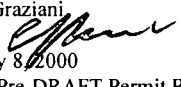


TO: Darrel Graziani
FROM: Ed Svec 
DATE: February 8, 2000
SUBJ: Title V Pre-DRAFT Permit Review
Osceola Farms Company
0990019-002-AV

Thank you for submitting your pre-DRAFT Title V permits. My comments on the pre-DRAFT are listed below:

1. Cover Letter

- a. Mr. Rionda is a "Vice" not "Vise" President.??

2. Section III. Subsection B.

- a. The applicable requirements cited in conditions B.21. and B.22. must be completely spelled out.

3. Section III. Subsection G.

- a. The applicable requirements cited in conditions G.16. and G.17. must be completely spelled out.

4. Section III. Subsection I.

- a. In the Emissions Unit Description, correct the typo "Avid" to "Acid".
- b. The applicable requirements cited in conditions I.16. and I.17. must be completely spelled out.

5. Section III. Subsection J.

- a. The applicable requirements cited in condition J.8. must be completely spelled out.

Thanks for allowing us the ability to provide comments. I must say that this is an overall excellent effort.

EJS/s

copy to: Scott Sheplak

PRE - DRAFT

Date

CERTIFIED MAIL #
RETURN RECEIPT REQUESTED

Mr. Carlos Rionda
Vice President/General Manager
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Re: Palm Beach County - AP
DRAFT Title V Permit No.: 0990019-002-AV
Osceola Farms Company
EMA - South Florida

Dear Mr. Rionda:

One copy of the DRAFT Title V Air Operation Permit for the Osceola Farms Company's Sugarcane Processing and Power Generation facilities, located at U.S. 98 and Hatton Highway, Pahokee, Palm Beach County, Florida, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" are also included.

Please note initial Title V Air Operation Permits shall be issued for a term of less than 5 (five) years but subsequent Title V Air Operation Permits shall be issued for a term of 5 (five) years.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" must be published as soon as possible upon receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to David M. Knowles, P.E., Air Program Administrator, at the above letterhead address. If you have any other questions, please contact Mara G. Nasca at 941/332-6975, Ext. 188.

Sincerely

Richard W. Cantrell
Director of
District Management

RWC/DG/jw
Enclosures

In the Matter of an
Application for Permit by:

Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

DRAFT Permit No.: 00990019-002-AV
Osceola Farms Company
Palm Beach County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

The Florida Department of Environmental Protection (permitting authority), gives notice of its intent to issue a Title V air operation permit (copy of DRAFT Permit enclosed) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Osceola Farms Company, applied on June 17, 1996, to the permitting authority for a Title V air operation permit for its Sugar Cane Processing and Power Generation facilities, located at U.S. 98 and Hatton Highway, Pahokee, Palm Beach County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code (FAC), Chapters 62-4, 62-210, and 62-213. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facilities.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, FAC.

Pursuant to Sections 403.815 and 403.087, FS, and Rules 62-110.106 and 62-210.350(3), FAC, you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. 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, FS, in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Permitting Authority's Office, South District Office, Florida Department of Environmental Protection, 2295 Victoria Avenue, Suite 264W, Ft. Myers, Florida 33902-2549 (Telephone No. 941-332-6975, Fax No. 941-332-6969) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-110.106, FAC.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the attached Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall process a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, FS. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: (850)488-9314, Fax (850) 487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), FS, must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), FS, however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, 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, FS, 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, FAC.

A petition must contain the following information:

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

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

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, FS. The relief provided by this state statute applies only to state rules, not statutes, and not to any city or federal regulatory requirements. 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 of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, FL 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), FS, 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 United States Environmental Protection Agency (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.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, FAC. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: United States Environmental Protection Agency, 401 M Street SW, Washington, D.C. 20460.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Richard W. Cantrell
Director of
District Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) and all copies were sent by certified mail before the close of business on _____ to the person(s) listed:

Mr. Carlos Rionda, Vice President/General Manager, Osceola Farms Company

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) were sent by U.S. mail or Internet E-mail on the same date to the person(s) listed or as otherwise noted:

Mr. David Buff, P.E., Golder & Associates Inc.

Elizabeth Bartlett, USEPA, Region 4 (INTERNET E-mail Memorandum)

Mr. Greg Worley, USEPA , Region IV (INTERNET E-mail memorandum)

Mr. James Stormer, Palm Beach County Health Department (Internet E-mail)

Clerk Stamp

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

(Clerk)

(Date)

RWC/DG/jw

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V DRAFT Permit No.: 00990019-002-AV

Osceola Farms Corporation

Palm Beach County

The Department of Environmental Protection (permitting authority), gives notice of its intent to issue a Title V Air Operation Permit to Osceola Farms Company for the operation of the Sugarcane Processing and Power Generation facilities, located at U.S. 98 and Hatton Highway, Pahokee, Palm Beach County, FL. The applicant's name and address are: Mr. Carlos Rionda, Vice President/General Manager, Osceola Farms Company, Post Office Box 679, Pahokee, FL 33476.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the permitting authority's office Florida Department of Environmental Protection, Post Office Box 2549, Fort Myers, Florida, 33902-2549. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (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 (Telephone: (850) 488-9314, Fax (850) 487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen 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 applicable 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 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address and telephone number of the petitioner; 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 petitioner's substantial rights will be affected by the agency determination;
- (c) A statement of how and when the petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so state;

- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;
- (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 permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

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:

Permitting Authority

Department of Environmental Protection
2295 Victoria Avenue, Suite 364W
Fort Myers, Florida 33902-2549
Telephone: 941-332-6975
Fax: 941-332-6969

Local Program

Palm Beach County Health Department
Post Office Box 29 (901 Evernia Street)
West Palm Beach, FL 33402-0029
Telephone: 561-355-3136
Fax: 561-355-2442

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Mara G. Nasca at the above address, or call 941/332-6975, ext. 188, for additional information.

OSCEOLA FARMS COMPANY

Facility ID No.: 0990019

Palm Beach County

Initial Title V Air Operation Permit

DRAFT Permit No.: 0990019-002-AV

Permitting Authority:

State of Florida Department of Environmental Protection

Post Office Box 2549

Fort Myers, Florida 33902-2549

Telephone: (941) 332-6975

Fax: (941) 332-6969

Drafted on

**Initial Title V Air Operation Permit
Draft Permit No.: 00990019-002-AV**

Table of Contents

Section	Page Number
Placard Page	1
I. Facility Information	6
A. Facility Description	6
B. Summary of Emissions Unit ID Nos. and Brief Descriptions.....	6
C. Relevant Documents.....	6
II. Facility-wide Conditions.....	8
III. Emissions Unit(s) and Conditions.....	13
A. Mill Boiler No. 2	13
B. Mill Boiler No. 3	18
C. Mill Boiler No. 4	23
D. Mill Boiler No. 5	28
E. Mill Boiler No. 6	33
F. Lime Storage Silo.....	39
G. Materials Handling and Storage Operations (Cogeneration Facility).....	41
H. Bagasse Handling System (Sugarcane Processing Facility).....	46
I. Cogeneration Boiler Nos. 1 and 2.....	48
J. Volatile Organic Liquid Storage Vessels.....	55
K. Common Conditions.....	57

Attachment	Description
Appendix A-1	Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix AC-001	Annual Certification Checklist
Appendix AMP-001	Ash Management Plan
Appendix FMP-001	Fuel Management Plan
Appendix FMTP-001	Fuel Management and Testing Plan
Appendix H-1	Permit History/ID Number Changes
Appendix OMP-001	Operation and Maintenance Plan for the Fly Ash Silo Baghouse
Appendix OMP-002	Operation and Maintenance Plan for the Mercury Control Agent Silo Baghouse(s)
Appendix OMP-003	Operation and Maintenance Plan for the Cogeneration Facility Boiler AQCSs
Appendix OMP-004	Operation and Maintenance Plan, Mill Boiler No. 3 – CO BACT
Appendix OMP-005	Operation and Maintenance Plan, Mill Boiler No. 6 – CO BACT
Appendix RBL-001	RACT, BACT and LAER Determinations
Appendix TDF-001	Tire Derived Fuel, Authority to Conduct Test Burns
Appendix SS-1	Stack Sampling Facilities
Appendix TV-3	Title V CONDITIONS (version dated 04/30/99)
Appendix U-1	List of Unregulated Emissions Units and/or Activities
Appendix Wood-001	Sugar Mill Boilers, Authority to Burn Wood Chip Fuel
Figure 1	Summary Report – Gaseous and Opacity Excess Emission and Monitoring System Performance
Table 1-1	Summary of Air Pollutant Standards and Terms
Table 2-1	Summary of Compliance Requirements

Permittee:

Osceola Farms Company
P.O. Box 679
Pahokee, Florida 33476

DRAFT Permit No.: 0990019-002-AV**Facility ID No.:** 00990019**SIC No.:** 2062 & 4911**Project:** Initial Title V Air Operation Permit

This permit is for the operation of the Osceola Farms Company's Sugarcane Processing (AIRS ID NO. 00990019) and Power Generation (AIRS ID NO. 00990332) facilities located at U.S. 98 and Hatton Highway, Pahokee, Palm Beach County, FL; UTM Coordinates: Zone 17, 544.200 km East and 2968.000 km North; Latitude: 26° 49' 45" North and Longitude: 80° 33' 00" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (FS), and Florida Administrative Code (F.A.C.), Chapters 62-4, 62-210, and 62-213.

The above named permittee is hereby authorized to perform the work or operate the facilities shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix SS-1, Stack Sampling Facilities

Appendix TV-3, Title V CONDITIONS (version dated 04/30/99)

Appendix OMP-001, Operation and Maintenance Plan for the Fly Ash Silo Baghouse

Appendix OMP-002, Operation and Maintenance Plan for the Mercury Control Agent Silo Baghouse(s)

Appendix OMP-003, Operation and Maintenance Plan for the Cogeneration Facility Boiler AQCSs

Appendix OMP-004, Operation and Maintenance Plan, Mill Boiler No. 3 – CO BACT

Appendix OMP-005, Operation and Maintenance Plan, Mill Boiler No. 6 – CO BACT

Appendix FMTP-001, Fuel Management and Testing Plan

Appendix FMP-001, Fuel Management Plan

Appendix AMP-001, Ash Management Plan

Appendix Wood-001, Sugar Mill Boilers, Authority to Burn Wood Chip Fuel

Appendix TDF-001, Tire Derived Fuel, Authority to Conduct Test Burns

Appendix AC-001, Annual Certification Checklist

Appendix RBL-001, RACT, BACT and LAER Determinations

Figure 1, Summary Report – Gaseous and Opacity Excess Emission and Monitoring System Performance

Effective Date:
Renewal Application Due Date:
Expiration Date:

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

DRAFT

Richard W. Cantrell
Director of
District Management

RWC/DG/jw

Section I. Facility Information.

Subsection A. Facility Description.

The source consists of the sugarcane processing (AIRS ID No. 0990019 – Osceola Farms Company) and the power generating (AIRS ID No.: 0990332 – Osceola Power L.P.) operations under the common control of the Osceola Farms Company. The facilities have been combined into a single major Title V Source in accordance with Rule 62-210.200(126), F.A.C. based on the location of the two facilities.

The Title V Source includes Steam Generating Units, Materials Handling and Storage Operations, and Volatile Organic Liquid Handling and Storage Operations associated with the processing of sugarcane and the cogeneration of power.

The Title V Source is classified as a modified-major source under the Prevention of Significant Deterioration (PSD) and New Source Review for Non-attainment Area (NSR-NAA) programs. The source includes existing, modified and new emissions units having undergone PSD review. The source is a major facility under the category “Fossil fuel fired boilers (or combinations thereof) totaling more than 250 million Btu/hr of heat input” as listed in Table 212.400-1, F.A.C. Facility-wide restrictions are addressed within Section II, Facility-wide Conditions

The Title V Source is classified as a major VOC and NO_x emitting Facility and subject to the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. for the existing boilers. The RACT requirements are addressed within Section III, Emissions Unit Conditions.

The Title V Source includes several emissions units subject to New Source Performance Standards (NSPS) including 40 CFR 60 Subparts A, Da, Db and Kb. The NSPS requirements are addressed within Section III, Emissions Unit Conditions.

The Title V Source does not include any emissions units subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP). The source has reported emissions of methanol and hydrogen chloride at levels greater than 10 tons per year and total HAP emissions of greater than 25 tons per year. Other HAPS, are listed as regulated based on a BACT determination under the PSD program.

Subsection B. Summary of Emission Unit ID Nos. and Brief Descriptions.

<u>EU ID No.</u>	<u>Status</u>	<u>Brief Description</u>
001	Shutdown	Mill Boiler No. 1
002	Regulated	Mill Boiler No. 2
003	Regulated	Mill Boiler No. 3
004	Regulated	Mill Boiler No. 4
005	Regulated	Mill Boiler No. 5
006	Regulated	Mill Boiler No. 6
007	Regulated	Lime Silo
008	Regulated	Materials Handling and Storage Operations (Cogeneration Facility)
009	Regulated	Bagasse Handling and Storage Operations (Sugarcane Processing Facility)
010	Regulated	Cogeneration Boiler No. 1
011	Regulated	Cogeneration Boiler No. 2
012	Regulated	Volatile Organic Liquid Storage Tanks (NSPS)

Note: Please reference the Permit No., Facility ID No., and appropriate Emission Unit ID No(s), on all correspondence, test report submittal, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit, however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History / ID Number Changes

These documents are on file with the permitting authority:

Title V Operating Permit

Initial Title V Permit Application received June 17, 1996

Mill Boiler No. 2

AO50-2049, Initial Air Operating Permit

AC50-2049A, Air Construction Permit for the Air Quality Control System (AQCS)

AO50-203679, Permit Amendments for Wood Firing, dated 2/16/94 & 5/24/95

AC50-2049A & AO50-203679, Permit Amendment for VOC/NOx RACT Requirements

Mill Boiler No. 3

AO50-2050, Initial Air Operating Permit

AC50-2051A, Air Construction Permit for the Air Quality Control System (AQCS)

AC50-144971 & PSD-FL-134, Air Construction Permits (Major Modification)

AC50-144971 & PSD-FL0134, Air Construction Permit Amendments

U.S. EPA NSPS Determination, Modification - 11/8/88

U.S. EPA NSPS Determination, Fuel Oil Use – 01/14/93

AC50-2051A & AO50-165813, Permit Amendment for VOC/NOx RACT Requirements

Mill Boiler No. 4

AO50-2051, Initial Air Operating Permit

AC50-2052A, Air Construction Permit for the Air Quality Control System (AQCS)

AO50-203680, Permit Amendments for Wood Firing, dated 2/16/94 & 5/24/95

AC50-2052A & AO50-203680, Permit Amendment for VOC/NOx RACT Requirements

Mill Boiler No. 5

AC50-4770, Initial Air Construction Permit

AO50-165626, Permit Amendments for Wood Firing, dated 2/16/94 & 5/24/95

Mill Boiler No. 6

AC50-43777, Initial Air Construction Permit

PSD-FL-080, Initial PSD Permit

AC50-112851, Modification Permit

U.S. EPA NSPS Determination, Modification - 11/8/88

AC50-144972 & PSD-FL-134, Air Construction Permits (Major Modification)

AO50-165814, Permit Amendments for Wood Firing, dated 2/16/94, 5/24/95, 7/26/94

Lime Storage Silo

AC50-0990019-001-AC, Initial Air Construction Permit

Materials Handling and Storage Operations (Cogeneration Facility)

AC50-219795 & PSD-FL-197, Initial Air Construction Permits

Bagasse Handling Operations (Sugarcane Processing Facility)

AC50-43777, Initial Air Construction Permit

PSD-FL-080, Initial PSD Permit

AC50-144972 & PSD-FL-134, Modification Permit

AO50-165814, -165626, -203680, -203679, Permit Amendments for Wood Firing

Cogeneration Facility Boilers

AC50-219795 & PSD-FL-197, Initial Air Construction Permits

AC50-269980 & PSD-FL-197A, Modification Permit

AC50-269980 & PSD-FL-197B-F, Permit Amendments

Section II. Facility-wide Conditions.

The following conditions apply Facility-wide.

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.

{Permitting Note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested, or otherwise appropriate.}

2. General Particulate Emission Limiting Standards: General Visible Emissions Standard.

- (a) No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as No. 1 on the Ringelmann Chart (20 percent opacity). [Rule 62-296.320(4)(b)1., F.A.C.]
- (b) If the presence of uncombined water is the only reason for failure to meet the visible emissions standards given in Rule 62-296.320(4)1, F.A.C., such failure shall not be a violation of the rule. [Rule 62-296.320(4)(b)3, F.A.C.]
- (c) All visible emissions test performed pursuant to the requirements of Rule 62-296.320(b)(4)1, F.A.C. shall use EPA Reference Method 9, and shall meet all applicable requirements of Chapter 62-297, F.A.C.. [Rule 62-296.320(4)(b)4, F.A.C.]

{Permitting Note: The general opacity standard applies in all cases except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit.}

3. Unregulated Emissions Units and/or Activities: Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

{Permitting note: Within the initial Title V permit application, the applicant grouped all exempt, insignificant, and unregulated emissions units and activities into a single-unregulated emissions unit.}

4. Excess Emissions Requirements:

- (a) Excess emissions resulting from startup, shutdown, or malfunction of any emission 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.]
- (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- (c) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust the maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700(5), F.A.C.]

- (d) In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C.. A full written report on the malfunctions shall be submitted to the Compliance Authority in a quarterly report, if requested by the Permitting or Compliance Authority. [Rule 62-210.700(6), F.A.C.]

{Permitting note: The permittee has requested authorization for periods of excess emissions greater than 2 hours in any 24-hour period for specific emissions units within the Initial Title V application. The procedures for approving the request in accordance with Rule 62-210.700(5), F.A.C. are identified in the common conditions of Section III of this permit.}

5. Prevention of Accidental Releases (Section 112(r) of CAA):

- (a) As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
- (b) As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
- (c) The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

6. Notifications and Reports: The permittee shall submit all compliance-related notifications and reports required by this permit to South District Office of the Department of Environmental Protection and the Palm Beach County Health Department at:

Department of Environmental Protection

South District Office
Post Office Box 2549
Fort Myers, Florida 33902-2549
Telephone: (941) 332-6975
Fax: (941) 332-6969

Palm Beach County Health Department

Air Pollution Control Section
Post Office Box 29
West Palm Beach, Florida 33402-0029
Telephone: (561) 355-3136
Fax: (561) 355-2442

7. U.S. Environmental Protection Agency, Report & Notifications: Any reports, data, notification, certifications, and requests required to be sent to the United States Environmental Protection Agency should be sent to:

United States Environmental Protection Agency
Region 4
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, GA 30303
Telephone: 404/562-9055
Fax: 404/562-9164

8. Air Emissions Bubble: Within Attachment OFC-FA-7 of the initial Title V application, the permittee notified the Permitting Authority of its intent to use an air emissions bubble to locate a temporary steam generator at the source. The permittee's intent would be to use the temporary steam generator during major malfunctions of the existing steam generators. The permittee shall submit a complete application and receive a permit in accordance with the requirements of Rule 62-212.710, F.A.C. prior to implementing any changes. [Rule 62-210.300(1) and 62-212.710, F.A.C.]

9. Alternate Sampling Procedures: Within Attachment OFC-EU1-I4 of the initial Title V application, the permittee requested an alternate sampling procedure (ASP) for determining compliance with the visible emissions limitation for Emissions Units 002, 003, 004, 005, and 006. Approval of the ASP for the proposed purpose is subject to approval by the Permitting Authority. The permittee shall submit a request for the ASP in accordance with the requirements of Rule 62-297.620, F.A.C. prior to implementing any changes in the testing procedures. [Rule 62-297.620, F.A.C.]

10. Title V Effective Date: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]

11. Annual Statement of Compliance: The permittee shall provide an annual statement of compliance to the Permitting Authority and Compliance Authority on or before March 1 each year covering the period for the previous calendar year. The permittee may use the checklist provided in Appendix AC-001. [40 CFR 70.6 & Rule 62-213.440, F.A.C.]

{Permitting Note: See Condition No. 51, Appendix TV-3, Title V Conditions}

12. Facility Wide Recordkeeping and Monitoring Requirements: The following facility wide recordkeeping and monitoring requirements apply [Rule 62-213.440(1)(b), F.A.C.]:

- (a) The permittee shall generate a daily operations report for each day that a regulated emissions unit operates. The daily operations report shall be formatted to address the various facility wide restrictions identified in Section II, Subsection A, Specific Condition No. 9.
- (b) The permittee shall monitor and record the hourly electrical power generation (1-hour block averages) from the cogeneration facility for each day of operation.
- (c) The permittee shall monitor and record the hourly steam production rates of the sugar mill boilers (24-hour block average, 8:00 a.m. to 8:00 a.m.) and the cogeneration facility boilers (24-hour average) for each day of operation.
- (d) The permittee shall monitor and record the fuel oil consumption rates for the sugar mill boilers on a daily basis for each day of operation.
- (e) The permittee shall monitor and record the type and quantities of fuels fired in each emissions unit for each day of operation.

