning Operations

Glades Sugar House Air Permit No. 0990026-008-AC Facility ID No. 0990026 SIC No. 2061 Permit Expires: December 30, 2007

PROJECT AND LOCATION

This permit authorizes modification of existing oil burners for Boilers 4 and 5 to accommodate natural gas as a startup and supplementary fuel. The existing sugar mill boilers operate at the Glades Sugar House, which is located on West Sugar Road in Belle Glade, Palm Beach County, Florida. The UTM coordinates are Zone 17, 534.9 km East, and 2953.3 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 install the proposed equipment 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 air construction permit supplements all other valid air construction permits.

CONTENTS

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

(DRAFT)

Michael G. Cooke, Director
Division of Air Resource Management

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

This facility consists of a sugar mill and boiling house where sugar cane is milled and pressed. The raw juice is clarified, crystallized, and centrifuged. Steam requirements are furnished by six boilers that fire bagasse as the primary fuel. Bagasse is the fibrous, vegetative material remaining after sugarcane is milled. Each boiler also fires No. 6 fuel oil as a supplementary fuel.

The proposed project will add natural gas-firing capabilities to the following existing boilers.

ID	Emission Unit Description
004	Boiler No. 4 is a traveling grate boiler with a steam production capacity of 300,000 pounds per hour.
005	Boiler No. 5 is a traveling grate boiler with a steam production capacity of 230,000 pounds per hour.

The conditions of this permit regulate Boilers 4 and 5 for the firing of natural gas and include operational restrictions necessary to avoid PSD preconstruction review.

REGULATORY CLASSIFICATION

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

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

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

PSD: The existing facility is a PSD-major facility 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.

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: Applications for permits to construct or modify emissions units subject to PSD preconstruction review 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. Applications for minor source construction permits and operation permits shall be submitted to Air Resource Section of the Department's South District Office at 2295 Victoria Avenue, Suite #364, Fort Myers, Florida 33901-3381. Copies of permit applications shall also be submitted to each Compliance Authority listed below.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29 (901 Evernia Street), West Palm Beach, FL 33402-0029. Copies of all such documents shall be submitted to the Air Resource Section of the Department's South District Office at 2295 Victoria Avenue, Suite #364, Fort Myers, Florida 33901-3381.
3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Format); Appendix B (General Conditions); and Appendix C (Common Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. 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.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. 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.]
7. 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.]
8. Title V Permit: Pursuant to Rule 62-213.420(1)(a)2, F.A.C., the permittee shall submit an application for a revised Title V air operation permit at least ninety (90) days before the expiration of this permit, but no later than 180 days after commencing operation. In accordance with Rule 62-213.412(2), F.A.C., the permittee may immediately implement the changes authorized by this air construction permit after submitting the application for a revised Title V air operation permit to the Permitting Authority and providing copies of the application to EPA Region 4 and each Compliance Authority. To apply for a revised Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's South District Office with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, 62-213.412, and 62-213.420, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 4 (EU-004) and Boiler 5 (EU-005) – Gas Firing

This section of the permit addresses the following emissions units.

EU No.	Description
004	Boiler No. 4 is a traveling grate boiler with a steam production capacity of 300,000 lb/ hour (572 MMBtu/hour). Steam production, steam temperature, and steam pressure are monitored and recorded. The primary fuel is bagasse. No. 6 residual fuel oil and natural gas are used as startup and supplementary fuels. Particulate matter emissions are controlled by two Joy Turbulaire Type D wet impingement scrubbers in parallel. The scrubber pressure drop and inlet water pressure are also monitored. The exhaust stack is 9.46 feet in diameter and 180 feet tall. Flue gases exit the stack at a flow rate of approximately 214,000 acfm and a temperature of 160° F.
005	Boiler No. 5 is a traveling grate boiler with a steam production capacity of 230,000 lb/hour (439 MMBtu/hour). Steam production, steam temperature, and steam pressure are monitored and recorded. The primary fuel is bagasse. No. 6 residual fuel oil and natural gas are used as startup and supplementary fuels. Particulate matter emissions are controlled by a multi-cyclone dust collector followed by two Joy Turbulaire Type D wet impingement scrubbers in parallel. The scrubber pressure drop and inlet water pressure are also monitored. The exhaust stack is 7.0 feet in diameter and 150 feet tall. Flue gases exit the stack at a flow rate of approximately 165,320 acfm and a temperature of 160° F.