13. Facility Wide Operating Restrictions

- A. The following multi-unit operating restrictions apply to Emissions Units 002, 003, 004, 005 and 006 (Sugar Mill Boilers):
 - (a) Total blended Bunker C fuel oil consumption shall not exceed 1,900 gallons per hour, an 24,000 gallons per day (maximum), or 7,500 gallons per day (season average) [AC50-144971 & AC50-144972].
 - (b) Total steam production shall not exceed 17,280,000 pounds per 24-hour period (Block Average, 8:00 a.m. to 8:00 a.m.) [AC50-144971 and AC50-144972].
 - (c) Each boiler shall be permanently shutdown and rendered incapable of operations by April 1, 2001 [AC50-144971, amended 06/10/98].
 - (d) The permittee is authorized to burn clean wood chip fuel. Appendix CWC-001 contains the restrictions on the fuel which shall not contain any paint, pentachlorophenol, creosote, tar, asphalt, wood preservative, tires, rubber, roofing materials, railroad cross ties, plastics, garbage, hazardous substances, hazardous wastes, or biomedical wastes. [AO50-20679, amended 5/25/94; AO50-203680, amended 5/24/94; AO50-165626, amended 5/24/94; and AO50-165814, amended 7/26/94]
 - (e) The permittee is authorized to operate the emissions units 160 days per year between October 1 and April 30. [AO50-20679, amended 5/25/94; AO50-203680, amended 5/24/94; AO50-165626, amended 5/24/94; and AO50-165814, amended 7/26/94]
- B. The following multi-unit operating restrictions apply to Emissions Unit 010 and 011 (Cogeneration Boilers) and the Cogeneration Facility:
 - (a) Electrical power generation from the cogeneration facility shall not exceed 74 (gross) megawatts on any 1-hour average. [AC50-269980 & PSD-FL-197A]
 - (b) Total heat input to Emissions Unit 010 and 011 shall not exceed 8.208×10^{12} Btu/year [AC50-269980 & PSD-FL-297A]
 - (c) Fuel oil fired in the emissions unit shall be "new" No. 2 fuel oil with a maximum sulfur content 0.05 percent sulfur by weight. [AC50-269980 & PSD-FL-297A]

- (d) Coal fired in the emissions units shall be low sulfur coal with a maximum sulfur content of 0.7 percent by weight and a maximum potential emission equivalent to 1.2 pounds of sulfur dioxide per million Btu. [AC50-269980 & PSD-FL-297A]
 - (e) Combined coal and fuel oil usage shall be less than 25 percent of the total heat input to the emissions units on a calendar quarter basis. The total amount of coal burned at the cogeneration Facility shall not exceed 18,221 tons per year (12-month rolling average). [AC50-269980 & PSD-FL-297A]
 - (f) During the commercial demonstration of the cogeneration facility, steam in excess of 570,000 pounds per hour (24-hour average) shall be sent to the sugarcane processing operations and steam production from emissions units 002, 003, 004, 005 and 006 reduced by an equivalent amount. [AC50-269980 & PSD-FL-297A]
 - (g) During the commercial demonstration of the cogeneration facility, only biomass and fuel oil (Low Sulfur No. 2) shall be fired in emissions units 10 and 11. [AC50-269980 & PSD-FL-297A]
- C. Simultaneous Operations: The existing Mill Boilers (Emissions Units 002, 003, 004, 005, and 006 per the Title V Permit) may be retained for standby operation until the interconnections (bagasse fuel and steam systems) between the cogeneration facility and the sugarcane processing facility are commercially and operationally reliable, but no later than April 1, 2000.

During the period from initial firing through April 1, 2000, both cogeneration boilers can be operated simultaneously with the existing boilers. Only biomass and No. 2 fuel oil may be used in the cogeneration boilers during this period. If more than 570,000 lb/hr (24-hour average) is generated in the cogeneration boilers, steam in excess of 570,000 lb/hr (24-hour average) must be sent to the Osceola sugarcane processing facility, and the existing sugar mill boilers' steam production reduced by an equivalent amount. After April 1, 2000, the cogeneration facility's boilers may be operated only when the sugarcane processing facility's mill boilers are shutdown or in the process of immediately shutting down. During operation, the existing sugar mill boilers must meet all requirements in the most recent construction and operation permits for the boilers. The existing boilers shall be shutdown and rendered incapable of operation when the interconnected operations are commercially and operationally reliable, but no later than April 1, 2001.

{Permitting note(s): "New oil" means oil that has been refined from crude oil and has not been used in any manner that may contaminate it. The construction permits authorized the simultaneous operation of the cogeneration facility boilers and the existing sugar mill boilers for the initial period (3-years) following startup. The initial three-year period ended January 1, 1999. The Permitting Authority has authorized an extension to the April 1, 2001 compliance date allowing continued operation of the existing sugar mill boilers. The extension period is being classified as the "Commercial Demonstration" of the project.}

Non-Federally Enforceable Facility Wide-Conditions.

1. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited: The permittee shall not 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.]

{Permitting note: An objectionable odor is defined as 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. [Rule 62-210.200, F.A.C.]

2. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions The permittee shall allow no person to store, pump, handle, process, load, unload, or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department in accordance with Rule 62-296.320(1)(a), F.A.C.

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-002	Mill Boiler No. 2

Emissions Unit(s) Details:

Mill Boiler No. 2, designated Emissions Unit 002, is an inclined grate boiler fired by bagasse, blended Bunker C fuel oil, and/or wood chips. Particulate matter emissions from the unit are controlled by use of two wet impingement scrubbers (Joy Turbulaire Type D-48). Each scrubber exhausts through a separate 90' stack.

{Permitting note(s): The unit is classified as an existing major facility under the PSD Program for particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). As a major source of VOC and NO_x, the unit is subject to the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. For this unit, the permittee has requested and received VOC and NO_x emission limits lower than the applicable regulation. The unit is classified as an existing facility under the New Source Performance Standards (40 CFR 60 Subpart Db) and under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

A.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Production: 140,000 pounds per hour (24-hour average) of steam at 350-psig and 575°F. [AC50-112851]
- (b) Maximum Heat Input: 280 mmBtu/hr (3-hour average). [Not Federally Enforceable; AO50-203679, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

A.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in increased short-term or long-term emissions, without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Generator Operation: The permittee is authorized to operate the emissions unit as a Carbonaceous Fuel Burner⁽¹⁾. [Not Federally Enforceable; AO50-203679, as amended]

- (b) Carbonaceous Fuels⁽¹⁾: The permittee is authorized to fire bagasse and clean wood chips (as authorized in Appendix Wood-001 of this permit) as the primary fuels. [Not Federally Enforceable; AO50-203679, as amended]
- (c) Fossil Fuels: The permittee is authorized to fire blended Bunker C fuel oil with a maximum sulfur content of 2.4 percent by weight. [AC50-112851]
- (d) Total Heat Input Rates: The permittee is authorized to operate the unit at 280 mmBtu/hr of total heat input. The total heat input includes the sum of the carbonaceous fuels and fossil fuels fired. The total heat input may include 100 percent bagasse firing, 100 percent clean wood chip firing, or any combination. The heat input from fossil fuel firing shall not exceed 82.5 mmBtu/hr of the total heat input during any 24-hour period. The annual average heat input from fuel oil shall not exceed 10 percent (3-year average, calendar year) nor 15 percent (1-year average, calendar year) of the total heat input. [Not Federally Enforceable; AO50-203679, as amended]

A.3. Hours of Operation⁽²⁾. The permittee shall not allow the commercial operation of the unit during the period May 1 through October 1, nor operate in excess of 160 days or 3,840 hours per season (7-month rolling total) without prior authorization from the Permitting Authority. [Not Federally Enforceable; AO50-203679, as amended]

{Permitting note(s): The following notes address the Operating Restrictions: (1) The Department has classified the unit as a Carbonaceous Fuel Burner under Rule 62-296.410, F.A.C. versus a Fossil-Fuel Fired Steam Generator under Rule 62-296.406, F.A.C. based on the definition of carbonaceous fuel fired equipment and the regulation which allows for the co-firing of fossil fuels. The annual limits on fuel oil heat input reflect the definition of "Oil Fired" contained in Rule 62-210.200, F.A.C. Operation of the unit with fossil fuels above the oil-fired levels would subject the unit to the requirements of Rule 62-296.406, F.A.C. (2) The crop season is seven (7) months and spans the calendar year. The 7-month rolling total ensures compliance with the authorized period of operation, which covers two calendar years.}

Emission Limitations and Standards.

A.4. Visible Emissions⁽¹⁾: The permittee shall not allow visible emissions that exceed 20 percent opacity except that 40 percent opacity is allowed for two minutes in any one hour [PSD-FL-134, AC50-144971]

A.5. Particulate Matter⁽²⁾: The permittee shall not allow particulate matter emissions greater than 0.20 pounds per million Btu (3-hour average) of heat input from carbonaceous fuels plus 0.10 pounds per million Btu (3-hour average) of heat input from fossil fuels. [Rule 62-296.410(1)(b)2., F.A.C., AC50-144971, as amended and AC50-144972, as amended]

A.6. Volatile Organic Compounds (VOC)⁽³⁾ - The permittee shall not allow VOC emissions greater than 5.0 pounds per million Btu (3-hour average) of total heat input. [Rule 62-296.570(4)(b)6, F.A.C.]

A.7. Nitrogen Oxides (NOx)⁽³⁾ The permittee shall not allow NOx emissions greater than 0.9 pounds per million Btu (3-hour average). [Rule 62-296.570(4)(b)6, F.A.C.]

A.8. VOC & NOx RACT Limits: The permittee has assumed more stringent VOC and NOx emissions limit than the RACT emissions limit established in Rule 62-296.570(4), F.A.C., for the applicable emissions unit category. Compliance with these VOC and NOx emissions limits shall be considered compliance with RACT for purposes of the rule. The specific VOC and NOx limits assumed by the permittee and the conditions on these limits include the following [Not Federally Enforceable; Rule 62-296.570(2), F.A.C. and AO50-203679, as amended]

- (a) Volatile Organic Compounds (VOCs): Emissions of VOC shall not exceed 1.5 pounds per million Btu (3-hour average) of total heat input.
- (b) Nitrogen Oxides (NO_x): Emissions of NO_x shall not exceed 0.45 pounds per million Btu (3-hour average) of total heat input.
- (c) VOC RACT Limit Revision: The VOC RACT limit of this condition shall be revised based on actual stack test results obtained during the 1998-1999 and 1999-2000 crop seasons if testing demonstrates VOC emissions in the range of 1.5 to 5.0 lb/mmBtu. During the testing period, VOC emissions greater than 1.5 lb/mmBtu but less than 5.0 lb/mmBtu shall not constitute a violation. Upon completion of the testing period, the Permitting Authority shall revise the limit upwards, but shall not exceed 5.0 lb/mmBtu, if required.

A.9. Fuel Oil Sulfur Content: The permittee shall not allow the firing of fuel oil with a sulfur content 2.4 percent by weight within the unit nor allow the sulfur content of any fuel purchased for the unit to exceed 2.4 percent by weight. [AC50-112851]

{Permitting note(s): The following notes address the Emission Limitations and Standards: ⁽¹⁾ The visible emissions limitation remains in effect until after the Permitting Authority acts upon the request for the Alternate Sampling Procedure. ⁽²⁾ The particulate matter emission limitations are set at 2 significant digits based on AO50-203679, as amended. ⁽³⁾ VOC and NO_x limits reflect the federally enforceable standards contained in the Rule.}

Test Methods and Procedures.

A.10. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C., [PSD-FL-134 and AC50-144971, as amended]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

A.11. Particulate Matter: All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5, described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [Rule 62-296.410(3)(b), F.A.C.]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

A.12. Volatile Organic Compounds: All volatile organic compound tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 25, or 25A, , Rule 62-297.401(25) and (25)(a), F.A.C., modified to incorporate a dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. If EPA Method 25A is employed, EPA

Reference Method 18, Rule 62-297.401(18), F.A.C. may be used to quantify and subtract the methane fraction in the exhaust gases. Methods 25, 25A and 18 are described in 40 CFR 60, Appendix A. [Rule 62-297.401, F.A.C. and AO50-203679, as amended]

A.13. Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 7, or 7E, Rules 62-297.401(7) and (7)(e), F.A.C. Methods 7 and 7E are described in 40 CFR 60, Appendix A. [Rule 62-297.401, F.A.C. and AO50-203679, as amended]

A.14. Fuel Oil Sulfur Content: All fuel oil sulfur content tests performed pursuant to the requirements of this permit shall be determined using ASTM D129-91, ASTM D2662-94, or ASTM D4294-90, Rule 62-297.440(1)(h), (1)(i), or (1)(j), F.A.C. Copies of the documents are available from ASTM. [Rule 62-297.401, F.A.C. and AO50-203679, as amended]

A.15 Waiver of Compliance Test Requirements: For fuel oil sulfur content, the Compliance Authority may waive the compliance test requirement, unless a Special Compliance test is required under Rule 62-297.310(7)(b), F.A.C., provided the permittee complies with the requirements of condition **A.17(e)** of this permit and submits copies of the fuel purchase records with the annual compliance test report. [Rule 62-297.310(7)(c), F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

A.16. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C. and AO50-203679, as amended]:

- (a) Visible Emissions;
- (b) Particulate Matter;
- (c) Volatile Organic Compounds;
- (d) Nitrogen Oxides; and
- (e) Fuel Oil Sulfur Content.

A.17. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **A.1**, **A.2**, and **A.3** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Steam Production:** The permittee shall install and continuously monitor steam production (lb/hr), recording the maximum production (3-hour average) and daily production (24-hour block average) during each day of operation. Permittee shall record and log steam production (totalizer), temperature and pressure at least once during each hour of operation. All instrumentation shall be properly maintained and functional at all times.
- (b) **Maximum Heat Input:** The permittee shall use the steam production data required under condition **A.17(a)** of this permit to determine the heat input rate on an hourly basis. The permittee shall assume a Thermal Efficiency Rating of 55% for the unit. The permittee shall determine and log the total maximum heat input rate (3-hour average) during each day of operation.
- (c) **Fuel Types:** The permittee shall monitor the types of fuel fired in the emissions unit during each day of operation recording the heat input percentage for each fuel.

- (d) Fuel Oil Usage: The permittee shall monitor fuel oil consumed in the emissions unit during each day of operation recording the maximum hourly rate (24-hour block average) and daily rate (midnight to midnight). All instrumentation shall be properly maintained and functional at all times.
- (e) Fuel Oil Sulfur Content: The permittee shall perform fuel oil sampling each day the emissions unit fires fuel oil analyzing the sample for sulfur content and recording the results of the analysis. In lieu of daily sampling, the permittee may determine compliance with the sulfur content limitation based on a certification from the fuel supplier. The certification must include the following:
 - (a) Fuel Oil Supplier: Name, address and phone number;
 - (b) Fuel Oil Lot Number: Lot number for delivery;
 - (c) Fuel Oil Sulfur Content: Sulfur content and method of analysis;
 - (d) Fuel Oil Density: Density and method used of analysis; and
 - (e) Fuel Oil Heat Content: Heat and method of analysis.
- (f) Hours of Operation: The permittee shall log the hours of operation for each day of operation.

A.18. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **A.4** and **A.5** of this permit [Rule 62-213.440(1)(b), F.A.C.]:

- (a) Total Pressure Drop: The permittee shall monitor and record the total pressure drop across the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 5 – 10 inches of H₂O*). All instrumentation shall be properly maintained and functional at all times.
- (b) Scrubber Water Pressure: The permittee shall monitor and record the scrubber water inlet pressure to the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 40-60 psig*). All instrumentation shall be properly maintained and functional at all times.
- (c) Scrubber Water Flow: The permittee shall visually monitor and note feed water flow at the scrubber outlet a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 300 gpm, minimum*).
- (d) Scrubber Water Quality: The permittee shall sample and analyze the feed water to the scrubber for pH (*Design Criteria: 6.6-8.6*), total solids and undissolved solids a minimum of once per month during the crop season (October 1 – April 30).

A.19. Emissions Unit Performance: The permittee shall monitor and record the oxygen content of the furnace exhaust gases prior to the scrubber hourly during each day of operation to ensure compliance with conditions **A.6**, **A.7**, and **A.8** of this permit. The oxygen monitor shall be installed, operated, and maintained in accordance with the manufacturer's recommendations and properly maintained and functional at all times. [Rule 62-213.440(1)(b), F.A.C.]

New Source Performance Standards.

{Permitting note(s): The emissions unit is classified as an existing unit under 40 CFR 60 Subpart Db. The following conditions address reconstruction and modification requirements for informational purposes.}

A.20 Modification: Upon modification, the emissions unit shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

A.21 Emission Rate Increases: When a determination of an emission rate increase is required and it is to be based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 Appendix C shall be used to determine whether an increase in emission rate has occurred. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

A.22 Reconstruction: Upon reconstruction, the emissions unit shall become an affected facility, irrespective of any change in emission rate. [40 CFR 60.15 and Rule 62-204.800(7)(d), F.A.C.]

Common Conditions.

A.23. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in Subsection **K. Common Conditions.**

Subsection B. This section addresses the following emissions unit(s).

<u>E.U. ID</u> <u>No.</u>	<u>Brief Description</u>
-003	Mill Boiler No. 3

Emissions Unit(s) Details.

Mill Boiler No. 3, designated Emissions Unit 003, is an inclined grate boiler fired by bagasse. Particulate matter emissions from the unit are controlled by use a single wet impingement scrubbers (Joy Turbulaire Type Size 90). The scrubber is vented through a single 90' stack.

{Permitting note(s): The unit is classified as a modified major facility under the PSD Program for particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). As a modified major source of VOC and NO_x, the unit is not subject to the Reasonably Available Control Technology (RACT) emission limiting standards of Rule 62-296.570, F.A.C. The unit is subject to the federally enforceable Best Available Control Technology and Lowest Achievable Emission Rate emission limiting standards for NO_x and VOC, respectively. The unit is classified as a modified facility under the New Source Performance Standards (40 CFR 60 Subpart Db) and as an existing unit under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

B.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Production: 150,000 pounds per hour (1-hour average) of steam at 350-psig and 550°F. [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) Maximum Heat Input: 292 mmBtu/hr (1-hour average) based on the boiler thermal efficiency. [PSD-FL-134, as amended and AC50-144971, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

B.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the methods of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Generator Operation: The permittee is authorized to operate the emissions unit as a Carbonaceous Fuel Burner. [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) Carbonaceous Fuels: The permittee is authorized to fire bagasse and clean wood⁽¹⁾ chips (as authorized in Appendix Wood-001 of this permit) as the primary fuels. [PSD-FL-134, as amended and AC50-144971, as amended]

- (c) Fossil Fuels⁽¹⁾: The permittee is not authorized to fire fuel oil or blended Bunker C fuel oil. [PSD-FL-134, as amended and AC50-144971, as amended]
- (d) Total Heat Input Rates: The permittee is authorized to operate the unit at 292 mmBtu/hr of total heat input. The total heat input includes the sum of the carbonaceous fuels. [PSD-FL-134, as amended and AC50-144971, as amended]

B.3. Hours of Operation⁽²⁾: The permittee shall not allow the commercial operation of the unit during the period May 1 through October 1, nor operate in excess of 160 days or 3,840 hours per season (7-month rolling total) without prior authorization from the Permitting Authority. [PSD-FL-134, as amended and AC50-144971, as amended]

{Permitting note(s): The following notes address the Operating Restrictions: ⁽¹⁾ The permittee has received permit amendments from the Department authorizing the firing of wood and blended fuel oil. The firing of wood will require compliance with the particulate matter emission limiting standard (0.1 lb/mmBtu) of 40 CFR 60, Subpart Db. For fuel oil firing, the permit amendment reflected a "relaxation of a federally enforceable permit condition" contained in Permit Nos. PSD-FL-134 and AC50-144971. The relaxation of the federally enforceable permit conditions required a "Modification" and not a permit amendment as was requested and received by the permittee. ⁽²⁾ The crop season is seven (7) months and spans the calendar year. The 7-month rolling total ensures compliance with the authorized period of operation, which covers two calendar years.}

Emission Limitations and Standards.

B.4. Visible Emissions: The permittee shall not allow visible emissions that exceed 20 percent opacity except that 40 percent opacity is allowed for two minutes in any one hour [PSD-FL-134, as amended and AC50-144971, as amended]

B.5. Particulate Matter: The permittee shall not allow particulate matter emissions greater than 58.4 pounds per hour (3-hour average), 112 tons per season (7-month rolling total), or 0.20 pounds per million Btu (3-hour average) of total heat input. [PSD-FL-134, as amended and AC50-144971, as amended]

B.6. Volatile Organic Compounds (VOC): The permittee shall not allow VOC emissions greater than 71.0 pounds per hour (3-hour average), 136 tons per season (7-month rolling total), or 0.25 pounds per million Btu (3-hour average) of total heat input. [PSD-FL-134, as amended and AC50-144971, as amended]

B.7. Nitrogen Oxides (NO_x): The permittee shall not allow NO_x emissions greater than 64.6 pounds per hour (3-hour average), 96 tons per season (7-month rolling total), or 0.16 pounds per million Btu (3-hour average) of total heat input. [PSD-FL-134, as amended and AC50-144971, as amended]

B.8. Carbon Monoxide (CO): The permittee shall not allow CO emissions greater than 1022 pounds per hour (3-hour average), 1962 tons per season (7-month rolling total), or 3.5 pounds per million Btu (3-hour average) of total heat input. [PSD-FL-134, as amended and AC50-144971, as amended]

B.9. Sulfur Dioxide (SO₂): The permittee shall not allow SO₂ emissions greater than 244 pounds per hour (3-hour average), 78 tons per season (7-month rolling total), or 0.24 pounds per million Btu of heat input (3-hour average). [PSD-FL-134, as amended and AC50-144971, as amended 1]

Test Methods and Procedures.

B.10. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C., [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

B.11. Particulate Matter: All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5, described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

B.12. Volatile Organic Compounds: All volatile organic compound tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Method 25, Rule 62-297.401(25), F.A.C., modified to incorporate a dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. Method 25 is described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144971, as amended]

B.13. Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 7 and 7A, Rules 62-297.401(7) and (7)(a), F.A.C. Methods 7 and 7A are described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144971, as amended]

B.14. Carbon Monoxide: All carbon monoxide tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Method 10, Rule 62-297.401(10), F.A.C. Method 10 is described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144971, as amended]

B.15. Sulfur Dioxide: All sulfur dioxide tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 6, 6A, or 6B, Rules 62-297.401(6), (6)(a), and (6)(b), F.A.C. Methods 6, 6A, and 6B are described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144971, as amended]

Compliance Demonstrations and Periodic Monitoring.

B.16. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C., PSD-FL-134, as amended and AC50-144971, as amended]:

- (a) Visible Emissions;
- (b) Particulate Matter;
- (c) Carbon Monoxide;
- (d) Volatile Organic Compounds;

- (e) Nitrogen Oxides; and
- (f) Sulfur Dioxide.

B.17 Thermal Efficiency Testing: The permittee shall, as a minimum, conduct thermal efficiency testing using the ASME short-form procedure prior to renewing the operation permit (every 5 years) and a copy of the test report must be included with the application for renewal of the operation permit. [PSD-FL-134, as amended and AC50-144971, as amended]

B.18. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **B.1**, **B.2**, **B.3** and **B.9**. of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Steam Production:** The permittee shall monitor steam production (lb/hr) recording the maximum production (1-hour average) and daily production (24-hour block, 8:00 AM to 8:00 P.M.) during each day of operation. The permittee shall also log steam pressures and temperatures each hour during operation. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) **Maximum Heat Input:** The permittee shall use the steam production data required under condition **B.18(a)** of this permit to determine the heat input rate on an hourly basis. The permittee shall assume a Thermal Efficiency Rating of 55% for the unit. The permittee shall determine and log the total maximum heat input rate (1-hour average) during each day of operation.
- (c) **Fuel Types:** The permittee shall monitor the types of fuel fired in the emissions unit during each day of operation recording the amounts and capacity factors of each fuel.
- (d) **Hours of Operation:** The permittee shall log the hours of operation for each day of operation.

B.19. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **B.4** and **B.5** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Total Pressure Drop:** The permittee shall monitor and record the total pressure drop across the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 7-10 inches of H₂O*). During compliance testing, the permittee shall monitor and record the total pressure drop every 15 minutes, or at the permittee's option, continuously monitored during particulate matter and sulfur dioxide testing. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144971, as amended]
- (b) **Scrubber Water Pressure:** The permittee shall monitor and record the feed water inlet pressure to the scrubber at the nozzles a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 30-60 psig*). During compliance testing, the permittee shall monitor and record the feed water pressure every 15 minutes, or at the permittee's option, continuously monitored during particulate matter and sulfur dioxide testing. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144971, as amended]
- (c) **Scrubber Water Flow:** The permittee shall monitor and record the feed water flow rate through the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 300 gpm, minimum*). During compliance testing, the permittee shall monitor and record the feed water flow rate every 15 minutes, or at the permittee's option,

continuously monitored during particulate matter and sulfur dioxide testing. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144971, as amended]

- (d) Scrubber Water Quality: The permittee shall sample, analyze and record the scrubber water pH (*Design Criteria: 6.6-8.6*) at the inlet and outlet at minimum of once per day during each day of operation [PSD-FL-134, as amended and AC50-144971, as amended]. In addition, the permittee shall sample and analyze the scrubber feed water for total solids and undissolved solids a minimum of once per month during the crop season (October 1 – April 30).
- (e) Scrubber Nozzles: The permittee shall equip and maintain the scrubber with “quick-release” type nozzles. The permittee shall visually inspect the nozzles a minimum of once per day checking for pluggage and water flow. The permittee shall record the results of all inspections and replace any plugged or defective nozzles within 24 hours of detection. The record shall include as a minimum the condition (plugged, cleaned, replaced, time of inspection, etc.) of the nozzle and location (I.D. No.). [PSD-FL-134, as amended and AC50-144971, as amended]
- (f) Operating Restrictions: The permittee shall not operate the emissions unit when the pressure drop across the scrubber is less than 7 inches of water, the feed water pressure to the scrubber is less than 30 psig and the feed water flow rate through the scrubber is less than 300 gallons per minute. [PSD-FL-134, as amended and AC50-144971, as amended]

B.20. Emissions Unit Performance: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **B.6**, **B.7**, and **B.8** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Exhaust Gas Oxygen Monitor: The permittee shall monitor and record the oxygen content of the exhaust gases prior to the scrubber at least hourly during each day of operation. The oxygen monitor shall be installed, operated, and maintained in accordance with the manufacturer’s recommendations and properly maintained and functional at all times.
- (b) Operation and Maintenance Plan: The permittee shall operate and maintain the emissions unit in accordance with Appendix OMP-004. [PSD-FL-134, as amended and AC50-144971, as amended]

New Source Performance Standards (NSPS).

{Permitting note: The proposed firing of wood will subject Boiler 3 to the requirements of 40 CFR 60 Subpart A-General Provisions and 40 CFR 60 Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. The NSPS include notifications, emission limitations, and testing requirements.}

B.21. 40 CFR 60 Subpart A, General Provisions: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A contained in Appendix NSPS-A prior to firing wood. Specifically:

- (a) 40 CFR 60.7, Notification and Recordkeeping,
- (b) 40 CFR 60.8, Performance Tests,
- (c) 40 CFR 60.11, Compliance with Standards and Maintenance Requirements,
- (d) 40 CFR 60.12 Circumvention,
- (e) 40 CFR 60.13, Monitoring Requirements

- (f) 40 CFR 60.14, Modification, and
- (g) 40 CFR 60.19 General Notification and Reporting Requirements

[40 CFR 60.1, Rule 62-204.800(7)(a), F.A.C.]

B.22 40 CFR 60 Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart Db contained in Appendix NSPS-Db within 60 days of firing wood. Specifically:

- (a) 40 CFR 60.43b(c), (f), & (g), Standard for Particulate Matter,
- (b) 40 CFR 60.46b(a), (b), (d), and (g), Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides,
- (c) 40 CFR 60.48b(a), (c), and (e)(1), Emissions Monitoring for Particulate Matter and Nitrogen Oxides, and
- (d) 40 CFR 60.49b(a), (b), (d), (f), (h)(1), (h)(3), (o), and (p), Reporting and Recordkeeping Requirements.

[40 CFR 60.40b(a), Rule 62-204.800(7)(b), F.A.C.]

B.23. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in Subsection **K. Common Conditions.**

Subsection C. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-004	Mill Boiler No. 4

Emissions Unit(s) Details.

Mill Boiler No. 4, designated Emissions Unit 004, is a horseshoe boiler fired by bagasse, blended Bunker C fuel oil, and/or wood chips. Particulate matter emissions from the unit are controlled by use of two wet impingement scrubbers (Joy Turbulaire Type D-48). The scrubbers exhaust through a common 90' stack.

{Permitting note(s): The unit is classified as an existing major facility under the PSD Program for particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). As a major source of VOC and NO_x, the unit is subject to the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. For this unit, the permittee has requested and received VOC and NO_x emission limits lower than the applicable regulation. The unit is also classified as an existing facility under the New Source Performance Standards (40 CFR 60 Subpart Db) and Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

C.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Production: 140,000 pounds per hour (24-hour average) of steam. [AC50-112851]
- (b) Maximum Heat Input: 280 mmBtu/hr (3-hour average). [Not Federally Enforceable; AO50-203680, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

C.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the methods of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Generator Operation: The permittee is authorized to operate the emissions unit as a Carbonaceous Fuel Burner⁽¹⁾. [Not Federally Enforceable; AO50-203680, as amended]
- (b) Carbonaceous Fuels⁽¹⁾: The permittee is authorized to fire bagasse and clean wood chips as the primary fuels. [Not Federally Enforceable; AO50-203680, as amended]
- (c) Fossil Fuels: The permittee is authorized to fire blended Bunker C fuel oil with a maximum sulfur content of 2.4 percent by weight. [AC50-112851].

- (d) Total Heat Input Rates: The permittee is authorized to operate the unit at 280 mmBtu/hr of total heat input. The total heat input includes the sum of the carbonaceous fuels and fossil fuels fired. The total heat input may include 100 percent bagasse firing, 100 percent clean wood chip firing, or any combination. The heat input from fossil fuel firing shall not exceed 82.5 mmBtu/hr of the total heat input during any 24-hour period. The annual average heat input shall not exceed 10 percent (3-year average, calendar year) nor 15 percent (1-year average, calendar year) of the total heat input. [Not Federally Enforceable; AO50-203680, as amended]

C.3. Hours of Operation⁽²⁾: The permittee shall not allow the commercial operation of the unit during the period May 1 through October 1, nor operate in excess of 160 days or 3,840 hours per season (7-month rolling total) without prior authorization from the Permitting Authority. [Not Federally Enforceable; AO50-203680, as amended]

{Permitting note(s): The following notes address the Operating Restrictions: ⁽¹⁾ The Department has classified the unit as a Carbonaceous Fuel Burner under Rule 62-296.410, F.A.C. versus a Fossil-Fuel Fired Steam Generator under Rule 62-296.406, F.A.C. based on the definition of carbonaceous fuel fired equipment and the regulation which allows for the co-firing of fossil fuels. The annual limits on fuel oil heat input reflect the definition of "Oil Fired" contained in Rule 62-210.200, F.A.C. Operation of the unit with fossil fuels above the oil-fired levels would subject the unit to the requirements of Rule 62-296.406, F.A.C. ⁽²⁾ The crop season is seven (7) months and spans the calendar year. The 7-month rolling total ensures compliance with the authorized period of operation, which covers two calendar years.}

Emission Limitations and Standards.

C.4. Visible Emissions⁽¹⁾: The permittee shall not allow visible emissions that exceed 30 percent opacity except that 40 percent opacity is allowed for two minutes in any one hour [Rule 62-196.410(1)(b)1., F.A.C.]

C.5. Particulate Matter⁽²⁾: The permittee shall not allow particulate matter emissions of 0.30 pounds per million Btu (3-hour average) of heat input from carbonaceous fuel plus 0.10 pounds per million Btu (3-hour average) of heat input from fossil fuel. [Rule 62-196.410(1)(b)2., F.A.C. and AO50-203680, as amended]

C.6. Volatile Organic Compounds (VOC)⁽³⁾ - The permittee shall not allow VOC emissions greater than 5.0 pounds per million Btu (3-hour average) of total heat input. [Rule 62-296.570(4)(b)6, F.A.C.]

C.7. Nitrogen Oxides (NO_x)⁽³⁾ The permittee shall not allow NO_x emissions greater than 0.9 pounds per million Btu (3-hour average). [Rule 62-296.570(4)(b)6, F.A.C.]

C.8. VOC & NO_x RACT Limits: The permittee has assumed more stringent VOC and NO_x emissions limit than the RACT emissions limit established in Rule 62-296.570(4), F.A.C., for the applicable emissions unit category, compliance with these VOC and NO_x emissions limits shall be considered compliance with RACT for purposes of this rule. The specific VOC and NO_x limits assumed by the permittee and the conditions on these limits include the following [Not Federally Enforceable, Rule 62-296.570(2), F.A.C. and AO50-203680, as amended]

- (a) Volatile Organic Compounds (VOCs): Emissions of VOC shall not exceed 1.5 pounds per million Btu (3-hour average) of total heat input.
- (b) Nitrogen Oxides (NO_x): Emissions of NO_x shall not exceed 0.45 pounds per million Btu (3-hour average) of total heat input.

- (c) VOC RACT Limit Revision: The VOC RACT limit of this condition shall be revised based on actual stack test results obtained during the 1998-1999 and 1999-2000 crop seasons if testing demonstrates VOC emissions in the range of 1.5 to 5.0 lb/mmBtu. During the testing period, VOC emissions greater than 1.5 lb/mmBtu but less than 5.0 lb/mmBtu shall not constitute a violation. Upon completion of the testing period, the Permitting Authority shall revise the limit upwards, but shall not exceed 5.0 lb/mmBtu if required.

C.9. Fuel Oil Sulfur Content: The permittee shall not allow the firing of fuel oil with a sulfur content 2.4 percent by weight within the unit nor allow the sulfur content of any fuel purchased for the unit to exceed 2.4 percent by weight. [AC50-112851]

{Permitting note(s): The following notes address the Emission Limitations and Standards: ⁽¹⁾ The visible emissions limitation remains in effect until after the Permitting Authority acts upon the request for the Alternate Sampling Procedure. ⁽²⁾ The particulate matter emission limitations are set at 2 significant digits based on the AO50-203680, as amended. ⁽³⁾ VOC and NOx limits reflect the federally enforceable standards contained in the Rule.}

Test Methods and Procedures.

C.10. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be DEP Reference Method 9, Rule 62-297.401(9)(c), F.A.C., [Rule 62-296.410(3)(a), F.A.C.]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]
- (c) Opacity Compliance Tests: The DEP Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

C.11. Particulate Matter: All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5, described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [Rule 62-296.410(3)(b), F.A.C.]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

C.12. Volatile Organic Compounds: All volatile organic compound tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 25, or 25A, , Rule 62-297.401(25) and (25)(a), F.A.C., modified to incorporate a dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. If EPA Method 25A is employed, EPA Reference Method 18, , Rule 62-297.401(18), F.A.C. may be used to quantify and subtract the methane fraction in the exhaust gases. Methods 25, 25A and 18 are described in 40 CFR 60, Appendix A. [Rule 62-297.401, F.A.C. and AO50-203680, as amended]

C.13. Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 7, or 7E, Rules 62-297.401(7) and (7)(e), F.A.C. Methods 7 and 7E are described in 40 CFR 60, Appendix A. [62-297.401, F.A.C. and AO50-203680, as amended]

C.14. Fuel Oil Sulfur Content: All fuel oil sulfur content tests performed pursuant to the requirements of this permit shall be determined using ASTM D129-91, ASTM D2662-94, or ASTM D4294-90, Rule 62-297.440(1)(h), (1)(i), or (1)(j), F.A.C. Copies of the documents are available from ASTM. [Rule 62-297.401, F.A.C. and AO50-203680, as amended]

C.15 Waiver of Compliance Test Requirements: For fuel oil sulfur content, the Compliance Authority may waive the compliance test requirement, unless a Special Compliance test is required under Rule 62-297.310(7)(b), F.A.C., provided the permittee complies with the requirements of condition C.17(e) of this permit and submits copies of the fuel purchase records with the annual compliance test report. [Rule 62-297.310(7)(c), F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

C.16. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C. and AO50-203680, as amended]:

- (a) Visible Emissions;
- (b) Particulate Matter;
- (c) Volatile Organic Compounds;
- (d) Nitrogen Oxides; and
- (e) Sulfur Dioxide.

C.17. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions C.1, C.2, C.3 and C.9 of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Steam Production:** The permittee shall install and continuously monitor steam production (lb/hr) recording the maximum production (3-hour average) and daily production (24-hour block) during each day of operation. All instrumentation shall be properly maintained and functional at all times.
- (b) **Maximum Heat Input:** The permittee shall monitor the heat input rate based on the fuel oil and carbonaceous fuel flow monitors. The permittee may, in lieu of the flow monitors, use the Thermal Efficiency Rating of the emissions unit to determine total heat input. The permittee shall log the maximum heat input rate (3-hour average) for each fuel during each day of operation.
- (c) **Fuel Types:** The permittee shall monitor the types of fuel fired in the emissions unit during each day of operation recording the amounts of each fuel.
- (d) **Fuel Oil Usage:** The permittee shall monitor fuel oil consumed in the emissions unit during each day of operation recording the maximum hourly rate (24-hour block average) and daily rate (midnight to midnight). All instrumentation shall be properly maintained and functional at all times.
- (e) **Fuel Oil Sulfur Content:** The permittee shall perform fuel oil sampling each day the emissions unit fires fuel oil analyzing the sample for sulfur content and recording the results of the analysis. In lieu of daily sampling, the permittee may determine compliance with the

sulfur content limitation based on a certification from the fuel supplier. The certification must include the following:

- (i) Fuel Oil Supplier: Name, address and phone number;
- (ii) Fuel Oil Lot Number: Lot number for delivery;
- (iii) Fuel Oil Sulfur Content: Sulfur content and method of analysis;
- (iv) Fuel Oil Density: Density and method used of analysis; and
- (v) Fuel Oil Heat Content: Heat and method of analysis.

- (f) Hours of Operation: The permittee shall log the hours of operation for each day of operation.

C.18. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions C.4 and C.5 of this permit [Rule 62-213.440(1)(b), F.A.C.]:

- (a) Total Pressure Drop: The permittee shall monitor and record the total pressure drop across the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 5-10 inches of H₂O*). All instrumentation shall be properly maintained and functional at all times.
- (b) Scrubber Water Pressure: The permittee shall monitor and record the feed water inlet pressure to the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 40-60 psig*). All instrumentation shall be properly maintained and functional at all times.
- (c) Scrubber Water Flow: The permittee shall visually monitor and note feed water flow at the scrubber outlet a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 300 gpm*).
- (d) Scrubber Water Quality: The permittee shall sample and analyze the feed water to the scrubber for pH (*Design Criteria: 6.6-8.6*), total solids and undissolved solids a minimum of once per month during the crop season (October 1 – April 30).

C.19. Emissions Unit Performance: The permittee shall monitor and record the oxygen content of the exhaust gases prior to the scrubber at least hourly during each day of operation to ensure compliance with conditions C.6, C.7, and C.8 of this permit. The oxygen monitor shall be installed, operated, and maintained in accordance with the manufacturer's recommendations and properly maintained and functional at all times. [Rule 62-213.440(1)(b), F.A.C.]

New Source Performance Standards.

{Permitting note(s): The emissions unit is classified as an existing unit under 40 CFR 60 Subpart Db. The following conditions address reconstruction and modification requirements for informational purposes.}

C.20 Modification: Upon modification, the emissions unit shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

C.21 Emission Rate Increases: When a determination of an emission rate increase is required and it is to be based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 Appendix C shall be used to determine whether an increase in emission rate has occurred. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

C.22 Reconstruction: Upon reconstruction, the emissions unit shall become an affected facility, irrespective of any change in emission rate. [40 CFR 60.15 and Rule 62-204.800(7)(d), F.A.C.]

Common Conditions.

C.23. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection D. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-005	Mill Boiler No. 5

Emissions Unit Description.

Mill Boiler No. 5, designated Emissions Unit 005, is a horseshoe boiler fired by bagasse, No. 6 fuel oil, and/or wood chips. Particulate matter emissions from the unit are controlled by use of two wet impingement scrubbers (Joy Turbulaire Type D-40). Each scrubber exhausts to a separate 90' stack.

{Permitting note(s): The unit is classified as a *new major facility* under the PSD Program for particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). As a major source of VOC and NO_x, the unit is subject to the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. For this unit, the permittee has requested and received VOC and NO_x emission limits lower than the applicable regulation. The unit is classified as an existing facility under the New Source Performance Standards (40 CFR 60 Subpart Db) and as a new unit under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

D.1. Permitted Capacity⁽¹⁾. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Production: 165,000 pounds per hour (24-hour average) of steam. [AC50-112851]
- (b) Maximum Heat Input: 330 mmBtu/hr (3-hour average). [Not Federally Enforceable; AO50-165626, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

D.2. Methods of Operation. The permittee shall not allow, cause, suffer or permit any change in the method of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Steam Generator Operation: The permittee is authorized to operate the emissions unit as a Carbonaceous Fuel Burner⁽²⁾. [Not Federally Enforceable; AO50-165626, as amended]
- (b) Carbonaceous Fuels⁽²⁾: The permittee is authorized to fire bagasse and clean wood chips (as authorized in Appendix Wood-001 of this permit) as the primary fuels. [Not Federally Enforceable; AO50-165626, as amended]
- (c) Fossil Fuels: The permittee is authorized to fire blended Bunker C fuel oil with a maximum sulfur content of 2.4 percent by weight. [AC50-112851]

- (d) Total Heat Input Rates: The permittee is authorized to operate the unit at 330 mmBtu/hr of total heat input. The total heat input includes the sum of the carbonaceous fuels and fossil fuels fired. The total heat input may include 100 percent bagasse firing, 100 percent clean wood chip firing, or any combination. The heat input from fossil fuel firing shall not exceed 82.5 mmBtu/hr of the total heat input during any 24-hour period. The annual average heat input shall not exceed 10 percent (3-year average, calendar year) nor 15 percent (1-year average, calendar year) of the total heat input. [Not Federally Enforceable; AO50-165626, as amended]

D.3. Hours of Operation⁽³⁾: The permittee shall not allow the commercial operation of the unit during the period May 1 through October 1, nor operate in excess of 160 days or 3,840 hours per season (7-month rolling total) without prior authorization from the Permitting Authority. [Not Federally Enforceable; AO50-165626, as amended]

{Permitting note(s): The following notes address the Operating Restrictions: ⁽¹⁾ Construction Permit AC50-4770, issued May 26, 1978 authorized the construction of a bagasse and fuel oil fired carbonaceous fuel burner based on an application submitted on November 18, 1977. The unit authorized was rated for 125,000 pounds per hour of steam, a total heat input of 226.5 mmBtu/hr (222.7 mmBtu/hr – Bagasse & 3.8 mmBtu/hr – Fuel Oil). Since originally permitted the emissions unit has had reported increases in both steam production and heat input. ⁽²⁾ The Department has classified the unit as a Carbonaceous Fuel Burner under Rule 62-296.410, F.A.C. versus a Fossil-Fuel Fired Steam Generator under Rule 62-296.406, F.A.C. based on the definition of carbonaceous fuel fired equipment and the regulation which allows for the co-firing of fossil fuels. The annual limits on fuel oil heat input reflect the definition of “Oil Fired” contained in Rule 62-210.200, F.A.C. Operation of the unit with fossil fuels above the oil-fired levels would subject the unit to the requirements of Rule 62-296.406, F.A.C. ⁽³⁾ The crop season is seven (7) months and spans the calendar year. The 7-month rolling total ensures compliance with the authorized period of operation, which covers two calendar years.}

Emission Limitations and Standards.

D.4. Visible Emissions⁽¹⁾: The permittee shall allow visible emissions that exceed 30 percent opacity except that 40 percent opacity is allowed for two minutes in any one hour [Rule 62-196.410(2)(b)1., F.A.C.]

D.5. Particulate Matter⁽²⁾: The permittee shall not allow particulate matter emissions of 0.20 pounds per million Btu (3-hour average) of heat input from carbonaceous fuel plus 0.10 pounds per million Btu (3-hour average) of heat input from fossil fuel. [Rule 62-196.410(2)(b)2., F.A.C. and AO50-165626, as amended]

D.6. Volatile Organic Compounds (VOC)⁽³⁾ - The permittee shall not allow VOC emissions greater than 5.0 pounds per million Btu (3-hour average) of total heat input. [Rule 62-296.570(4)(b)6, F.A.C.]

D.7. Nitrogen Oxides (NO_x)⁽³⁾ The permittee shall not allow NO_x emissions greater than 0.9 pounds per million Btu (3-hour average). [Rule 62-296.570(4)(b)6, F.A.C.]

D.8. VOC & NO_x RACT Limits: The permittee has assumed more stringent VOC and NO_x emissions limit than the RACT emissions limit established in Rule 62-296.570(4), F.A.C., for the applicable emissions unit category, compliance with these VOC and NO_x emissions limits shall be considered compliance with RACT for purposes of this rule. The specific VOC and NO_x limits assumed by the permittee and the conditions on these limits include the following [Not Federally Enforceable, Rule 62-296.570(2), F.A.C. and AO50-165626, as amended]

- (a) Volatile Organic Compounds (VOCs): Emissions of VOC shall not exceed 1.5 pounds per million Btu (3-hour average) of total heat input.
- (b) Nitrogen Oxides (NOx): Emissions of NOx shall not exceed 0.45 pounds per million Btu (3-hour average) of total heat input.
- (c) VOC RACT Limit Revision: The VOC RACT limit of this condition shall be revised based on actual stack test results obtained during the 1998-1999 and 1999-2000 crop seasons if testing demonstrates VOC emissions in the range of 1.5 to 5.0 lb/mmBtu. During the testing period, VOC emissions greater than 1.5 lb/mmBtu but less than 5.0 lb/mmBtu shall not constitute a violation. Upon completion of the testing period, the Permitting Authority shall revise the limit upwards, but shall not exceed 5.0 lb/mmBtu if required.

D.9. Fuel Oil Sulfur Content: The permittee shall not allow the firing of fuel oil with a sulfur content 2.4 percent by weight within the unit nor allow the sulfur content of any fuel purchased for the unit to exceed 2.4 percent by weight. [AC50-112851]

{Permitting note(s): The following notes address the Emission Limitations and Standards: ⁽¹⁾ The visible emissions limitation remains in effect until after the Permitting Authority acts upon the request for the Alternate Sampling Procedure. ⁽²⁾ The particulate matter emission limitations are set at 2 significant digits based on AO50-165626, as amended. ⁽³⁾ VOC and NOx limits reflect the federally enforceable standards contained in the Rule.}

Test Methods and Procedures.