PREVIOUS APPLICABLE REQUIREMENTS

1. **Other Permits:** The conditions of this permit regulate Boilers 4 and 5 for the firing of natural gas and include operational restrictions necessary to avoid PSD preconstruction review. These conditions supplement prior air construction and operation permits. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT

2. **Burner Modifications and Specifications:** For Boilers 4 and 5, the permittee is authorized to modify the existing Peabody oil-fired burners to accommodate the firing of natural gas including, but not limited to, a new diffuser and new gas gun with supports. Only one of the existing four oil burners shall be modified for Boiler 4. All three existing oil burners will be modified for Boiler 5. Each modified burner shall be designed for a maximum heat input rate of 100 MMBtu per hour from the firing of natural gas. The total maximum heat input rates to the existing boilers and the maximum heat input rates from firing oil remain unchanged. Each modified burner shall be designed to achieve an emissions rate of 0.20 lb/MMBtu or less for nitrogen oxides (NOx). *{Permitting Note: The preliminary design specification is 0.17 lb/MMBtu of carbon monoxide emissions from each modified burner.}* [Design: Applicant Request]

PERFORMANCE RESTRICTIONS

3. **Authorized Fuel:** In addition to other previously permitted fuels, Boilers 4 and 5 are authorized to fire natural gas as a startup and supplementary fuel. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
4. **Permitted Capacity:** For Boiler 4, the maximum heat input rate from firing supplementary fuels (any combination of natural gas and fuel oil) is 393 MMBtu per hour. For Boiler 5, the maximum heat input rate from firing supplementary fuels (any combination of natural gas and fuel oil) is 302 MMBtu per hour. The maximum heat input rate to each modified burner is 100 MMBtu per hour from firing natural gas. *{Permitting Note: The permitted capacities for other fuels are specified in prior permits including the current Title V operation permit.}* [Rules 62-210.200(PTE) and 62-212.400(2)(g), F.A.C.]
5. **Restricted Operation:** Natural gas fired in both Boilers 4 and 5 combined shall not exceed 632,000,000

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Boiler 4 (EU-004) and Boiler 5 (EU-005) – Gas Firing

standard cubic feet of natural gas during any consecutive 12 months. *{Permitting Note: The restriction on natural gas firing allows this project to avoid PSD preconstruction review. The current Title V operation permit specifies additional operational restrictions for Boilers 4 and 5.}* [Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]

EMISSIONS STANDARDS

6. **Nitrogen Oxides (NOx):** Each modified burner shall be designed to achieve a NOx emissions performance specification of 0.20 lb/MMBtu or less from the firing of natural gas. NOx emissions are defined as all oxides of nitrogen as determined by EPA Method 7E and expressed as “NO₂”. *{Permitting Note: Other than startup, natural gas will typically be co-fired (with bagasse) as a supplementary fuel. Except for NOx, emissions from firing natural gas are expected to be much less than emissions from firing bagasse. Therefore, no other additional standards are imposed by this permit.}* [Design; Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]
7. **Other Pollutant Emissions Standards:** All existing emissions standards specified in prior permits for Boilers 4 and 5 shall also apply when firing natural gas alone or in combination with other fuels. *{Permitting Note: This requirement does not impose any additional testing because natural gas is used as a startup fuel and to supplement bagasse.}* [Design; Rules 62-4.070(3), F.A.C.]

EMISSIONS PERFORMANCE TESTING

8. **Test Requirements:** NOx emissions shall be determined in accordance with EPA Method 7E. EPA Methods 1 through 4 shall be used as necessary to support this test. These methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. Tests shall also be conducted in accordance with the requirements specified in Appendix C of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]
9. **Initial Tests:** The permittee shall conduct an initial test on Boiler 5 to demonstrate compliance with the NOx emissions performance specification. The initial performance test shall be conducted within 60 days after achieving permitted capacity on natural gas, but no later than 180 days after initial firing on natural gas. The test shall be performed while Boiler 5 is firing only natural gas at a rate of 270 MMBtu per hour or greater. *{Permitting Note: No test is required for Boiler 4, which is only authorized for one modified burner representing less than 20% of the total permitted heat input rate.}* [Rule 62-4.070(3), F.A.C.]
10. **Subsequent Tests:** Subsequent tests are not required after the initial demonstration of compliance because natural gas will be fired during startups and to supplement the firing of bagasse. However, the Department may require subsequent “special compliance tests” in accordance with Rule 62-297.310(7)(b), F.A.C. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

11. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix C of this permit. For each test run, the report shall also indicate the actual natural gas firing rate (million cubic feet per hour), the heating value of the natural gas (MMBtu/million cubic feet), the actual heat input rate (MMBtu per hour), and the actual boiler steam production rate (lb/hour). [Rule 62-297.310(8), F.A.C.]
12. **Monitoring:** In accordance with the manufacturer’s recommendations, the permittee shall install, calibrate, operate, and maintain flow meters with totalizers to monitor and record the natural gas consumption from each boiler. At the end of each month, the permittee shall record the amount indicated by the integrator on the flow meter. The permittee shall calculate and record the heat input rate and amount of natural gas fired during each month and during each consecutive 12-month period. Records shall be available for inspection within ten days following each month. [Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]

SECTION 4. APPENDICES

CONTENTS

Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Common Conditions

SECTION 4. APPENDIX A
CITATION FORMATS

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

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

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

New Permit Numbers

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

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

PSD Permit Numbers

Example: Permit No. PSD-FL-317

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

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

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

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

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX B
GENERAL CONDITIONS

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

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

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

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

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

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

SECTION 4. APPENDIX B
GENERAL CONDITIONS

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 (not applicable);
 - b. Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
COMMON CONDITIONS

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

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 permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
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. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
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. This regulation does not impose a specific testing requirement. [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.]

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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

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test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

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

Sugar Cane Growers Cooperative of Florida
Airport Road, P.O. Box 666
Belle Glade, Florida 33430-0666

Draft Air Permit No. 0990026-008-AC
Glades Sugar House, Boilers 4 and 5
Addition of Natural Gas
Palm Beach County, Florida

PROJECT DESCRIPTION

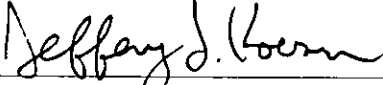
The applicant operates an existing sugar mill and boiling house where sugar cane is milled and processed. Steam requirements are furnished by six boilers that fire bagasse as the primary fuel. Each boiler also fires No. 6 fuel oil as a startup and supplementary fuel. The applicant proposes to modify the existing oil burners for Boiler 4 and 5 by installing a new diffuser and gas gun with supports to accommodate natural gas as a startup and supplementary fuel.

An analysis of applicable regulations indicates the following:

- NSPS Subpart Db does not apply because the project is not considered a "modification" or "reconstruction" as defined in the NSPS requirements.
- NESAHF Subpart DDDDD is not applicable because final "compliance dates" have not yet been established. Nevertheless, the project is not subject to this regulation because it is not a "reconstruction" as defined in the NESAHF requirements.
- The project will not result in any increases to the maximum fossil fuel heat input rate, so the project will not change the status of these units with respect to Rule 62-296.405, F.A.C. (fossil fuel fired steam generators > 250 MMBtu/hour heat input rate).
- A restriction on total natural gas firing allows the project to avoid PSD preconstruction review in accordance with Rule 62-212.400, F.A.C.

Therefore, the burner modification will be authorized in a minor source air construction permit that only regulates Boilers 4 and 5 for gas firing. The draft permit establishes a NOx emissions performance specification. Boiler 5 must be tested to demonstrate compliance with the NOx emissions performance specification. No testing is required for Boiler 4 because only one burner is being modified, which represents less than 20% of the total supplemental heat input rate. Subsequent tests may be required by the Department as "special compliance tests" in accordance with Rule 62-297.310(7)(b), F.A.C. All existing emissions standards specified in prior permits for Boilers 4 and 5 shall also apply when firing natural gas alone or in combination with other fuels.

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



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

7-12-04

(Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee <i>*Diana Lopez</i></p> <p>B. Received by (Printed Name) <input type="checkbox"/> Agent <i>SORCIA YASQUEZ</i></p> <p>C. Date of Delivery <input type="checkbox"/> Agent <i>7/26/04</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to: Jose F. Alvarez, Sr. Vice President - Planning Operations Sugar Cane Growers Cooperative of Florida Airport Road Post Office Box 666 Belle Glade, Florida 33430-0666</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>Article Number 7001 0320 0001 3692 6686 (Transfer from service label) 7001 0320 0001 3692 6686</p>	
<p>PS Form 3811, August 2001</p>	<p>Domestic Return Receipt 102595-02-M-1540</p>

U.S. Postal Service CERTIFIED MAIL RECEIPT <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
7001 0320 0001 3692 6686	
Postage \$	
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Postmark Here Sent To: Mr. Jose F. Alvarez, Sr. - Vice Presid. Street, Apt. No: Airport Road, Post Office Box 666 City, State, ZIP+4: Belle Glade, Florida 33430-0666	
PS Form 3800, January 2001	See Reverse for Instructions