D.10. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be DEP Reference Method 9, Rule 62-297.401(9)(c), F.A.C., [Rule 62-296.410(3)(a), F.A.C.]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]
- (c) Opacity Compliance Tests: The DEP Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

D.11. Particulate Matter: All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5, described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [Rule 62-296.410(3)(b), F.A.C.]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

D.12. Volatile Organic Compounds: All volatile organic compound tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 25, or 25A, , Rule 62-297.401(25) and (25)(a), F.A.C., modified to incorporate a dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. If EPA Method 25A is employed, EPA

Reference Method 18, , Rule 62-297.401(18), F.A.C. may be used to quantify and subtract the methane fraction in the exhaust gases. Methods 25, 25A and 18 are described in 40 CFR 60, Appendix A. [AO50-165626, as amended]

D.13. Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 7, or 7E, Rules 62-297.401(7) and (7)(e), F.A.C. Methods 7 and 7E are described in 40 CFR 60, Appendix A. [AO50-165626, as amended]

D.14. Fuel Oil Sulfur Content: All fuel oil sulfur content tests performed pursuant to the requirements of this permit shall be determined using ASTM D129-91, ASTM D2662-94, or ASTM D4294-90 , Rule 62-297.440(1)(h), (1)(i), or (1)(j), F.A.C. Copies of the documents are available from ASTM. [Rule 62-297.401, F.A.C. and AO50-165626, as amended]

D.15. Waiver of Compliance Test Requirements: For fuel oil sulfur content, the Compliance Authority may waive the compliance test requirement, unless a Special Compliance test is required under Rule 62-297.310(7)(b), F.A.C., provided the permittee complies with the requirements of condition **D.17(e)** of this permit and submits copies of the fuel purchase records with the annual compliance test report. [Rule 62-297.310(7)(c), F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

D.16. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C. and AO50-165626, as amended]:

- (a) Visible Emissions;
- (b) Particulate Matter;
- (c) Volatile Organic Compounds;
- (d) Nitrogen Oxides; and
- (e) Fuel Oil Sulfur Content.

D.17. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **D.1**, **D.2**, **D.3** and **D.9** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Steam Production:** The permittee shall install and continuously monitor steam production (lb/hr) recording the maximum production (3-hour average) and daily production (24-hour block) during each day of operation. All instrumentation shall be properly maintained and functional at all times.
- (b) **Maximum Heat Input:** The permittee shall monitor the heat input rate based on the fuel oil and carbonaceous fuel flow monitors. The permittee may, in lieu of the flow monitors, use the Thermal Efficiency Rating of the emissions unit to determine total heat input. The permittee shall log the maximum heat input rate (3-hour average) for each fuel during each day of operation.
- (c) **Fuel Types:** The permittee shall monitor the types of fuel fired in the emissions unit during each day of operation recording the amounts of each fuel.
- (d) **Fuel Oil Usage:** The permittee shall monitor fuel oil consumed in the emissions unit during each day of operation recording the maximum hourly rate (24-hour block average) and daily

rate (midnight to midnight). All instrumentation shall be properly maintained and functional at all times.

- (f) Fuel Oil Sulfur Content: The permittee shall perform fuel oil sampling each day the emissions unit fires fuel oil analyzing the sample for sulfur content and recording the results of the analysis. In lieu of daily sampling, the permittee may determine compliance with the sulfur content limitation based on a certification from the fuel supplier. The certification must include the following:
- (i) Fuel Oil Supplier: Name, address and phone number;
 - (ii) Fuel Oil Lot Number: Lot number for delivery;
 - (iii) Fuel Oil Sulfur Content: Sulfur content and method of analysis;
 - (iv) Fuel Oil Density: Density and method used of analysis; and
 - (v) Fuel Oil Heat Content: Heat and method of analysis.
- (e) Hours of Operation: The permittee shall log the hours of operation for each day of operation.

D.18. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **D.4** and **D.5** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Total Pressure Drop: The permittee shall monitor and record the total pressure drop across the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 5-10 inches H₂O*). All instrumentation shall be properly maintained and functional at all times.
- (b) Scrubber Water Pressure: The permittee shall monitor and record the feed water inlet pressure to the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 40-60 psig*). All instrumentation shall be properly maintained and functional at all times.
- (c) Scrubber Water Flow: The permittee shall visually monitor and note feed water flow at the scrubber outlet a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 300 gpm minimum*).
- (d) Scrubber Water Quality: The permittee shall sample and analyze the feed water to the scrubber for pH (*Design Criteria: 6.6-8.6*), total solids and undissolved solids a minimum of once per month during the crop season (October 1 – April 30).

D.19. Emissions Unit Performance: The permittee shall monitor and record the oxygen content of the furnace exhaust gases prior to the scrubber hourly during each day of operation to ensure compliance with conditions **D.6**, **D.7**, and **D.8** of this permit. The oxygen monitor shall be installed, operated, and maintained in accordance with the manufacturer's recommendations and properly maintained and functional at all times. [Rule 62-213.440(1)(b), F.A.C]

New Source Performance Standards.

{Permitting note(s): The emissions unit is classified as an existing unit under 40 CFR 60 Subpart Db. The following conditions address reconstruction and modification requirements for informational purposes.}

D.20 Modification: Upon modification, the emissions unit shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

D.21 Emission Rate Increases: When a determination of an emission rate increase is required and it is to be based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 Appendix C shall be used to determine whether an increase in emission rate has occurred. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

D.22 Reconstruction: Upon reconstruction, the emissions unit shall become an affected facility, irrespective of any change in emission rate. [40 CFR 60.15 and Rule 62-204.800(7)(d), F.A.C.]

Common Conditions.

D.23. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20** contained in **Subsection K. Common Conditions**.

Subsection E. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-006	Mill Boiler No. 6

Emissions Unit(s) Details.

Mill Boiler No. 6, designated Emissions Unit 006, is a traveling grate boiler fired by bagasse, No. 6 fuel oil, and/or wood chips. Particulate matter emissions from the unit are controlled by use a single wet impingement scrubber (Joy Turbulaire Type Size 90). The scrubber exhausts through a single 90' stack.

{Permitting note(s): The unit is classified as a modified-new major facility under the PSD Program (PSD-FL-080 & PSD-FL-134) for particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO). As a modified-new major source of VOC and NO_x, the unit is not subject to the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. The unit is subject to the federally enforceable Best Available Control Technology and Lowest Achievable Emission Rate emission limiting standards for NO_x and VOC, respectively. The unit is classified as an existing facility under the New Source Performance Standards (40 CFR 60 Subpart Db) and as a new unit under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners.}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

E.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Steam Production: 195,000 pounds per hour (1-hour average) of steam at 350-psig and 575°F. [PSD-FL-134, as amended and AC50-144972, as amended]
- (b) Maximum Heat Input: 357 mmBtu/hr (1-hour average) based on thermal efficiency rating of the boiler. [PSD-FL-134, as amended and AC50-144972, as amended]
- (c) Fossil Fuel Heat Input: 75.4 mmBtu/hr (1-hour average). [PSD-FL-134, as amended and AC50-144972, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

E.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the methods of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Steam Generator Operation: The permittee is authorized to operate the emissions unit as a Carbonaceous Fuel Burner⁽¹⁾. [Not Federally Enforceable; AO50-165814, as amended]
- (b) Carbonaceous Fuels⁽¹⁾: The permittee is authorized to fire bagasse and clean wood chips as the primary fuels. [PSD-FL-134, as amended and AC50-144972, as amended]

- (c) Fossil Fuels: The permittee is authorized to fire blended Bunker C fuel oil. [PSD-FL-134, as amended and AC50-144972, as amended]
- (d) Total Heat Input Rates: The permittee is authorized to operate the unit at 357 mmBtu/hr of total heat input based on a set thermal efficiency of 55 percent. The total heat input includes the sum of the carbonaceous and fossil fuels. The total heat input may include 100 percent bagasse firing, 100 percent clean wood chip firing, or any combination. The heat input from fossil fuel firing shall not exceed 75.4 mmBtu/hr of the total heat input during any 1-hour period. The annual average fuel oil heat input shall not exceed 10 percent (3-year average, calendar year) nor 15 percent (1-year average, calendar year) of the total heat input. [Not Federally Enforceable; AO50-165814, as amended]

E.3. Hours of Operation⁽²⁾: The permittee shall not allow the commercial operation of the unit during the period May 1 through October 1, nor operate in excess of 160 days or 3,840 hours per season (7-month rolling total) without prior authorization from the Permitting Authority. [PSD-FL-134, as amended and AC50-144972, as amended]

{Permitting note(s): The following notes address the Operating Restrictions: ⁽¹⁾ The Department has classified the unit as a Carbonaceous Fuel Burner under Rule 62-296.410, F.A.C. versus a Fossil-Fuel Fired Steam Generator under Rule 62-296.406, F.A.C. based on the definition of carbonaceous fuel fired equipment and the regulation which allows for the co-firing of fossil fuels. The annual limits on fuel oil heat input reflect the definition of "Oil Fired" contained in Rule 62-210.200, F.A.C. Operation of the unit with fossil fuels above the oil-fired levels would subject the unit to the requirements of Rule 62-296.406, F.A.C. ⁽²⁾ The crop season is seven (7) months and spans the calendar year. The 7-month rolling total ensures compliance with the authorized period of operation, which covers two calendar years.}

Emission Limitations and Standards.

E.4. Visible Emissions: The permittee shall allow visible emissions that exceed 20 percent opacity except that 40 percent opacity is allowed for two minutes in any one hour.[PSD-FL-134, as amended and AC50-144972, as amended]

E.5. Particulate Matter: The permittee shall not allow particulate matter emissions greater than 58.4 pounds per hour (3-hour average) and 109 tons per season (7-month rolling total) nor allow emissions greater than 0.15 pounds per million Btu (3-hour average) of heat input from carbonaceous fuels or 0.10 lb/mmBtu of heat input from fossil fuels. In the event, that more than one fuel is fired concurrently the allowable particulate matter emissions shall be prorated from the allowable standards for each fuel by their respective heat inputs. [PSD-FL-134, as amended and AC50-144972, as amended]

E.6. Volatile Organic Compounds (VOC): The permittee shall not allow VOC emissions greater than 92.3 pounds per hour (3-hour average), 177 tons per season (7-month rolling total) or 0.25 pounds per million Btu (3-hour average) of total heat input from carbonaceous fuels nor 0.002 pounds per million Btu (3-hour average) from fossil fuels .[PSD-FL-134, as amended and AC50-144972, as amended]

E.7. Nitrogen Oxides (NO_x): The permittee shall not allow NO_x emissions greater than 78.6 pounds per hour (3-hour average), 122 tons per year (12-month rolling average) or 0.16 pounds per million Btu (3-hour average) of total heat input from carbonaceous fuels nor 0.4 pounds per million Btu (3-hour average) from fossil fuels.[PSD-FL-134, as amended and AC50-144972, as amended]

E.8. Carbon Monoxide (CO): The permittee shall not allow CO emissions greater than 2463.5 pounds per hour (3-hour average), 4730 tons per year (12-month rolling average) or 6.5 pounds per million Btu (3-hour average) of total heat input from carbonaceous fuels or 0.033 pounds per million Btu (3-hour average) from fossil fuels. [PSD-FL-134, as amended and AC50-144972, as amended]

E.9. Sulfur Dioxide (SO₂): The permittee shall not allow SO₂ emissions greater than 265 pounds per hour (3-hour average), 97 tons per year (12-month rolling average) or 0.24 pounds per million Btu (3-hour average) of total heat input from carbonaceous fuels or 2.35 pounds per million Btu (3-hour average) from fossil fuels. [PSD-FL-134, as amended and AC50-144972, as amended]

E.10. Fuel Oil Sulfur Content: The permittee shall replace the total quantity of fuel oil consumed by Emissions Unit 006 by the addition to the blended fuel oil tank an equal or greater amount of fuel oil during the season with a sulfur content not to exceed 1 percent. [PSD-FL-134, as amended and AC50-144972, as amended]

Test Methods and Procedures.

E.11. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C., [PSD-FL-134, as amended and AC50-144972, as amended]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]
- (d) Simultaneous Testing: The permittee shall determine particulate matter emissions and visible emissions concurrently. Under circumstances when this is not feasible, the permittee shall obtain prior approval from the Permitting Authority to conduct the tests at separate times. In such circumstances, the tests shall be conducted as close to each other as feasible. [PSD-FL-134, as amended and AC50-144972, as amended]

E.12. Particulate Matter: All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5, described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [PSD-FL-134, as amended and AC50-144972, as amended]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.410(3)(c), F.A.C.]

E.13. Volatile Organic Compounds: All volatile organic compound tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Method 25, Rule 62-297.401(25), F.A.C., modified to incorporate a dilution system as approved by the Department under the provisions of Rule 62-297.620, F.A.C. Method 25 is described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144972, as amended]

E.14. Nitrogen Oxides: All nitrogen oxides tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 7 or 7A, Rules 62-297.401(7) and (7)(a), F.A.C. Methods 7 and 7A are described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144972, as amended]

E.15. Carbon Monoxide: All carbon monoxide tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Method 10, Rule 62-297.401(10), F.A.C. Method 10 is described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144972, as amended]

E.16. Sulfur Dioxide: All sulfur dioxide tests performed pursuant to the requirements of this permit shall be determined using EPA Reference Methods 6, 6A, 6B, or 6C, Rule 62-297.401(6), (6)(a), (6)(b), and (6)(c), F.A.C. Methods 6, 6A, 6B, and 6C are described in 40 CFR 60, Appendix A. [PSD-FL-134, as amended and AC50-144972, as amended]

E.17. Fuel Oil Sulfur Content: All fuel oil sulfur content tests performed pursuant to the requirements of this permit shall be determined using ASTM D129-91, ASTM D2662-94, or ASTM D4294-90, Rule 62-297.440(1)(h), (1)(i), or (1)(j), F.A.C. Copies of the documents are available from ASTM. [Rule 62-297.401, F.A.C. and AO50-203679, as amended]

E.18 Waiver of Compliance Test Requirements: For fuel oil sulfur content, the Compliance Authority may waive the compliance test requirement, unless a Special Compliance test is required under Rule 62-297.310(7)(b), F.A.C., provided the permittee complies with the requirements of condition **E.17(e)** of this permit and submits copies of the fuel purchase records with the annual compliance test report. [Rule 62-297.310(7)(c), F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

E.19. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C., PSD-FL-134, as amended and AC50-144972, as amended]:

- (a) Visible Emissions;
- (b) Particulate Matter;
- (c) Carbon Monoxide;
- (d) Volatile Organic Compounds;
- (e) Nitrogen Oxides;
- (f) Fuel Oil Sulfur Content; and
- (g) Sulfur Dioxide.

E.20. Thermal Efficiency Testing: The permittee shall, as a minimum, conduct thermal efficiency testing using the ASME short-form procedure prior to renewing the operation permit (every 5 years) and a copy of the test report must be included with the application for renewal of the operation permit. [PSD-FL-134, as amended and AC50-144972, as amended]

E.21. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **E.1**, **E.2**, **E.3** and **E.9**. of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Steam Production: The permittee shall continuously monitor steam production (lb/hr), pressure (psig) and temperature (°F) recording each parameter (1-hour average) and the daily steam production (24-hour block, 8:00 AM to 8:00 P.M.) during each day of operation. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144972, as amended]
- (b) Maximum Heat Input: The permittee shall use the steam production data required under condition E.21(a) of this permit to determine the heat input rate on an hourly basis. The permittee shall assume a Thermal Efficiency Rating of 55% for the unit. The permittee shall determine and log the total maximum heat input rate (1-hour average) during each day of operation. [PSD-FL-134, as amended and AC50-144972, as amended]
- (c) Fuel Types: The permittee shall monitor the types of fuel fired in the emissions unit during each day of operation recording the amounts of each fuel.
- (d) Fuel Oil Usage: The permittee shall monitor fuel oil consumed in the emissions unit during each day of operation recording the maximum hourly rate (1-hour block average) and daily rate (midnight to midnight). All instrumentation shall be properly maintained and functional at all times.
- (e) Fuel Oil Sulfur Content: The permittee shall perform fuel oil sampling each day the emissions unit fires fuel oil analyzing the sample for sulfur content and recording the results of the analysis. In lieu of daily sampling, the permittee may determine compliance with the sulfur content limitation based on a certification from the fuel supplier. The certification must include the following:
 - (i) Fuel Oil Supplier: Name, address and phone number;
 - (ii) Fuel Oil Lot Number: Lot number for delivery;
 - (iii) Fuel Oil Sulfur Content: Sulfur content and method of analysis;
 - (iv) Fuel Oil Density: Density and method used of analysis; and
 - (v) Fuel Oil Heat Content: Heat and method of analysis.
- (e) Hours of Operation: The permittee shall log the hours operated for each day of operation.

E.22. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions E.4 and E.5 of this permit [Rule 62-213.440(1)(b), F.A.C.]:

- (a) Total Pressure Drop: The permittee shall monitor and record the total pressure drop across the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 7-10 inches of water*). During compliance testing, the permittee shall monitor and record the total pressure drop every 15 minutes, or at the permittee's option, continuously monitored during particulate matter and sulfur dioxide testing. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144972, as amended]
- (b) Scrubber Water Pressure: The permittee shall monitor and record the feed water inlet pressure to the scrubber at the nozzles a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 30-60 psig*). During compliance testing, the permittee shall monitor and record the feed water pressure every 15 minutes, or at the permittee's option, continuously monitored during particulate matter and sulfur dioxide testing. All

instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144972, as amended]

- (c) Scrubber Water Flow: The permittee shall monitor and record the feed water flow rate through the scrubber a minimum of once per 8-hour shift during each day of operation (*Design Criteria: 300 gpm minimum*). During compliance testing, the permittee shall monitor and record the feed water flow rate every 15 minutes, or at the permittee's option, continuously monitored during particulate matter and sulfur dioxide testing. All instrumentation shall be properly maintained and functional at all times. [PSD-FL-134, as amended and AC50-144972, as amended]
- (d) Scrubber Water Quality: The permittee shall sample, analyze and record the scrubber water pH (*Design Criteria: 6.6-6.8 pH*) at the inlet and outlet at minimum of once per day during each day of operation [PSD-FL-134, as amended and AC50-144972, as amended]. In addition, the permittee shall sample and analyze the scrubber feed water for total solids and undissolved solids a minimum of once per month during the crop season (October 1 – April 30).
- (e) Scrubber Nozzles: The permittee shall equip and maintain the scrubber with "quick-release" type nozzles. The permittee shall visually inspect the nozzles a minimum of once per day checking for pluggage and water flow. The permittee shall record the results of all inspections and replace any plugged or defective nozzles within 24 hours of detection. The record shall include as a minimum the condition (plugged, cleaned, replaced, time of inspection, etc.) of the nozzle and location (I.D. No.). [PSD-FL-134, as amended and AC50-144972, as amended]
- (f) Operating Restrictions: The permittee shall not operate the emissions unit when the pressure drop across the scrubber is less than 7 inches of water, the feed water pressure to the scrubber is less than 30 psig and the feed water flow rate through the scrubber is less than 300 gallons per minute. [PSD-FL-134, as amended and AC50-144972, as amended]

E.23. Emissions Unit Performance: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **E.6**, **E.7**, and **E.9** of this permit [Rule 62-213.440(1)(b), F.A.C.]:

- (a) Exhaust Gas Oxygen Monitor: The permittee shall monitor and record the oxygen content of the exhaust gases prior to the scrubber at least hourly during each day of operation. The oxygen monitor shall be installed, operated, and maintained in accordance with the manufacturer's recommendations and properly maintained and functional at all times.
- (b) Operation and Maintenance Plan: The permittee shall operate and maintain the emissions unit in accordance with Appendix OMP-005. [PSD-FL-134, as amended and AC50-144971, as amended]

New Source Performance Standards.

{Permitting note(s): The emissions unit is classified as an existing unit under 40 CFR 60 Subpart Db. The following conditions address reconstruction and modification requirements for informational purposes.}

E.24 Modification: Upon modification, the emissions unit shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

E.25 Emission Rate Increases: When a determination of an emission rate increase is required and it is

Page 42

to be based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 Appendix C shall be used to determine whether an increase in emission rate has occurred. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

E.26 Reconstruction: Upon reconstruction, the emissions unit shall become an affected facility, irrespective of any change in emission rate. [40 CFR 60.15 and Rule 62-204.800(7)(d), F.A.C.]

E.28. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection F. This section addresses the following emissions unit(s).

<u>E.U. ID</u> <u>No.</u>	<u>Brief Description</u>
-007	Lime Storage Silo

Emissions Unit(s) Details.

Lime storage silo, designated Emissions Unit 007, used to store and handle lime for use in the sugar manufacturing process. Particulate matter emissions associated with the pneumatic loading of the silo are controlled by a baghouse (Walton/Stout, Model 21 BV8). The baghouse exhausts through a single 50' stack.

{Permitting note(s): The silo is classified as a new minor emissions unit under the PSD Program. The unit is classified as a "Regulated Emissions Unit" because it is subject to a unit-specific federally enforceable visible emission limitation (5 percent).}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as "Not Federally Enforceable" have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

F.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Process Rate: 25 tons per hour of lime. [Not Federally Enforceable; 0990019-001-AC]
- (b) Annual Capacity: 5,000 tons per year (12-month rolling total) of lime. [Not Federally Enforceable; 0990019-001-AC]

F.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Unloading System: The permittee is authorized to pneumatically unload lime into the silo from trucks. [Not Federally Enforceable; 0990019-001-AC]
- (b) Air Quality Control System: The permittee has equip, maintain and operate the storage silo with a fabric filter (baghouse). [0990019-001-AC]

F.3. Hours of Operation: The permittee is authorized to operate the unit continuously. [Not Federally Enforceable; 0990019-001-AC]

Emission Limitations and Standards.

F.4. Visible Emissions: The permittee shall allow visible emissions that exceed 5 percent opacity (6-minute average). [0990019-001-AC]

F.5. Particulate Matter (PM & PM₁₀)⁽¹⁾: The permittee shall not allow particulate matter emissions greater than 26.41 pounds per hour (3-hour average) and 7.9 tons per year (12-month rolling total) without prior authorization⁽¹⁾ from the Permitting Authority. [Not Federally Enforceable; 0990019-001-AC, Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

{Permitting note(s): (1) The particulate matter (PM and PM₁₀) emission limits are based on the requested allowable levels presented in the permit application, which were based on the Process Weight Table. Within the application, a request for the Department to waive the particulate matter compliance test was made based on Rule 62-297.620(4), F.A.C. As drafted, the construction permit set only a federally enforceable visible emissions standard of 5 percent opacity which ensures compliance with the requested allowable emission levels. }

Test Methods and Procedures.

F.6. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C., [0990019-001-AC]
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [0990019-001-AC]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for a compliance test shall be thirty (30) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

F.7. Particulate Matter (PM & PM₁₀): All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, and 5 described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), F.A.C. [Rule 62-297.401, F.A.C.]
- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

F.8. Waiver of Compliance Test Requirements: For particulate matter (PM & PM₁₀), the Permitting Authority has waived the particulate matter compliance test requirements and specified an alternative standard of 5% opacity (Condition F.4). If the Department has reason to believe that the particulate weight emission standard of Condition F.5 is not being met, it shall require that compliance be demonstrated by the test methods specified in Condition F.7.

Compliance Demonstrations and Periodic Monitoring.

F.9. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for the emissions unit annually during each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, for the following pollutants [Rule 62-297.310(7), F.A.C]:

- (a) Visible Emissions.

F.10. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions F.1. and F.2. of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Unloading Rate: The permittee shall monitor and record the truck unloading rates including date, start/stop times and amount transferred.
- (b) Annual Throughput: The permittee shall maintain records (12-month rolling total) of the amount of lime transferred.

F.11. Air Quality Control System: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **F.4** and **F.5** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) **Visible Emissions:** The permittee shall visually observe the exhaust from the baghouse stack during the first 6 minutes of each unloading operation. If any visible emissions are observed, the unloading operation shall be shutdown and the baghouse inspected and repaired prior to any further transfers.

F.12. Common Conditions: This emissions unit is also subject to **Specific Conditions K1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection G. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-008	Material Handling and Storage Operations (Cogeneration Facility)

Emissions Unit(s) Details.

The materials handling and storage operations include the truck and railcar unloading operations, storage piles, transfer operations, conveyors, screens, crushers, hoppers and silos. The materials handled and stored include coal, biomass (bagasse and wood), ash (fly and bottom) and a mercury removal agent (Carbon). Unconfined particulate matter emissions from the operations are controlled through the use of reasonable precautions as specified in the specific conditions.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as “Not Federally Enforceable” have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

G.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Coal Handling: 68,625 tons per year (12-month rolling total) of bituminous coal. [Not Federally Enforceable]
- (b) Biomass Handling: 823,529 tons per year (12-month rolling total) of biomass fuels (bagasse and wood). [Not Federally Enforceable]
- (c) Fly Ash Handling: 26,353 tons per year (12-month rolling total) of removal agent (dry basis). [Not Federally Enforceable]
- (d) Mercury Removal Agent (Carbon): 26,353 tons per year (12-month rolling total) of fly ash (dry basis). [Not Federally Enforceable]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

G.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the methods of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following:[Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Coal Handling and Storage Operations⁽¹⁾: The permittee is authorized to handle and store bituminous coal. The following activities are associated with these operations:
 - Railcar & Truck Unloading
 - Conveyor (Railcar to Coal Pile);
 - Coal Storage Piles (Active & In-active)
 - Reclaim Hopper
 - Conveyor (Reclaim Hopper to Coal Crusher)

- Coal Crusher
 - Conveyor (Coal Crusher to Conveyor)
 - Conveyor (Conveyor to Boiler Silos)
- (b) Biomass Handling and Storage Operations: The permittee is authorized to handle and store biomass fuels. The following activities are associated with these operations:
- Truck Unloading (Dumps #1 and #2);
 - Chain Conveyors (#1 & #2);
 - Unloading Conveyor
 - Disk Screen
 - Hogger
 - Storage Conveyor
 - Radial Stacker
 - Biomass Storage Pile (Active & In-active)
 - Underpile Chain Reclaimers (#1 and #2)
 - Boiler Feed Conveyor
 - Boiler Feed Conveyor Hopper
 - Sugar Mill Bagasse Feed Conveyor
 - Sugar Mill Bagasse Conveyor Hopper
 - Chain Distribution Conveyors (#1 & #2)
 - Boiler #1 Meter Bins
 - Boiler # 2 Meter Bins
 - Recycle Conveyor
 - Fixed Recycle Stacker
- (c) Fly Ash Handling and Storage Operations: The permittee is authorized to handle and store fly ash. The following activities are associated with these operations:
- Boiler Bank Hoppers
 - Air Preheater Hoppers
 - Electrostatic Precipitator Hoppers
 - Enclosed Drag Chain Conveyors
 - Fly Ash Storage Silo (1,200 tons)
 - Fly Ash Pug-Mill Conditioners
 - Fly Ash Truck Loadout
- (d) Mercury Removal Agent Handling and Storage Operations: The permittee is authorized to handle and store a mercury removal agent (carbon). The following activities are associated with these operations:
- Pneumatic Truck Unloading System
 - Two Storage Silos
 - Injection System
- (e) Bottom Ash Handling and Storage Operations: The permittee is authorized to handle and store bottom ash. The following activities are associated with these operations:
- Submerged & Enclosed Drag Chain Conveyors
 - Collection Conveyor
 - Three-Walled Storage Bunker
 - Bottom Ash Truck Loadout

G.3. Hours of Operation: The permittee is authorized to operate the materials handling and storage operations continuously.

{Permitting note(s): The following notes address the Operating Restrictions: ⁽¹⁾ Specific portions of the coal handling and storage operations, when constructed, will be subject to 40 CFR 60 Subpart Y and the applicant is required to comply with the General Provisions of 40 CFR Part 60, Subpart A.}

Emission Limitations, Standards and Work Practices.

G.4. Visible Emissions: The permittee shall not allow visible emissions from the materials handling and storage operations that exceed the following without prior authorization from the Permitting Authority:

- (a) Coal & Biomass Handling and Storage Operations: An opacity greater than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed at no more than 20 percent opacity. [PSD-FL-197A and AC50-269880, as amended]
- (b) Fly Ash Handling and Storage Operations: An opacity greater than or equal to 5 percent (6-minute average). [PSD-FL-197A and AC50-269880, as amended]
- (c) Mercury Control Agent Handling and Storage Operations: An opacity greater than or equal to 5 percent (6-minute average). [PSD-FL-197A and AC50-269880, as amended]

G.5. Particulate Matter (PM & PM₁₀): The permittee shall not allow particulate matter emissions to exceed the following without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) Fly Ash Storage Silo: The permittee shall not allow emissions greater than 0.01 grains per actual cubic foot (gr/acf) outlet dust loading from the silo baghouse. [PSD-FL-197A and AC50-269880, as amended]
- (b) Mercury Control Agent Silos: The permittee shall not allow emissions greater than 0.01 grains per actual cubic foot (gr/acf) outlet dust loading from the silo baghouse(s). [PSD-FL-197A and AC50-269880, as amended]

G.6. Fugitive Dust Controls: The permittee shall implement the following controls to preclude particulate matter emissions: [AC50-269980, as amended and PSD-FL-197A, as amended]

- (a) All conveyors and conveyor transfer points shall be enclosed to preclude PM emissions (except those directly associated with the stacker/reclaimers, for which enclosure is operationally infeasible).
- (b) Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion. Sod, wetting agents, synthetic or other appropriate materials shall be used to cover those parts of the inactive coal pile that are prone to wind or water erosion.
- (c) Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, unenclosed transfer points, etc. during dry periods and as necessary to all facilities to maintain an opacity in compliance with condition G.4. of this permit.
- (d) The fly ash handling system (including transfer points and storage bin) shall be enclosed. The ash shall be wetted in the ash conditioner to minimize fugitive dust prior to it being discharged into the disposal bin.
- (e) The mercury control system reactant storage silos shall be maintained at a negative pressure while operating with the exhaust vented to a filter control system.

G.7. Unconfined Emissions of Particulate Matter: The permittee shall implement the following reasonable precautions to control the emissions of unconfined particulate matter: [Not Federally Enforceable; Rule 62-296.320(c), F.A.C.]

- (a) Use of an evacuation systems and baghouse on the boiler building fuel handling system. The permittee shall submit an after-the-fact construction permit application for the system within 60 days of the effective date of this permit.
- (b) The use of enclosed materials transfer points where feasible.
- (c) The use of windbreaks around the material handling equipment.
- (d) Maintenance of paved areas as needed.

G.8. Fuel Management Plan: The permittee shall comply with the conditions of the April 1, 1994 Fuel Management Plan contained in Appendix FMP-94. [PSD-FL-197A and AC50-269880, as amended]

G.9. Ash Management Plan: The permittee shall comply with the conditions of the April 1, 1994 Ash Management Plan contained in Appendix AMP-94. [PSD-FL-197A and AC50-269880, as amended]

G.10. Operation and Maintenance Plans: At least thirty (30) days prior to reactivation of the emissions units/activities, the permittee shall submit to the Permitting Authority operation and maintenance plans that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. The O/M Plans shall be incorporated into this permit as the following appendices:

- (a) Appendix OMP-001, Fly Ash Silo Baghouse; and
- (b) Appendix OMP-002, Mercury Control Agent Storage Silo Baghouses

{Permitting note(s): The controls identified in condition G.6. are specified within the construction permits and federally enforceable. Those identified in condition G.7. are in addition to controls specified in the construction permits and were identified within the initial Title V application.}

Test Methods and Procedures.

G.11. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C.
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [PSD-FL-197A and AC50-269880, as amended]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for an annual compliance test shall be thirty (30) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

G.12. Particulate Matter (PM & PM₁₀): All particulate matter tests performed pursuant to the requirements of this permit shall comply with the following:

- (a) Test Method: The test methods for particulate matter shall be EPA Reference Methods 1, 2, 3, 4, 5, 201 and 201A described in 40 CFR 60, Appendix A, Rules 62-297.401(1) through (5), (41) and (41)(a), F.A.C. [Rule 62-297.401, F.A.C.]

- (b) Test Procedures: The test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

G.13. Compliance Demonstrations: The permittee shall, upon reactivation of the emissions units/activities, conduct formal compliance tests within 60 days and have a formal visible emissions compliance test conducted for each baghouse annually thereafter during each federal fiscal year (October 1 – September 30) and prior to renewal for particulate matter (PM & PM₁₀) unless otherwise specified by rule, order, or permit. [Rule 62-210.300(2)(a)4., F.A.C., Rule 62-297.310(7), F.A.C, PSD-FL-197A and AC50-269880, as amended]

{Permitting note(s): Prior to reactivation, the permittee is required to provide the notifications and information addressed in conditions 18 and 19 of Appendix TV-3.}

G.14. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **G.1.** and **G.2.** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Coal Handling: The permittee shall maintain records on each coal shipment including date and amount.
- (b) Biomass Handling: The permittee shall maintain records on each biomass shipment including date and amount.
- (c) Fly Ash Handling: The permittee shall maintain records on each fly ash shipment including date and amount.
- (d) Mercury Control Agent: The permittee shall maintain records on shipments including date and amount.

G.15. Air Quality Control Systems: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **G.4** and **G.5** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Visible Emissions: The permittee shall visual inspect the Coal and Biomass Handling and Storage Operations, the Fly Ash Handling and Storage Operations, and the Mercury Control Agent Handling and Storage Operations at least once per day for visible emissions. The permittee shall record the date, time of each inspection, and any corrective actions required.
- (b) Particulate Matter (PM/PM₁₀): The permittee shall visual inspect each baghouse at least once per day for visible emissions. The permittee shall record the date and time of the inspections and record any corrective actions required.

New Source Performance Standards (NSPS).

{Permitting note: The proposed coal handling and storage operations are subject to the requirements of 40 CFR 60 Subpart A-General Provisions and Subpart Y-Standards of Performance for Coal Preparation Plants. The NSPS include notifications, emission limitations, and testing requirements.}

G.16 40 CFR 60 Subpart A, General Provisions: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A contained in Appendix NSPS-A. Specifically:

- (a) 40 CFR 60.7, Notification and Recordkeeping,
- (b) 40 CFR 60.8, Performance Tests,

- (c) 40 CFR 60.11, Compliance with Standards and Maintenance Requirements,
- (d) 40 CFR 60.12 Circumvention,
- (e) 40 CFR 60.14, Modification, and
- (f) 40 CFR 60.19 General Notification and Reporting Requirements

[40 CFR 60.1, Rule 62-204.800(7)(a), F.A.C.]

G.17 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart Y contained in Appendix NSPS-Y. Specifically:

- (a) 40 CFR 60.252(c), Standards for Particulate Matter, and
- (b) 40 CFR 60.254(a)(2), Test Methods and Procedures.

[40 CFR 60.250(a) and (b), Rule 62-204.800(7)(b), F.A.C.]

Common Conditions.

G.18. Common Conditions: This emissions unit is also subject to **Specific Conditions K1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection H. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-009	Bagasse Handling System (Sugarcane Processing Facility)

Emissions Unit(s) Details.

The bagasse handling system includes the storage piles, transfer operations, and conveyors. The materials authorized to be handled and stored include bagasse and wood. Unconfined particulate matter emissions from the operations are controlled with reasonable precautions as specified in the specific conditions.

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as “Not Federally Enforceable” have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

H.1. Permitted Capacity. The permittee shall not allow, cause, suffer or permit the operation of the unit in excess of the following capacities without prior authorization from the Permitting Authority. [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Biomass Handling: 1,431,953 tons per year (7-month rolling total) of biomass fuels (bagasse and wood). [Not Federally Enforceable]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

H.2. Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the methods of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]:

- (a) Biomass Handling and Storage Operations: The permittee is authorized to handle and store biomass fuels (Bagasse and Clean Wood Chips). [Not Federally Enforceable]

H.3. Hours of Operation: The permittee is authorized to operate the materials handling and storage operations continuously.

Emission Limitations, Standards and Work Practices.

H.4. Visible Emissions: The permittee shall not allow visible emissions from the bagasse handling system that exceed 10 percent opacity over any 6-minute period, provided, however, that this visible emissions limit shall not apply during periods of high winds (wind speeds of 18 miles per hour or greater) if the reasonable precautions in condition **H.5.** of this permit have been taken. [AC50-112851]

H.5. Unconfined Emissions of Particulate Matter: The permittee shall implement the following reasonable precautions to control the emissions of unconfined particulate matter: [Not Federally Enforceable; Rule 62-296.320(c), F.A.C.]

- (a) Covered Conveyors.
- (b) Wind Breaks.
- (c) Minimizing Drop Point Heights.

Test Methods and Procedures.

H.6. Visible Emissions: All visible emissions tests performed pursuant to the requirements of this permit shall comply with the following provisions:

- (a) Test Method: The test method for visible emissions shall be EPA Reference Method 9, Rule 62-297.401(9), F.A.C.
- (b) Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [PSD-FL-197A and AC50-269880, as amended]
- (c) Opacity Compliance Tests: The EPA Method 9 is specified as the applicable opacity test method and the required minimum period of observation for an annual compliance test shall be thirty (30) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

H.7. Compliance Demonstrations: The permittee shall have a formal compliance test conducted for visible emissions prior to renewal, unless otherwise specified by rule, order, or permit. [Rule 62-297.310(7), F.A.C.]

H.8. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **H.1.** and **H.2.** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Biomass Handling: The permittee shall maintain records on each biomass shipment including dates and amounts.

H.9. Reasonable Precautions: The permittee shall implement the following periodic monitoring requirements to ensure compliance with conditions **H.4** and **H.5** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Visible Emissions: The permittee shall visual inspect the Biomass Handling System at least once per day for visible emissions. The permittee shall record the date, time of each inspection, wind speed, and any corrective actions required.
- (b) Wind Speed: The permittee shall install and maintain a meteorological instrument to record the wind speed at the facility. [AC50-112851]

H.10. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection I. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-010	Cogeneration Boiler No. 1
-011	Cogeneration Boiler No. 2

Emissions Unit Description.

Cogeneration Boiler Nos. 1 and 2, designated Emissions Units 010 and 011, respectively, are spreader stoker type units fired by biomass (bagasse, wood, etc.), No. 2 fuel oil, and coal. The air quality control system or strategy includes use of an Electrostatic Precipitator (ESP), a selective non-catalytic reduction (SNCR) system, an activated carbon injection, and good combustion practices. Each boiler is vented through a separate 200' stack.

{Permitting note(s): The boilers are classified as new major facilities under the PSD Program for sulfur dioxide (SO₂), sulfuric acid mist (H₂SO₄), nitrogen oxides (NO_x), beryllium, and total fluorides. The units are synthetically limited (federally enforceable) for particulate matter (TSP & PM₁₀), volatile organic compounds (VOC), carbon monoxide (CO), lead, and mercury. The synthetic emission limits for VOC and NO_x, are more stringent than the Reasonably Available Control Technology (RACT) requirements of Rule 62-296.570, F.A.C. The units are classified as new facilities under the New Source Performance Standards (40 CFR 60 Subpart Da), Rule 62-296.405(2), F.A.C., Fossil Fuel Fire Steam Generators with more than 250 million Btu per Hour of Heat Input, and Rule 62-296.410, F.A.C., Carbonaceous Fuel Burners. The units are Classified as "Qualifying Cogeneration Facilities" under 40 CFR Part 72, and exempt from the requirement to obtain an Avid Rain Permit.}

The following specific conditions apply to the emissions unit(s) listed above:

Construction Requirements.

I.1. Design Specifications: The permittee shall not allow any changes to the design of these units without prior authorization from the Permitting Authority. The design requirements include the following: [Rules 62-4.160(2), 62-210.200(228) and 62-210.300, F.A.C.]

- (a) **Power Generation:** Construction of the proposed units shall reasonably conform to the plans described in the construction permit application or permit. The units shall be designed, constructed, and operated so that its gross generating capacity shall not exceed 74 megawatt (MW), 1 hour average. The permittee shall provide the Permitting and Compliance Authorities with engineering, monitoring, and reporting plans for the generation capacity of the facility at least thirty (30) days prior to reactivation of the unit(s). [AC50-269980, as amended and PSD-FL-197A, as amended]
- (b) **Boiler Design:** Each boiler shall be of the spreader stoker type with a maximum heat input of 760 mmBtu/hr with biomass fuel, 600 mmBtu/hr with No. 2 fuel oil, and 530 mmBtu/hr with coal. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (c) **Stack Height:** Each boiler shall have an individual stack, and each stack must have a minimum height of 200 feet. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (d) **Stack Sampling Facilities:** The stack sampling facilities for each stack must comply with Rule 62-297.345, F.A.C. [AC50-269980, as amended and PSD-FL-197A, as amended]

- (e) Monitoring Equipment: Each boiler shall be equipped with instruments to measure the fuel feed rate, steam production, steam pressure, and steam temperature. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (f) Air Quality Control Systems: Each unit shall be equipped with the following: [AC50-269980, as amended and PSD-FL-197A, as amended]
 - (a) Electrostatic precipitator (ESP) designed for at least 99 percent removal of particulate matter.
 - (b) Selective non-catalytic reduction (SNCR) system designed for at least 40 percent removal of NO_x.
 - (c) Carbon injection system (or equivalent) for mercury emissions control.
- (d) Continuous Monitoring Systems: The permittee shall install and operate continuous monitoring devices for each main boiler exhaust for opacity, nitrogen oxides (NO_x), sulfur dioxide (SO₂), oxygen (O₂), and carbon monoxide (CO). The monitoring devices shall meet the applicable requirements of Rule 62-296.405, F.A.C., and 40 CFR 60.47a. The opacity monitor shall be placed in the ductwork between the electrostatic precipitator and the stack or in the stack. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (e) Oxygen Monitor: An oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Operating procedures shall be established based on the initial emission compliance tests. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" shall be used as a guide. An operating plan shall be submitted to the Permitting and Compliance Authorities at least thirty (30) days prior to reactivation of the unit(s). The operating plan shall be incorporated into this permit as Appendix OP-001, Operating Plan for Use of the Oxygen Meter as BACT for Combustion Controls. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (f) AQCS Design Features: For the electrostatic precipitator, the selective non-catalytic reduction process (SNCR), and the activated carbon injection mercury control system (equivalent controls allowed), the permittee shall submit to the Permitting and Compliance Authorities copies of technical data pertaining to the selected particulate matter (PM), NO_x, and mercury emission controls at least thirty (30) days prior to reactivation of the emissions units. These data should include, but not be limited to, guaranteed efficiency and emission rates and major design parameters. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (g) Operation and Maintenance Plan: At least thirty (30) days prior to reactivation of the unit(s), the permittee shall submit to the Permitting and Compliance Authorities an operation and maintenance plan that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. The O/M Plan shall be incorporated into this permit as Appendix OMP-003, Air Quality Control System Operation and Maintenance Plan. [AC50-269980, as amended and PSD-FL-197A, as amended]

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as “Not Federally Enforceable” have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

I.2. Permitted Capacity: The permittee shall not allow the operation of the units in excess of the following without prior authorization from the Permitting Authority:[Rule 62-210.300, F.A.C.]

- (a) **Power Generation:** The facility shall not exceed 74 (gross) megawatts (1-hour average) generating capacity. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (b) **Steam Production:** The steam production shall not exceed an average of 506,000 lbs/hr (1-hour average) at 1,540 psig, 955°F for each boiler. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (c) **Maximum Heat Input:** The maximum heat input rate for each steam generator shall not exceed 760 mmBtu/hr when burning 100 percent biomass, 600 mmBtu/hr when burning 100 percent No. 2 fuel oil, or 530 mmBtu/hr when burning low sulfur coal. The maximum heat input to the two boilers shall not exceed 8.208×10^{12} Btu per year (12-month rolling average). [AC50-269980, as amended and PSD-FL-197A, as amended]

{Permitting note(s): Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to 62-210.300(1), F.A.C.}

I.3. Methods of Operation – The permittee shall not allow, cause, suffer or permit any change in the method of operation without prior authorization from the Permitting Authority. The authorized methods of operation include the following:[Rule 62-210.300, F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended]

- (a) **Steam Generator Operation:** The permittee is authorized to operate the emissions unit as either an electric utility steam generator, a fossil-fuel fired steam generator, or a carbonaceous fuel burner. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (b) **Carbonaceous Fuels:** The permittee is authorized to fire biomass including bagasse and wood waste material as the primary fuel. Authorized wood waste material is clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter. The fuel used in the boilers shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The biomass fuel used at in the boilers shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The wood waste shall not contain more than 56.7 parts per million (ppm) arsenic or 67.3 ppm chromium or 53.2 ppm copper based on analysis of a composite sample of the fuel. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (c) **Fuel Oil:** The permittee is authorized to burn only “new” No. 2 fuel oil with a maximum sulfur content of 0.05 percent sulfur as determined by the appropriate test method listed in 40 CFR 60.17. “New” oil means an oil which has been refined from crude oil and has not been used in any manner that may contaminate it. [AC50-269980, as amended and PSD-FL-197A, as amended]

- (d) Coal: The permittee is authorized to burn low sulfur coal with a maximum sulfur content of 0.70 percent and a maximum potential emission equivalent to 1.2 lbs SO₂/mmBtu. [AC50-269980, as amended and PSD-FL-197A, as amended]
- (e) Fossil Fuels: The combined use of coal and oil shall be less than 25 percent of the total heat input to boilers on a calendar quarter basis. The consumption of low sulfur coal shall not exceed 14,883 tons during any 12-month period (12-month rolling average). [AC50-269980, as amended and PSD-FL-197A, as amended]

I.4. Hours of Operation: The permittee is authorized to operate the boilers continuously (8,760 hours per year. [AC50-269980, as amended and PSD-FL-197A, as amended]

Emission Limitations and Standards.

I.5. Visible Emissions: The permittee shall allow visible emissions that exceed 20 percent opacity (6-minute average) except up to 27 percent opacity is allowed for 6 minutes in any 1-hour period[AC50-269980, as amended and PSD-FL-197A, as amended]

I.6 Stack Emissions: The permittee shall not allow stack emissions, based on the maximum allowable heat input rate for each fuel, to exceed any limit shown in the following table[AC50-269980, as amended and PSD-FL-197A, as amended]:

EMISSION LIMIT (PER BOILER)^d

Pollutant	Biomass		No. 2 Oil		Bit. Coal		Total ^e Two Boilers
	(lb/mmBtu)	(lb/hr)	(lb/mmBtu)	(lb/hr)	(lb/mmBtu)	(lb/hr)	(TPY)
Particulate Matter (TSP)	0.03	22.8	0.03	18.0	0.03	15.9	123.1
Particulate Matter (PM ₁₀)	0.03	22.8	0.03	18.0	0.03	15.9	123.1
Sulfur Dioxide	---	---	---	---	1.2	636.0	---
3-hour average	---	---	---	---	1.2	636.0	---
24-hour average	0.10	76.0	0.05	30.0	1.2a	---	339.0 f
Annual average	---	---	---	---	---	---	---
(Bagasse)	0.02 a b	---	---	---	---	---	---
(Wood Waste)	0.05 a c	---	---	---	---	---	---
Nitrogen Oxides	---	---	---	---	---	---	---
Annual average	0.14	103 a	0.14 a	84.0	0.15 a	79.5 a	577
Carbon Monoxide	---	---	---	---	---	---	---
24-hour average	0.35	266.0	0.35	210.0	0.35	185.5	1436.4
Volatile Organic Compounds	0.06 b 0.04 c	45.6 b 30.4 c	0.03	18.0	0.03	15.9	219.2
Lead	---	---	---	---	---	---	---
(Bagasse)	2.7 x 10 ⁻⁶ b	0.002	8.9 x 10 ⁻⁷	0.0005	5.1 x 10 ⁻⁶	0.0027	0.027 f
(Wood Waste)	1.6 x 10 ⁻⁴ c	0.12	---	---	---	---	---
Mercury	---	---	---	---	---	---	---
(Bagasse)	3.5 x 10 ⁻⁶ b	0.0027 b	2.4 x 10 ⁻⁶	0.0014	8.4 x 10 ⁻⁶	0.0045	0.0168 f
(Wood Waste)	4.0 x 10 ⁻⁶ c	0.0030 c	---	---	---	---	---
Beryllium	---	---	3.5 x 10 ⁻⁷	0.0002	5.9 x 10 ⁻⁶	0.0031	0.0013
Fluorides	---	---	6.3 x 10 ⁻⁶	0.004	0.024	12.7	5.25
Sulfuric Acid Mist	0.005	3.72	0.0025	1.5	0.010	5.3	6.0

- Compliance based on 30-day rolling average, per 40 CFR 60, Subpart Da.
- Emission limit for bagasse. Subject to revision after testing.
- Emission limit for wood waste. Subject to revision after testing.
- The emission limit shall be prorated when more than one type of fuel is burned in a boiler.
- Limit heat input of No. 2 fuel oil to less than 25% of total heat input on a calendar quarter basis and coal to 14,833 tons during any 12-month period. Combined heat input of coal and oil shall be less than 25% of the total heat input on a calendar quarter basis.
- Compliance based on a 12-month rolling average.

I.7 Excess Emissions: The permittee shall comply with the excess emissions rule contained in Rule 62-210.700, F.A.C. In addition, the permittee is allowed excess emissions during startup conditions, provided such excess emissions do not exceed a duration of four hours, and such emissions in excess of two hours do not exceed six (6) times per year.[AC50-269980, as amended and PSD-FL-197A, as amended]

Test Methods and Procedures.

I.8. Test Methods: Compliance with emission limitations for each fuel stated in Condition I.6 of this permit shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with Rule 62-297.620 F.A.C. [AC50-269980, as amended and PSD-FL-197A, as amended]:

- (a) Sample and Velocity Traverses: EPA Reference Method 1, described in 40 CFR 60, Appendix A, [Rule 62-297.401(1), F.A.C.]
- (b) Stack Gas Velocity and Volumetric Flow Rate: EPA Reference Method 2, described in 40 CFR 60, Appendix A, [Rule 62-297.401(2), F.A.C.]
- (c) Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight: EPA Reference Method 3 or 3a, described in 40 CFR 60, Appendix A, [Rules 62-297.401(3) and (3)(a), F.A.C.]
- (d) Determination of Moisture Content in Stack Gases: EPA Reference Method 4, described in 40 CFR 60, Appendix A, [Rule 62-297.401(4), F.A.C.]
- (e) Determination of Particulate Emissions: EPA Reference Method 5, described in 40 CFR 60, Appendix A, [Rule 62-297.401(5), F.A.C.]
- (f) Determination of PM10 Emissions (Exhaust Gas Recycle Procedure): EPA Reference Method 201 or 201A, described in 40 CFR 51, Appendix M, [Rules 62-297.401(41) and (41)(a), F.A.C.]
- (g) Determination of Sulfur Dioxide Emissions: EPA Reference Method 6, 6C or 19, described in 40 CFR 60, Appendix A, [Rules 62-297.401(6), (6)(c), and (19), F.A.C.]
- (h) Determination of Nitrogen Oxide Emissions: EPA Reference Method 7, 7E , described in 40 CFR 60, Appendix A, [Rules 62-297.401(7), and (7)(e), F.A.C.]
- (i) Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions: EPA Reference Method 8, described in 40 CFR 60, Appendix A, [Rules 62-297.401(8), F.A.C.]
- (j) Visual Determination of the Opacity of Emissions: EPA Reference Method 9, described in 40 CFR 60, Appendix A, [Rules 62-297.401(9), F.A.C.]
- (k) Determination of Carbon Monoxide Emissions: EPA Reference Method 10, described in 40 CFR 60, Appendix A, [Rules 62-297.401(10), F.A.C.]
- (l) Determination of Inorganic Lead Emissions: EPA Reference Method 12, described in 40 CFR 60, Appendix A, [Rules 62-297.401(12), F.A.C.]
- (m) Determination of Total Fluoride Emissions: EPA Reference Method 13A or 13B, described in 40 CFR 60, Appendix A, [Rules 62-297.401(13)(a) and (13)(b), F.A.C.]
- (n) Determination of Total Gaseous Non-methane Organic Emissions: EPA Reference Method 18 or 25, described in 40 CFR 60, Appendix A, [Rules 62-297.401(18) and (25), F.A.C.]
- (o) Determination of Particulate and Gaseous Mercury Emissions: EPA Reference Method 101A, described in 40 CFR 61, Appendix B, [Rules 62-297.401(32)(a), F.A.C.]

- (p) Determination of Beryllium Emissions: EPA Reference Method 104, described in 40 CFR 61, Appendix B, [Rules 62-297.401(35), F.A.C.]
- (q) Determination of Particulate and Gaseous Arsenic Emissions: EPA Reference Method 108, described in 40 CFR 61, Appendix B, [Rules 62-297.401(39), F.A.C.]
- (r) Determination of Chromium and Copper Emissions: EMTIC Test Method, [AC50-269980, as amended and PSD-FL-197A, as amended]

I.9. Test Procedures: Emission compliance tests shall be conducted under such conditions as the Compliance Authority shall specify based on representative performance of the facility. The permittee shall make available to the Permitting and Compliance Authorities such records as may be necessary to determine the conditions of the performance tests. [AC50-269980, as amended and PSD-FL-197A, as amended]

Compliance Demonstrations and Periodic Monitoring.

I.10. Compliance Demonstrations: The permittee shall have formal compliance tests for particulates, NO_x, SO₂, sulfuric acid mist, CO, VOC, lead, mercury, beryllium, fluorides, arsenic, chromium, copper, and visible emissions performed once every six months during the first two years of facility operation, following reactivation. If the test results for the first two years of operation indicate the facility is operating in compliance with the terms of this permit, the tests will thereafter occur according to the following schedule:

- (a) Annually for particulate matter (PM & PM₁₀), sulfur dioxide⁽¹⁾, sulfuric acid mist⁽¹⁾, NO_x, CO, VOC, mercury, arsenic, chromium, copper and visible emissions.
- (b) Once every five years (prior to renewal of this permit) for SO₂, sulfuric acid mist, lead, beryllium, and fluorides.

[(1)Annual test required only during years coal is burned in the boilers. [Rule 62-297.310(7), F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended.: The permittee is authorized to conduct a demonstration test and associated compliance tests firing Tire Derived Fuel as specified in Appendix TDF-001.]

I.11 Continuous Monitoring Systems: The permittee shall comply with the performance specifications for continuous monitoring systems under 40 CFR Part 60, Appendix B and the Quality Assurance Procedures of 40 CFR Part 60, Appendix F. The specific performance specifications include the following: [40 CFR 60.13(a) and Rule 62-204.800(7), F.A.C.]:

- (a) Performance Specification 1—Specifications and test procedures for opacity continuous emission monitoring systems in stationary sources
- (b) Performance Specification 2—Specifications and test procedures for SO₂ and NO_x continuous emission monitoring systems in stationary sources
- (c) Performance Specification 3—Specifications and test procedures for O₂ and CO₂ continuous emission monitoring systems in stationary sources
- (d) Performance Specification 4—Specifications and test procedures for carbon monoxide continuous emission monitoring systems in stationary sources
- (e) Performance Specification 4A—Specifications and test procedures for carbon monoxide continuous emission monitoring systems in stationary sources
- (f) Performance Specification 6—Specifications and test procedures for continuous emission rate monitoring systems in stationary sources

I.12. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **I.2** and **I.3** of this permit [Rule 62-213.440(1)(b), F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended]:

- (a) Steam Production: The permittee shall continuously monitor steam production (lb/hr), temperature (°F), and pressure (psig) recording the values (1-hour average) and daily values (24-hour block average) during each day of operation. All instrumentation shall be properly maintained so as to be functional at all times.
- (b) Maximum Heat Input: The permittee shall continuously monitor the heat input rate based on the fuel flow monitors recording the maximum heat input rate (1-hour average) for each fuel during each day of operation. All instrumentation shall be properly maintained and functional at all times.
- (c) Fuel Types: The permittee shall monitor and maintain a daily log of the amounts and types of fuels used. The amount, heating value, beryllium content (coal only), sulfur content, and equivalent SO₂ emission rate (in lbs/mmBtu) of each fuel oil and coal delivery shall be kept in a log. For each calendar month, the calculated SO₂, mercury and lead emissions and 12-month rolling average shall be determined (in tons) and kept in a log.
- (d) Hours of Operation: The permittee shall log the hours of operation for each day of operation.

I.13. Combustion Control Performance: The permittee shall monitor combustion efficiency in accordance with Appendix OP-001, Operating Plan for the Use of the Oxygen Meter as BACT for Combustion Controls to ensure compliance with condition **I.6** of this permit [Rule 62-213.440(1)(b), F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended]:

I.14. Air Quality Control Systems: The permittee shall monitor and inspect the AQCS in accordance with Appendix OMP-003, Air Quality Control System Operation and Maintenance Plan to ensure compliance with condition **I.6** of this permit. [Rule 62-213.440(1)(b), F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended]

I.15. Fuel Management and Testing Plan: The permittee shall monitor and inspect the biomass fuels in accordance with Appendix FMTP-001, Fuel Management and Testing Plan to ensure compliance with condition **I.6** of this permit [Rule 62-213.440(1)(b), F.A.C., AC50-269980, as amended and PSD-FL-197A, as amended]

New Source Performance Standards (NSPS).

{Permitting note: The cogeneration facility boilers are subject to the requirements of 40 CFR 60 Subpart A-General Provisions and Subpart Da- Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978. The NSPS include notifications, emission limitations, monitoring and testing requirements.}

I.16. 40 CFR 60 Subpart A, General Provisions: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A contained in Appendix NSPS-A of this permit. Specifically:

- (a) 40 CFR 60.5, Determination of Construction or Modification,
- (b) 40 CFR 60.6, Review of Plans,
- (c) 40 CFR 60.7, Notification and Recordkeeping,
- (d) 40 CFR 60.8, Performance Tests,
- (e) 40 CFR 60.11, Compliance with Standards and Maintenance Requirements,
- (f) 40 CFR 60.12 Circumvention,
- (g) 40 CFR 60.13, Monitoring Requirements,

- (h) 40 CFR 60.14, Modification,
- (i) 40 CFR 60.15, Reconstruction,
- (j) 40 CFR 60.17, Incorporation by Reference, and
- (k) 40 CFR 60.19, General Notification and Reporting Requirements

[40 CFR 60.1, Rule 62-204.800(7)(a), F.A.C.]

I.17 40 CFR 60 Subpart Da- Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart Da contained in Appendix NSPS-Da. Specifically:

- (a) 40 CFR 60.42a(a), (a)(1), (a)(2), (a)(3) and (b), Standard for Particulate Matter.
- (b) 40 CFR 60.43a(a), (b)(2), (d)(2), (g), (h)(1) and (h)(2), Standard for Sulfur Dioxide.
- (c) 40 CFR 60.44a(a), (a)(1), (a)(2), and (c), Standard for Nitrogen Oxides,
- (d) 40 CFR 60.46a(a), (b), (c), (e), (f), (g) and (h), Compliance Provisions.
- (e) 40 CFR 60.47a(a), (b), (b)(2), (c), (d), (e), (f), (g), (h), (h)(1), (h)(2), (h)(3), (h)(4), (i), (i)(1), (i)(2), (i)(5), (j), (j)(1), (j)(2), (j)(3), and (j)(4), Emission Monitoring,
- (f) 40 CFR 60.48a(a), (b), (b)(1), (b)(2), (b)(3), (c)(3), (c)(4), (c)(5), (d), (d)(1), (d)(2), (e), (e)(1), and (e)(2), Compliance Determination Procedures and Methods.
- (g) 40 CFR 60.49a(a), (b), (b)(1), (b)(2), (b)(4), (b)(5), (b)(6), (b)(7), (b)(8), (b)(9), (c), (c)(1), (c)(2), (c)(3), (c)(4), (c)(5), (e), (e)(1), (e)(2), (f), (g), (g)(1), (g)(2), (g)(3), (g)(4), (h), and (i), Reporting Requirements.

[40 CFR 60.40a(a)(1) and (a)(2), Rule 62-204.800(7)(b), F.A.C.]

Common Conditions.

I.23. Common Conditions: This emissions unit is also subject to **Specific Conditions K.1. through K.20.** contained in **Subsection K. Common Conditions.**

Subsection J. This section addresses the following emissions unit(s).

<u>E.U. ID</u> <u>No.</u>	<u>Brief Description</u>
-012	Volatile Organic Liquid Storage Tanks

Emissions Unit(s) Details.

Eight (8), volatile organic liquid storage tanks constructed after July 23, 1984. The tanks are subject to specific recordkeeping requirements of 40 CFR 60 Subpart Kb.

{Permitting note(s): The units are is classified as new facilities under the New Source Performance Standards (40 CFR 60 Subpart Kb).}

The following specific conditions apply to the emissions unit(s) listed above:

Operating Restrictions.

{Permitting note(s): Those operating restrictions which are identified as “Not Federally Enforceable” have been included for purposes of compliance testing, establishing appropriate emission limitations and to aid in determining future rule applicability.}

J.1. Construction Permit Application: The permittee is authorized to operate the emissions unit under the authority of Rule 62-210.300(b)(3), F.A.C. based on the Permitting Authority’s determination that an after-the-fact construction permit application is required for the emissions unit. The permittee shall submit a complete air construction permit application for the facilities with 90 days of the effective date of this permit. Following issuance of the after-the-fact construction permit the permittee shall apply for a revision to this permit to incorporate any federally enforceable restrictions contained in the construction permit. [Rule 62-201.300(b)(3), F.A.C.]

Emission Limitations and Standards.

J.2. Volatile Organic Compounds (VOC): The permittee shall not allow VOC emissions greater than 5.0 tons per year from the emissions unit. [Rule 62-213.420(2)(c)3., F.A.C.]

Compliance Demonstrations and Periodic Monitoring.

J.3. Compliance Demonstrations: The permittee shall demonstrate compliance with the emissions limitation based on record keeping and emission estimates calculated using the latest version of AP-42 or the TANKS Software Package. [Rule 62-297.310(7), F.A.C.]:

J.4. Operating Parameters: The permittee shall implement the following periodic monitoring requirements to ensure compliance with the conditions **B.1, B.2, B.3** and **B.9.** of this permit [Rule 62-213.440(1)(b), F.A.C]:

- (a) Monthly Throughput: The permittee shall monitor and record the monthly throughput of volatile organic liquids through each tank.
- (b) Volatile Organic Liquid Types: The permittee shall monitor and record the type (Name and True Vapor Pressure at 80°F) of volatile organic liquids stored and handled in each tank.

New Source Performance Standards (NSPS).

{Permitting note: The units are subject to only the recordkeeping requirements of 40 CFR 60 Subpart Db provided the permittee complies with the requirements of 40 CFR 60.110b, Applicability.}

J.5. Modification: Upon modification, the emissions unit shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

J.6. Emission Rate Increases: When a determination of an emission rate increase is required and it is to be based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 Appendix C shall be used to determine whether an increase in emission rate has occurred. [40 CFR 60.14 and Rule 62-204.800(7)(d), F.A.C.]

J.7. Reconstruction: Upon reconstruction, the emissions unit shall become an affected facility, irrespective of any change in emission rate. [40 CFR 60.15 and Rule 62-204.800(7)(d), F.A.C.]

J.8. 40 CFR 60 Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984: The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart Kb contained in Appendix NSPS-Kb. Specifically:

- (e) 40 CFR 60.110b, Applicability,
- (f) 40 CFR 60.111b, Definitions,
- (g) 40 CFR 60.116b, Monitoring of Operations

[40 CFR 60.40b(a), Rule 62-204.800(7)(b), F.A.C.]

Subsection K. Common Conditions.

This section addresses the common conditions for the following emissions unit(s) as noted within each emissions units section.

<u>E.U. ID No.</u>	<u>Brief Description</u>
-002	Mill Boiler No. 2
-003	Mill Boiler No. 3
-004	Mill Boiler No. 4
-005	Mill Boiler No. 5
-006	Mill Boiler No. 6
-007	Lime Storage Silo
-008	Materials Handling and Storage Operations (Cogeneration Facility)
-009	Bagasse Handling System (Sugarcane Processing Facility)
-010	Cogeneration Boiler No. 1
-011	Cogeneration Boiler No. 2

K.1. 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.]

K.2. Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. 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 62-297.301(2), F.A.C.]

K.3. Permitted Capacity: Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2)(b), F.A.C.]

K.4. Calculation of Emission Rate: 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.]

K.5. 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. [Rule 62-297.310(4)(a)1, F.A.C.]

K.6. Opacity Compliance Tests: When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

[Rule 62-297.310(4)(a)2, F.A.C.]

K.7. Minimum Sample Volume: Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]

K.8. Required Flow Rate Range: For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained. [Rule 62-297.310(4)(c), F.A.C.]

K.9. Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. [Rule 62-297.310(4)(d), F.A.C.]

Table 297.310-1
CALIBRATION SCHEDULE

<u>Item</u>	<u>Minimum Calibration Frequency</u>	<u>Reference Instrument</u>	<u>Tolerance</u>
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. Thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded Max. deviation between readings	Micrometer	+/-0.001" men of at least three readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	2%
		Comparison check	5%

K.10. Allowed Modification to EPA Method 5: When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4)(e), F.A.C.]

K.11. 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. [Rule 62-297.310(5)(a), F.A.C.]

K.12. 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)(b), F.A.C.]

K.13. 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 62-197.310(7)(b), F.A.C.]

K.14. Waiver of Compliance Test Requirements: If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7)(c), F.A.C.]

K.15. Compliance Test Notification: The permittee shall notify the Compliance Authority fifteen (15) days prior to Emission Unit (EU) testing. [Rule 62-297.310(7)(a)(9), F.A.C.]

K.16. Compliance Test Submittal: Copies of the test report(s) shall be submitted to the Permitting Authority and the Compliance Authority within forty-five (45) days of completion of testing. [Rule 62-297.310(8)(b), F.A.C.]

K.17. Test Reports: 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: [Rule 62-297.310(8)(c), F.A.C.]

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.

K.18. Recordkeeping: The permittee shall ensure that all records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]

K.19. Record Retention: The permittee shall retain records of all monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [Rule 62-213.440(1)(b)2.b., F.A.C.]

K.20. . Alternate Sampling Procedure: The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit and shall request approval of an alternate procedures or requirements.

The request shall set forth the following information, at a minimum:

- (a) Specific emissions unit and permit number, if any, for which exception is requested.
- (b) The specific provision(s) of this chapter from which an exception is sought.
- (c) The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of this chapter.
- (d) The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in the rules of the Department or any permit issued pursuant to those rules.

The Secretary or his/her designee shall specify by order each alternate procedure or requirement approved for an individual emissions unit source in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes.

[Rule 62-297.620, F.A.C.]

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
Section II. Facility-wide Conditions		
FEDERALLY ENFORCEABLE FACILITY WIDE CONDITIONS		
II.A.1. APPENDIX TV-3, TITLE V CONDITIONS		
II.A.2. General Particulate Emission Limiting Standards: General Visible Emissions Standard.		
II.A.3. Unregulated Emissions Units and/or Activities		
II.A.4. Excess Emissions Requirements		
II.A.5. Prevention of Accidental Releases (Section 112(r) of CAA)		
II.A.6. Notifications and Reports		
II.A.7. U.S. Environmental Protection Agency, Report & Notifications		
II.A.8. Air Emissions Bubble		
II.A.9. Alternate Sampling Procedures		
II.A.10. Title V Effective Date		
II.A.11. Annual Statement of Compliance		
II.A.12. Facility Wide Recordkeeping and Monitoring Requirements		
II.A.13. Facility Wide Operating Restrictions		
NON-FEDERALLY ENFORCEABLE FACILITY WIDE CONDITIONS		
I.B.1 General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited		
II.B.2 General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions		
SECTION III. EMISSIONS UNIT(S) AND CONDITIONS		
Emissions Unit 002, Mill Boiler No. 2		
<i>Operating Restrictions</i>		
III.A.1. Permitted Capacity		
III.A.2. Methods of Operation		
III.A.3. Hours of Operation		
<i>Emission Limitations and Standards</i>		
III.A.4. Visible Emissions		
III.A.5. Particulate Matter		
III.A.6. Volatile Organic Compounds		
III.A.7. Nitrogen Oxides		
III.A.8. VOC & NOx RACT Limits		
III.A.9. Fuel Oil Sulfur Content		
<i>Test Methods and Procedures</i>		
III.A.10. Visible Emissions		
III.A.11. Particulate Matter		
III.A.12. Volatile Organic Compounds		
III.A.13. Nitrogen Oxides		
III.A.14. Fuel Oil Sulfur Content		
III.A.15. Waiver of Compliance Test Requirements		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.A.16. Compliance Demonstrations		
III.A.17. Operating Parameters		
III.A.18. Air Quality Control System		
III.A.19. Emissions Unit Performance		
<i>New Source Performance Standards</i>		
III.A.20. Modification		
III.A.21. Emission Rate Increases		
III.A.22. Reconstruction		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
<i>Common Conditions</i>		
III.A.23. Common Conditions		
Emissions Unit 003, Mill Boiler No. 3		
<i>Operating Restrictions</i>		
III.B.1. Permitted Capacity		
III.B.2. Methods of Operation		
III.B.3. Hours of Operation		
<i>Emission Limitations and Standards</i>		
III.B.4. Visible Emissions		
III.B.5. Particulate Matter		
III.B.6. Volatile Organic Compounds (VOC)		
III.B.7. Nitrogen Oxides (NO_x)		
III.B.8. Carbon Monoxide (CO)		
III.B.9. Sulfur Dioxide (SO₂)		
<i>Test Methods and Procedures</i>		
III.B.10. Visible Emissions		
III.B.11. Particulate Matter		
III.B.12. Volatile Organic Compounds		
III.B.13. Nitrogen Oxides		
III.B.14. Carbon Monoxide		
III.B.15. Sulfur Dioxide		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.B.16. Compliance Demonstrations		
III.B.17. Thermal Efficiency Testing		
III.B.18. Operating Parameters		
III.B.19. Air Quality Control System		
III.B.20. Emissions Unit Performance		
<i>New Source Performance Standards (NSPS)</i>		
III.B.21. 40 CFR 60 Subpart A, General Provisions		
III.B.22. 40 CFR 60 Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units		
<i>Common Conditions</i>		
III.B.23. Common Conditions		
Emissions Unit 004, Mill Boiler No. 4		
<i>Operating Restrictions</i>		
III.C.1. Permitted Capacity		
III.C.2. Methods of Operation		
III.C.3. Hours of Operation		
<i>Emission Limitations and Standards</i>		
III.C.4. Visible Emissions		
III.C.5. Particulate Matter		
III.C.6. Volatile Organic Compounds (VOC)		
III.C.7. Nitrogen Oxides (NO_x)		
III.C.8. VOC & NO_x RACT Limits		
III.C.9. Fuel Oil Sulfur Content		
<i>Test Methods and Procedures</i>		
III.C.10. Visible Emissions		
III.C.11. Particulate Matter		
III.C.12. Volatile Organic Compounds		
III.C.13. Nitrogen Oxides		
III.C.14. Fuel Oil Sulfur Content		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
III.C.15 Waiver of Compliance Test Requirements		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.C.16. Compliance Demonstrations		
III.C.17. Operating Parameters		
III.C.18. Air Quality Control System		
III.C.19. Emissions Unit Performance		
<i>New Source Performance Standards</i>		
III.C.20 Modification		
III.C.21 Emission Rate Increases		
III.C.22 Reconstruction:		
<i>Common Conditions</i>		
III.C.23. Common Conditions		
Emissions Unit 005, Mill Boiler No. 5		
<i>Operating Restrictions</i>		
III.D.1. Permitted Capacity		
III.D.2. Methods of Operation		
III.D.3. Hours of Operation		
<i>Emission Limitations and Standards</i>		
III.D.4. Visible Emissions		
III.D.5. Particulate Matter		
III.D.6. Volatile Organic Compounds (VOC)		
III.D.7. Nitrogen Oxides (NO _x)		
III.D.8. VOC & NO _x RACT Limits		
III.D.9. Fuel Oil Sulfur Content		
<i>Test Methods and Procedures</i>		
III.D.10. Visible Emissions		
III.D.11. Particulate Matter		
III.D.12. Volatile Organic Compounds		
III.D.13. Nitrogen Oxides		
III.D.14. Fuel Oil Sulfur Content		
III.D.15. Waiver of Compliance Test Requirements		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.D.16. Compliance Demonstrations		
III.D.17. Operating Parameters		
III.D.18. Air Quality Control System		
III.D.19. Emissions Unit Performance		
<i>New Source Performance Standards</i>		
III.D.20 Modification		
III.D.21 Emission Rate Increases		
III.D.22 Reconstruction		
<i>Common Conditions</i>		
III.D.23. Common Conditions		
Emissions Unit 006, Mill Boiler No. 6		
<i>Operating Restrictions</i>		
III.E.1. Permitted Capacity		
III.E.2. Methods of Operation		
III.E.3. Hours of Operation		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
<i>Emission Limitations and Standards</i>		
III.E.4. Visible Emissions		
III.E.5. Particulate Matter		
III.E.6. Volatile Organic Compounds (VOC)		
III.E.7. Nitrogen Oxides (NO _x)		
III.E.8. Carbon Monoxide (CO)		
III.E.9. Sulfur Dioxide (SO ₂)		
III.E.10. Fuel Oil Sulfur Content		
<i>Test Methods and Procedures</i>		
III.E.11. Visible Emissions		
III.E.12. Particulate Matter		
III.E.13. Volatile Organic Compounds		
III.E.14. Nitrogen Oxides		
III.E.15. Carbon Monoxide		
III.E.16. Sulfur Dioxide		
III.E.17. Fuel Oil Sulfur Content		
III.E.18. Waiver of Compliance Test Requirements		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.E.19. Compliance Demonstrations		
III.E.20. Thermal Efficiency Testing		
III.E.21. Operating Parameters		
III.E.22. Air Quality Control System		
III.E.23. Emissions Unit Performance		
<i>New Source Performance Standards</i>		
III.E.24. Modification		
III.E.25. Emission Rate Increases		
III.E.26. Reconstruction		
<i>Common Conditions</i>		
III.E.28. Common Conditions		
Emissions Unit 007, Lime Storage Silo		
<i>Operating Restrictions</i>		
III.F.1. Permitted Capacity		
III.F.2. Methods of Operation		
III.F.3. Hours of Operation		
<i>Emission Limitations and Standards</i>		
III.F.4. Visible Emissions		
III.F.5. Particulate Matter (PM & PM ₁₀)		
<i>Test Methods and Procedures</i>		
III.F.6. Visible Emissions		
III.F.7. Particulate Matter (PM & PM ₁₀)		
III.F.8. Waiver of Compliance Test Requirements		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.F.9. Compliance Demonstrations		
III.F.10. Operating Parameters		
III.F.11. Air Quality Control System		
<i>Common Conditions</i>		
III.F.12. Common Conditions		
Emissions Unit 008, Material Handling and Storage Operations (Cogeneration Facility)		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
<i>Operating Restrictions</i>		
III.G.1. Permitted Capacity		
III.G.2. Methods of Operation		
III.G.3. Hours of Operation		
<i>Emission Limitations, Standards and Work Practices</i>		
III.G.4. Visible Emissions		
III.G.5. Particulate Matter (PM & PM ₁₀)		
III.G.6. Fugitive Dust Controls		
III.G.7. Unconfined Emissions of Particulate Matter		
III.G.8. Fuel Management Plan		
III.G.9. Fuel Management Plan		
III.G.10. Operation and Maintenance Plans		
<i>Test Methods and Procedures</i>		
III.G.11. Visible Emissions		
III.G.12. Particulate Matter (PM & PM ₁₀)		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.G.13. Compliance Demonstrations		
III.G.14. Air Quality Control Systems		
<i>New Source Performance Standards (NSPS)</i>		
III.G.15 40 CFR 60 Subpart A, General Provisions		
III.G.16 40 CFR 60 Subpart Y, Standards of Performance for Coal		
<i>Common Conditions</i>		
III.G.17. Common Conditions		
Emissions Unit 009, Bagasse Handling System (Sugarcane Processing Facility)		
<i>Operating Restrictions</i>		
III.H.1. Permitted Capacity		
III.H.2. Methods of Operation		
III.H.3. Hours of Operation		
<i>Emission Limitations, Standards and Work Practices</i>		
III.H.4. Visible Emissions		
III.H.5. Unconfined Emissions of Particulate Matter		
<i>Test Methods and Procedures</i>		
III.H.6. Visible Emissions		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.H.7. Compliance Demonstrations		
III.H.8. Reasonable Precautions		
<i>Common Conditions</i>		
III.H.9. Common Conditions		
Emissions Units 010 & 011, Cogeneration Facility Boilers		
<i>Construction Requirements</i>		
III.I.1. Design Specifications		
<i>Operating Restrictions</i>		
III.I.2. Permitted Capacity		
III.I.3. Methods of Operation		
III.I.4. Hours of Operation		
<i>Emission Limitations and Standards</i>		
I.III.5. Visible Emissions		
I.III.6. Stack Emissions		
III.I.7. Excess Emissions		
<i>Test Methods and Procedures</i>		
III.I.8. Test Methods		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
III.I.9. Test Procedures		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.I.10. Compliance Demonstrations		
III.I.11. Continuous Monitoring Systems		
III.I.12. Operating Parameters		
III.I.13. Combustion Control Performance		
III.I.14. Air Quality Control Systems		
III.I.15. Fuel Management and Testing Plan		
<i>New Source Performance Standards (NSPS)</i>		
III.I.16. 40 CFR 60 Subpart A, General Provisions		
III.I.17. 40 CFR 60 Subpart Da- Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978		
<i>Common Conditions</i>		
III.I.23. Common Conditions		
Emissions Unit 012, Volatile Organic Liquid Storage Tanks		
<i>Operating Restrictions</i>		
III.J.1. Construction Permit Application		
Emission Limitations and Standards		
III.J.2. Volatile Organic Compounds (VOC)		
<i>Compliance Demonstrations and Periodic Monitoring</i>		
III.J.3. Compliance Demonstrations		
III.J.4. Operating Parameters		
<i>New Source Performance Standards (NSPS)</i>		
III.J.5. Modification		
III.J.6. Emission Rate Increases		
III.J.7. Reconstruction		
III.J.8. 40 CFR 60 Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984		
<i>Common Conditions</i>		
III.K.1. Required Number of Test Runs		
III.K.2. Operating Rate During Testing		
III.K.3. Permitted Capacity		
III.K.4. Calculation of Emission Rate		
III.K.5. Required Sampling Time		
III.K.6. Opacity Compliance Tests		
III.K.7. Minimum Sample Volume		
III.K.8. Required Flow Rate Range		
III.K.9. Calibration of Sampling Equipment		
III.K.10. Allowed Modification to EPA Method 5		
III.K.11. Required Equipment		
III.K.12. Accuracy of Equipment		
III.K.13. Special Compliance Tests		
III.K.14. Waiver of Compliance Test Requirements		
III.K.15. Compliance Test Notification		
III.K.16. Compliance Test Submittal		
III.K.17. Test Reports		

APPENDIX AC-001
ANNUAL CERTIFICATION CHECKLIST
OSCEOLA FARMS CORPORATION

Permit Condition	Compliance Status ⁽¹⁾	Compliance Method ⁽²⁾
III.K.18. Recordkeeping		
III.K.19. Record Retention		
III.K.20. Alternate Sampling Procedure		

Notes: The compliance status of each condition of the permit must be reported each year as well as the method use to determine compliance. The method used should identify the type of method used as well as the procedure.

(1) Compliance Status Codes:

CC – Continuous compliance meaning the source/emissions unit complied with the permit condition continuously during the reporting period.

IC – Intermittent compliance meaning the source/emissions unit was not in continuous compliance with the permit condition during the reporting period. Attach an explanation for any IC conditions.

UC – Unknown compliance meaning the source/emissions unit may or may not have been in compliance during the reporting period. Attach description of any reason(s) for the unknown status.

OC – Out of compliance meaning that the source/emissions unit was operated out of compliance for the entire reporting period. Attach a listing of consent orders, notice of violation, notice to correct, etc..

(2) Compliance Method Codes:

IA – Internal Self-Assessment or EA – External Audit or third-party assessment

RR – Record Review; ST – Stack Test; CEMS – Continuous Emissions Monitoring System; PM – Periodic Monitoring

Appendix AMP-001, Ash Management Plan (version dated 04/01/94)

A. PERMIT CONDITIONS

Palm Beach County Restrictions on Ash Management

A detailed ash management plan must be submitted by the petitioner and approved by the Palm Beach County Public Health Unit. The plan must detail contingency plans, testing, and monitoring of the ash, ash handling and disposal methods, planned spreading locations and identification of environmental impacts and measures for mitigating those impacts (Petition 92-13, Condition F6).

All fly ash and bottom ash from the facility which are produced during any period in which fossil fuels are used, and thereafter for a reasonable time, shall be segregated and managed as set forth in the ash management plan (92-13, F5).

FDEP Industrial Wastewater Permit Restrictions on Ash Management

None evident.

A Management of Surface Waters permit draft is not yet available for review. We believe that the agency is satisfied that county requirements on fuel usage and ash management are sufficient.

B. BAGASSE AND WOOD

Ash quantities

The maximum quantities of bottom and fly ash that could be generated during normal operation are provided below:

<u>Fuel</u>	<u>Bottom Ash</u> <u>T/yr</u>	<u>Fly Ash</u> <u>T/yr</u>
Bagasse	1,300	4,000
Wood	2,200	6,500
TOTALS	3,500	10,500

The amount of ash generated by firing bagasse has been based upon operating on bagasse for 150 days per year. The amount of ash generated by firing wood has been based upon operating on wood for 215 days per year. Due to the occurrence of planned and unplanned shutdown during the year, the quantities noted above are conservatively high.

Bottom Ash

Bottom ash will be discharged continuously from each boiler into two water—submerged drag chain conveyors. Each conveyor will consist of a wet upper compartment and a dry lower compartment. The upper compartment will be a water-tight steel trough, designed to contain the water required for quenching and cooling the bottom ash to 1400F, and sized to accommodate and store up to 2 hours of bottom ash generated from the wood or bagasse.

An integrated water supply and recirculation system will be used. Over flow water from the submerged dry chain conveyor trough, hopper seal trough, and dewatered ash storage pile will be piped back to a recirculation sump equipped with an overflow weir and a return sump pump. Make-up water will be added to the recirculation sump to replace water lost in the dewatered ash and through evaporation.

The dewatered ash from the dewatering inclined ramp of the chain conveyor will be discharged into a transfer conveyor which will transfer the dewatered ash into a collecting conveyor, which in turn will unload the ash into a three-sided bunker, sized to accommodate about a 7-day ash capacity. A front-end loader will be used to reclaim and load the stored ash into trucks.

Appendix AMP-001, Ash Management Plan (version dated 04/01/94)

Fly Ash

Fly ash will consist of ash collected in air heater hoppers, dust collector hoppers, and from ESP hoppers. The system will encompass the removal and conveying of the fly ash from the hoppers to a storage silo, using a mechanical conveying system.

The ash storage silo will be sized to accommodate 1,200 tons (about 7 days) of fly ash. The silo will be a conical bottom cylinder type carbon steel structure. Two twin shaft pug-mill conditioner unloaders will be provided for discharging the ash into trucks for disposal.

Ash Removal

Fly ash will be loaded from the fly ash silo directly into trucks. Bottom ash falls from the boiler's grate into a water filled collection tank. From there the ash is conveyed by submerged drag chain onto a collection conveyor for transport to the three-walled bunker with a roof. At this point the ash is extremely wet. Under normal operating procedures, the ash will be removed from the bunker in a wetted condition. If it is determined that the bottom ash in storage has become dry, it will be sprayed with water.

Bottom ash will be removed from the storage bunkers by a front-end loader and also loaded into trucks. Loading of the trucks will be accomplished during daylight hours, with the fly ash silo and bottom ash bunkers providing the necessary overnight storage. The trucks will be covered and trucked to the designated staging area.

Ash Spreading

At the staging area the ash will be commingled and transferred to the spreaders. The spreaders will be drawn around the designated fields and the ash will be evenly distributed across the field. It is anticipated that the ash will be spread at a rate of approximately 2 tons per acre. The spreading of ash will take place over selected portions of Osceola's 50,000 acres of farmland. The ash will be spread on fallow fields, therefore, the specific location and schedule of the spreading will depend on the crop rotation plan developed each year by the Osceola farming operation and thus is not available at this time. If a fugitive dust problem exists after the ash has been spread, the ash will be wetted or incorporated.

We consider that the ash is a soil-conditioning agent without negative environmental impacts. The FDEP has advised Osceola that no Ash Management Plan needs to be submitted to the state to cover the spreading of ash on farmlands.

Quality Control

The standardized test to characterize the ash will be Method for Chemical Analysis of water and wastes, EPA-600/4-82. The tests will be conducted no less than once a month on a mixed product of fly ash and bottom ash for mercury, lead, arsenic, chromium, barium, selenium, silver, cadmium and copper.

There are no criteria established for the acceptance or rejection of ash materials. The control of ash quality will be at the source of the fuel, in particular the wood supplies which are required to meet strict standards, as noted in the Fuel Management Plan. The testing of ash will be performed to confirm further the quality of the fuel source and assist Osceola in its plans for spreading.

Additionally, stack tests will be performed in accordance with the FDEP air permit. These tests will be conducted with and without the mercury control system in operation thus providing an indication of the amount of mercury being removed.

Appendix AMP-001, Ash Management Plan (version dated 04/01/94)

C. Coal

The design of the Osceola Cogeneration Project includes the provision for the future installation of equipment and systems to allow the use of coal as a supplemental fuel. The following describes the FDEP air permit restrictions related to coal ash: coal ash (if collected as a result of coal firing) will be transported off site for disposal.

Ash Quantities

The maximum quantities of ash to be generated while burning a blend of coal and biomass are provided below:

Bottom Ash-1,200 T/yr

Fly Ash-3,500 T/yr

The amount of ash generated has been calculated based upon the maximum amount of coal allowed to be burned per year under the conditions of the FDEP air permit.

System Description

The fly ash will be collected and stored through the same system as described for handling fly ash when firing wood or bagasse. However, the disposal of the coal fly ash will be handled in a different manner. Any fly ash collected when burning coal will not be disposed of by spreading on the sugar cane fields. The ash will be collected and removed from the silo and disposed of in a permitted landfill. The ash would be transported from the site in covered or pressure differential trucks depending upon the final design requirements.

The bottom ash would also be handled in the same manner as when firing wood or bagasse and ultimately stored in the bunkers prior to removal. Again, this ash would be removed to a certified landfill site.

Quality Control

Since coal-ash has been classified as non-hazardous by the EPA and suitable for landfill disposal, we will not be performing any tests on the ash produced by the combination of coal or coal with biomass.

Upon the introduction of any amount of coal into the fuel feed system of the boilers, all ash generated will be treated as though it is 100% coal ash.

Appendix FMP-001, Fuel Management Plan (version dated 04/01/94)

A. PERMIT CONDITIONS

Palm Beach County

The restrictions on fuel usage are covered by certain special conditions incorporated as part of the County's approval of Petition 92-13. These conditions reflect, in part, the air permit requirements issued by the Florida Department of Environmental Protection (FDEP) and under Use Limitations establish criteria for height of fuel storage areas, the definition of "biomass waste", restrictions on sulfur content of coal and fuel oil and the containment requirements for stored liquids such as fuels and oils.

Florida Dept. of Environmental Protection (FDEP) Air Permit

Acting under authority of the U.S. Environmental Protection Agency, FDEP has issued a final construction permit for the Osceola Power Limited Partnership (OPLP) cogeneration facility (Permit Number AC50-21975 (*PSD-FL-197*)). This permit allows construction of air pollution sources. Allowed fuels are biomass, No. 2 fuel oil and coal. The combined use of coal and oil shall be less than 25% of the total heat input per quarter and the plant shall not burn more than 20,065 tons of coal on a 12 month rolling average. The permit limits the maximum heat input rate for each steam generator to 665 mmBtu/hr when burning 100 percent biomass and 460 mmBtu/hr when burning fuel oil or coal. The maximum heat input to the entire facility (total of two boilers) is limited to 7.0×10^{12} Btu per year.

Electrostatic precipitators for particulate matter control, selective non-catalytic reduction systems for nitrogen oxides control, and a mercury control system are required. Coal must contain no more than 0.7% sulfur, and No. 2 fuel oil must contain no more than 0.05% sulfur.

The permit limits emissions of all regulated pollutants, including SO₂, NO_x, PM, CO, VOC, and mercury pollutants. Extensive source testing is required to demonstrate compliance, and continuous emissions monitoring is required, as well as fuel and ash sampling and analysis. This permit constitutes best available control technology (BACT) for SO₂ emissions, and reasonable available control technology (RACT) for NO_x and VOC emissions.

FDEP Industrial Wastewater Permit Restrictions on Fuel Usage

The FDEP industrial wastewater permit (No. IC50-228720) indicates that the facility will be biomass/oil/coal fired. Specific Condition No. 4 of the permit notes that the permit is valid only for the specific processes and operations (including the types and quantities of raw materials and chemicals) indicated in the application. Any changes in these which may result in altered characteristics of the discharge are not permitted without the prior approval of FDEP and modification of the permit.

B. BAGASSE

Use

Bagasse is a fibrous waste product resulting from the milling of sugar cane. It is being collected and transported by conveyor to the cogeneration plant for use as a fuel in a process which generates both steam and electricity. The mill will supply bagasse to the cogeneration project during the Grinding Season, normally from mid October to mid March the next year.

System Description

During the grinding season, the sugar mill will provide the cogeneration facility with bagasse at an average daily rate that will be 4000 tons per day (tpd) and a maximum hourly rate of 185 tons per hour (tph).

Appendix FMP-001, Fuel Management Plan (version dated 04/01/94)

The bagasse will be transferred from the mill to the cogeneration facility via the Bagasse Transfer Conveyor, at the design rate of 185 tph. The Bagasse Transfer Conveyor is equipped with a belt scale designed to monitor and record the rate and quantity of bagasse flowing to the facility.

A system of Chain Distribution Conveyors receive the bagasse at the boiler area and transfer the material to the boiler feeders or to the bagasse bypass and recycle subsystem which conveys the bagasse to a storage area on the site.

The fuel from the Chain Distribution Conveyors will be bottom discharged into the boiler feed system via discharge chutes. Each chute is provided with shut off gates which are manually operated.

The entire fuel conveying system is provided with the necessary controls and fire protection systems.

The maximum height of the bagasse pile will be 50 feet and its maximum size will be about 500 feet by 600 feet and will be in the location noted on the site plan as fuel storage area. The bagasse will have a moisture content in excess of 50%, minimizing the incidence of fugitive emissions. During periods when the pile surface dries out, the pile will be sprayed with water.

The design of the fire protection system for the plant includes a fire water distribution system, designed in accordance with appropriate NFPA standards, including piping, valves and yard hydrants. Hydrants will be located in strategic areas around the fuel storage area at a spacing of approximately 250 feet along the buried yard loop or branch line piping. Hydrants will be suitable for attaching hoses for manually fire fighting. Deluge water spray systems will be used for protection of the fuel handling equipment and the conveyors.

The pile will be spread, compacted and rotated to minimize the number of air pockets in the pile and the risk of fire. Also, as explained above, the pile will be dampened when viewed to be dry.

During operation of the plant, fuel pile management personnel will be on site 24 hours a day. Telephone communication will be used to contact the local fire department upon the occurrence of a fire incident. The plant operation maintenance manual will incorporate instructions on fire protection and fighting procedure and personnel will be given classroom instructions.

C. WOOD WASTE

Use

During the Non-grinding Season, normally from mid March to mid October, the bagasse is no longer available as a fuel and clean wood waste is used instead.

System Description

Wood waste will be delivered to the facility by trucks at an approximate design rate of 2,500 tons per day. The anticipated deliveries are 6 days per week, 12 hours per day. Each truck is anticipated to have a capacity of 25 tons of wood waste.

The trucks will be unloaded utilizing two hydraulically operated truck dumpers. A third unloading bay is provided to accommodate self-unloading trucks.

The wood waste will be discharged into three receiving hoppers equipped with chain conveyors which will transfer the wood to the Unloading Conveyor

The Unloading Conveyor which is equipped with a belt scale and a magnetic separator will convey the wood waste to the Screen and Hog Tower at a design rate of 200 tph.

The Screen and Hog Tower is an open facility at which the wood waste is discharged onto a disc screen which will separate the material sized less than 3" from the oversized material. The oversized material will be discharged to the Hog, which is a motor driven, size reducing piece of equipment which reduces the oversized wood to less than 3", suitable to feed into the boiler.

Appendix FMP-001, Fuel Management Plan (version dated 04/01/94)

The sized wood waste is then transferred from the Screen and Hog Tower by a radial stacker to a wood storage area (wood yard) on the site or directed to the boilers via Plant Feed Conveyor which is equipped with a belt scale for monitoring and recording the quantity of fuel delivered directly to the boilers.

The wood is reclaimed continuously at design rates of 125 tph of wood chips or 62 tph of wood chips combined with 95 tph of bagasse by two under pile chain reclaimers.

The reclaimed fuel is transferred to the cogeneration facility via the Plant Feed Conveyor and to the boiler feeders by the Chain Distribution Conveyors.

A Radial Stacker will form a circular pile approximately 50 feet in height which forms the base configuration of the entire storage pile. The pile shape and ultimate configuration is developed by the use of plant mobile equipment which spreads, compacts, and shapes the pile. The maximum height of the wood pile will be 50 feet and its maximum size will be 600 feet by 800 feet.

The wood will have a relatively high moisture content and, as noted below, only 15% will be less than 1/4" in size. Fugitive emissions will be controlled by water spraying as necessary.

Quality Control

The wood waste will be supplied to the Project under long-term contracts which include quality requirements reflecting the conditions of the FDEP air permit. In addition to quality tests at the supplier's facility, additional quality tests will be conducted at the Project on a regular basis.

In accordance with the FDEP air permit the tests will be conducted on a weekly basis for the first year of operation and thereafter on a monthly basis. Upon delivery to the site, the wood waste will be stored in separate weekly piles, such that in the event the wood waste is determined not to be in accordance with the supplier's specification it can be readily identified and removed by the supplier.

The wood waste specification imposed on the supplier will be:

1. less than 1% by volume or weight shall be plastics, rubber, glass and painted wood.
2. free from chemically treated wood (e.g. chromium, copper and arsenic; creosote; or pentachlorophenol) except for incidental amounts, not to exceed 1% by volume or weight.
3. less than 5% shall be sand, soil or other organic material
4. moisture content shall be between 20% and 50% with a quarterly average of less than 40%.
5. 95% shall be less than 4" in size, 15% (on an individual load) will be less than 1/4" in size.

Osceola has the right to reject any load which does not meet any one of the above requirements, and the supplier will be required to remove the delivered amount from the site.

However, if the wood waste exceeds the specification limits for sand, soil, inorganic material or moisture content, Osceola may accept the material provided that the supplier reduces its handling and processing costs by a predetermined rate.

D. FUEL OIL

Use

Fuel oil will be used for two primary purposes - i) for start-up of the boilers , and ii) as a fuel for the on-site vehicles and heavy mobile equipment.

Appendix FMP-001, Fuel Management Plan (version dated 04/01/94)

System Description

No. 2 fuel oil will be used as a startup fuel for the boilers. The fuel oil system will consist of a truck unloading facility, a 50,000 gallon fuel oil storage tank, two fuel oil transfer pumps, a fuel oil dispensing station, and associated piping, valves, and instrumentation. Detailed plans of the fuel storage system will be submitted to the Department of Environmental Resources Management prior to construction.

Spill Protection and Clean Up

The fuel oil will be stored in an enclosed tank surrounded by a berm or wall which will be sized to contain the full capacity of the tank in the event of a spill. The tank will be located at a distance from the plant in accordance with the NFPA separation requirements. The area around the fuel tank will be serviced by hydrants connected to the fire system yard loop. Any spilled oil will be collected and taken off-site for proper disposal.

Quality Control

Due to the limited use of fuel oil (as a start—up fuel only), there will be no testing procedures employed. The fuel oil will be purchased as low sulfur fuel (0.05% in accordance with the FDEP air permit) on the spot market.

The only acceptance criteria to be used for fuel oil will be that the sulfur content is not greater than 0.05%.

E. COAL

The design of the Osceola project includes provisions for the installation of equipment and systems to use coal as a supplemental fuel, its use being restricted by the FDEP air permit. The plant will be designed with space allocated for equipment to receive, unload, store, retrieve and fire coal. The use of coal requires construction of additional systems and facilities of the plant. Implementation of coal firing will be predicated upon the experienced reliability of the wood supplies and the prediction of the future economics of wood supplies. The project will have a number of long term wood supply contracts in place which will satisfy the needs of the project for at least 15 years. Independent studies of the wood supplies in Florida indicate that a continually increasing quantity will be available. However, due to the long term obligation of the project to supply Florida Power and Light Company with electrical energy for 30 years, the plant has been permitted to allow limited coal firing.

The following describes the permit restrictions issued by the FDEP regarding the use of coal as a fuel and the plan we expect to implement, in the event the decision is made to fire coal.

Delivery and Unloading

The most efficient method to deliver coal to the site is by truck. Each truck will hold approximately 25 tons of coal. The coal will be unloaded into a hopper and onto a covered conveyor for transport to the coal storage pile.

Optionally, coal could be transported to the site by rail. Rail delivery will require the installation of a new spur track from the existing line west of the site.

Storage and Retrieval

Coal unloaded at the unloading facility will be conveyed on a covered conveyor to a stacking tower. The coal will be stored in two distinct piles - i) an active pile, from which coal is withdrawn on a regular basis, and ii) an inactive pile which provides a back—up source of fuel and is used only in emergency situations. The active pile will be constantly used with coal being withdrawn from it by means of mobile equipment loading into a hopper. The hopper will deliver the coal onto a covered conveyor for delivery to the day

Appendix FMP-001, Fuel Management Plan (version dated 04/01/94)

hoppers. The coal will then be fed to the boilers as required from the day hoppers.

The inactive pile will be established by moving excess coal from the active pile by mobile equipment. The inactive coal pile will be compacted and treated to minimize fugitive emissions.

The maximum height of the coal pile will be 50 feet and its maximum size is not expected to exceed two acres. At any time that a coal pile has remained unused for a three month period, the pile will be treated with an encrusting agent to minimize fugitive emissions.

The design of the fire protection system for the plant includes a fire water distribution system, designed in accordance with appropriate NFPA standards, including piping, valves and yard hydrants. Hydrants will be located in strategic areas around the fuel storage area at a spacing of approximately 250 feet along the buried yard loop or branch line piping. Hydrants will be suitable for attaching hoses for manually fire fighting. Deluge water spray systems will be used for protection of the fuel handling equipment and the conveyors.

The pile will be spread and compacted to minimize the number of air pockets in the pile and the risk of fire. Also, the pile will be dampened when viewed to be dry.

During operation of the plant, fuel pile management personnel will be on site 24 hours a day. Telephone communication will be used to contact the local fire department upon the occurrence of a fire incident. The plant operation maintenance manual will incorporate instructions on fire protection and fighting procedure and personnel will be given classroom instructions.

The fire protection system is not yet designed. However, during the design process, the Palm Beach County Fire and Rescue office will be contacted to assure that its requirements are incorporated in the final design.

Quality Control

ASTM D-2234 will be used as guidance for the collection of a coal sample and ASTM D-2013 will be used for the analysis of the sample. The analysis will determine:

- Heating value, BTU/lb
- Moisture content, %
- Ash content, %
- Sulfur content, %

The sampling and testing by an independent laboratory will be conducted for each delivery. Samples will be collected and tested at the source and test results forwarded to Osceola for receipt prior to delivery of the coal. The limit for sulfur content as contained in the FDEP air permit is 0.7%.

Operational testing, including emissions ash testing, will provide additional information about the properties of the coal fired.

Under the terms of the coal supply contract the supplier will be requested to meet certain criteria relating to heating value, moisture ash and sulfur content. Any load which does not meet any one of these criteria, is subject to rejection by Osceola and the supplier will be responsible for its removal from site. The project will also have the right to conduct spot check analyses on deliveries to confirm the information submitted by the supplier.

Regular operational testing, such as the Continuous Emissions Monitoring and ash testing, will provide additional information relating to the quality of the coal.

**Wood-Waste
Inspection and Testing Plan**

Osceola Generating Plant

1995

Prepared by

Osceola Power Limited Partnership

Osceola Generating Plant
U.S. Hwy. & Hatton Highway
Pahokee, FL 33476

Submitted to

Florida Department of Environmental Protection Bureau of Air Regulation

Appendix FMTP-001, Fuel Management And Testing Plan

TABLE OF CONTENTS

1.0	INTRODUCTION	2
2.0	FACILITY INFORMATION	2
3.0	PROCESS DESCRIPTIONS	3
3-1	Wood-Waste Handling System	3
4.0	INSPECTION, SAMPLING, AND ANALYSIS PROCEDURES	3
4.1	Wood-Waste Supply Sites	3
4.2	OsGP Wood Yard Storage	4
4.4	Analysis Results	5
5.0	RECORDKEEPING	5

Reference:

Bechtel Drawing 22433-M-03 1-01440-02; "Fuel Handling System Flow Diagram"

1.0 INTRODUCTION

The Osceola Power, L.P. (OsPLP) is constructing a bagasse/wood-waste fired cogeneration plant, known as the Osceola Generating Plant (OsGP), adjacent to the site of the Sugar Mill. The OsGP is located approximately six miles east of the town of Pahokee in Palm Beach County, Florida.

As a provision of the OsGP's Florida Department of Environmental (FDEP) Air Permit ACSO-269980, PSD-FL-197A, the plant is required to implement inspection and testing procedures for the wood-waste and other materials delivered to the plant for fuel. The primary function of these procedures is to keep painted and chemically-treated wood, household garbage, toxic or hazardous non-biomass, and non-combustible waste material from being burned at the plant. This Wood-Waste Inspection and Testing Plan describes the implementation of these procedures during operation of the OsGP to ensure compliance with sampling and analysis provisions outlined in the air permit.

The plan includes a brief description of the OsGP and its operations related to wood-waste in Sections 2.0 and 3.0. Procedures for inspection, sampling, and analysis of the wood-waste at both the wood-waste supply sites and at the OsGP are described in Section 4.0. The OsGP procedures for record keeping of inspections, sampling, and analysis results are provided in Section 5.0. Drawings for the fuel system, showing inspection and sampling locations are provided in the appendix.

2.0 FACILITY INFORMATION

The Osceola Generating Plant (OsGP) is a new 74 MW (gross) bagasse and wood-waste fired cogeneration plant located in Pahokee, Florida, adjacent to the existing Osceola Sugar Mill. The plant is designed to supply high and low pressure steam to the Osceola Sugar Mill during the grinding season (mid-October to April) while burning bagasse, supplied by the sugar mill,

Appendix FMTP-001, Fuel Management And Testing Plan

as the primary fuel. During the non-grinding season the OsUP is designed to use processed wood-waste as the primary fuel, with no steam provided to the mill. Steam generation will be accomplished by means of bagasse and wood-waste fired non-reheat boilers. Electrical power generation will be provided by means of an extraction-condensing steam turbine generator set which will provide electricity to meet in-house loads and for sale to Florida Power & Light.

The major components of the plant include:

- two balanced draft bagasse/wood-fired boilers with membrane wall construction, superheater, and economizer (boilers are also permitted for future coal firing to a maximum of 5.4 % of rated heat input).
- two electrostatic precipitators (one per boiler) with integral stacks
- an extraction-condensing steam turbine! generator set
- material storage and handling systems (e.g., wood-waste, bagasse, ash) ancillary plant equipment

3.0 PROCESS DESCRIPTIONS

The following sub-sections describe the OsUP wood-waste system from a “process flow” standpoint. Although the OsUP also includes a bagasse handling system which operates during the sugar cane grinding season, only the wood-waste is subject to the sampling and analysis requirements of the OsUP air permit. Therefore, only the wood system is described in this plan.

3.1 Wood-Waste Handling System

The following description of the Wood-Waste Handling System is depicted schematically on the wood-waste/bagasse flow diagram (Bechtel Drawing #22586-M-03 1-0002-03) contained in the appendix.

Wood-waste will be delivered to the OsUP by net 25-ton trucks (typical) at an approximate design rate of 1,200 tons per day, with deliveries anticipated 12 hours per day, 6 days per week. The trucks will be unloaded at the OsUP utilizing two hydraulically operated, tipping floor truck dumpers.

Upon unloading, the wood-waste will be discharged into receiving hoppers equipped with live bottom chain conveyors which will transfer the wood material onto the 42” Truck Unloading Conveyor. The Unloading Conveyor, which is equipped with a belt scale and magnetic separator, will convey the wood-waste to the Hog Tower at a design rate of up to 200 tons per hour (tph).

The Hog Tower is an open facility consisting of a disc screen and a motor-driven, size-reducing hog. The wood-waste will be discharged onto the disc screen which acts to separate material sized less than 3” from any oversized material. The oversized material (i.e., >3”) is discharged to the Hog which reduces the wood pieces to the less than 3” size, suitable for feeding into the boilers.

The sized wood-waste is transferred from the Hog Tower via the Storage Conveyor to the Radial Stacker Conveyor which deposits the sized wood-waste at the wood storage area.

Sized wood-waste is reclaimed from the wood pile at a design rate of up to 125 tph through the use of two under-pile chain reclaimers. The reclaimers transfer the sized wood-waste to the Boiler Feed Conveyor which deposits the fuel on to one of two chain distribution conveyors for apportionment into the boilers.

Appendix FMTP-001, Fuel Management And Testing Plan

4.0 INSPECTION, SAMPLING, AND ANALYSIS PROCEDURES

As stated in Section 1.0, the FDEP Air Permit for the OsUP requires that inspection, sampling, and analysis of the wood-waste be performed to demonstrate that contaminants, principally copper, chromium, arsenic, are minimized.

The specific inspection and sampling procedures to be utilized at each stage of the wood-waste system is provided in the following sub-sections.

4.1 *Wood-Waste Supply Sites.*

As stipulated in the OsUP fuel supply contracts with the wood-waste suppliers, the delivered woodwaste must be substantially free of plastics, rubber, glass, and painted wood and contain only incidental amounts of chemically treated wood (e.g., chromium, copper, arsenic, creosote, pentachlorophenol).

To help ensure that wood-waste delivered to the OsUP meets the provisions of the air permit, as well as other fuel quality specifications, the wood-waste suppliers will perform inspection and material segregation operations on each load of feedstock received at their facilities. Although the OsUP will obtain wood-waste fuel from several different suppliers with a variety of sources for their unprocessed feedstock, the following description of the inspection and material segregation operations are typical of those operations performed at wood yards supplying the OsUP.

The bulk material feedstock at the originating wood yards will first undergo a “gross” material separation by removing the bulk wood-waste from other mixed wastes (e.g., plastics, non-wood debris, scrap metal, concrete/soils) through the use of heavy equipment, magnetic separation, and mechanical screening. Trained personnel will be involved in oversight at this level of material segregation such that the majority of prohibited wastes are removed from the bulk wood-waste. After this operation, the wood-waste will be further visually inspected and manually sorted (when applicable) to remove chemically-treated and painted wood, smaller mixed wastes and other non-combustible materials. The “sorted” wood-waste is then mechanically sized and screened (to actual contract specifications) prior to delivery to the OsUP site.

As a quality assurance measure, each fuel supplier’s operations will be reviewed at least once monthly through an unannounced site inspection of OsUP personnel. These visits will allow OsUP to ensure that the supplier’s inspection and segregation efforts remain at acceptable levels.

4.2 *OsUP Wood Yard Storage*

In accordance with the FDEP Air Permit, analysis of wood-waste to be burned at the plant will be conducted on a weekly basis for the first year of operation at the OSUP. Thereafter, upon approval of FDEP, sampling and analysis may be reduced to a monthly basis.

Upon delivery of the wood-waste to the OSUP, each load will be visually inspected by the Fuel/Ash Handler stationed at the truck receiving dumping area. Loads which contain unacceptable, visible amounts (i.e., greater than fuel contract specified limits) of chemically treated and/or painted wood and other prohibited mixed wastes will be rejected by the inspector and prevented from discharging at the OsUP fuel storage area. If the delivered load is acceptable based on the visual inspection, the truck will be staged for unloading.

Appendix FMTP-001, Fuel Management And Testing Plan

Sampling of the wood-waste will occur at the OsUP fuel storage yard. Representative samples will be taken from specified sections of the wood-waste pile which represent and include the fuel to be reclaimed and burned during the following week of plant operation. These “weekly” sections, and their schedule for reclamation and burning, will be identified and approved by the Plant Manager (or designee) prior to samples being taken.

A total of three grab samples will be taken from different areas and depths as the specified “weekly” section of the fuel pile. Each grab sample will be approximately one pound and will be stored in sealable plastic (ziplock®-type) bags.

Prior to releasing the samples for outside lab analysis, a “composite sample” will be produced by combining the three individual grab samples into a homogeneous mixture and cutting out a single sample from the mixture as specified by the lab performing the analysis. This “composite sample” will represent the composition of the wood-waste to be burned during the following week of plant operations. The remaining portion of the homogenous mixture will be retained onsite for use as a control sample to verify the lab test results, if necessary.

Laboratory results on the samples will typically be available to the OsUP Fuel Manager within 2-3 days of receipt of the sample at the lab. Any results which indicate contamination of the wood-waste in the “weekly” section of the pile by copper, chromium, and/or arsenic in concentrations above the air permit-specified limits (i.e., 62.8 ppm copper, 83.3 ppm chromium, and 70.7 ppm arsenic) will be immediately investigated by the onsite Environmental, Health and Safety Representative (EH&S). The “weekly” section of the pile tested will not be burned until additional testing of the control sample is undertaken to verify the original test results. If necessary additional sampling/testing will be performed to determine the extent of contaminated wood-waste in the “weekly” section of the fuel pile.

4.4 Analysis Results

Results from the wood-waste tests will be analyzed so that a confidence level of the content of regulated metals in the feedstock (wood-waste) can be determined. This information will be used to assess the adequacy of the wood-waste inspection procedures. In addition, this information may be used to support a future request by OsUP for FDEP to relax the sampling and analysis requirements of this plan.

5.0 RECORDKEEPING

As required by the OsUP air permit, results from the weekly wood-waste analysis will be included in the Stack Monitoring Reports submitted quarterly to FDEP’s South and Southeast district Offices and the Palm Beach County Health Unit. Specifically, FDEP will be notified of:

- Any analysis results which indicate exceedances of the allowable concentrations of copper, chromium, and arsenic.
- Any re-sampling/re-analysis and handling (“blending”) of the wood-waste performed in the event an exceedance is indicated by the original analysis.

Appendix FMTP-001, Fuel Management And Testing Plan

- The ultimate disposal of the out of specification material.

In addition, records on the various wood-waste inspections and wood-waste sampling and analysis procedures outlined in this Plan will be maintained at the OSUP for review on an as-requested basis by FDEP. The records will typically include:

- Fuel delivery information (e.g., supplier, time/date of delivery, type of material, delivery size).
- Written inspection reports (stating findings) of unannounced site visits to wood-waste suppliers to determine adequacy of their material segregation operations.
- Wood-waste sampling and analysis information (e.g., time/date of sampling, locations selected from the “weekly” sections, any atypical conditions, labs utilized, sample results).

These records may also be used by OsUP personnel in investigating potential non-compliance events and verifying fuel test results.

Appendix H-1, Permit History/ID Number Changes

Osceola Farms Company

DRAFT Title V

Permit No.: 0990019-002-AV

Sugarcane Processing & Power Generation Facility

Page 1 of 5

<u>EU ID No.</u> <u>Date.</u>	<u>Description</u> <u>Revised Date</u>	<u>Permit No(s).</u>	<u>Issue Date</u>	<u>Exp.</u>
002	Mill Boiler No. 2			
	AO – Initial 7/1/75	AO50-2049 -	5/23/73	
	AC – AQCS N/A	AC50-2049A -	2/10/75	
	AC – Amendment	AC50-2049A	-	-
	AO – Renewal 3/30/81	AO50-2049A -	3/30/76	
(1986)	AO – Renewal -	AO50-7261	6/30/81	?
(1991)	AO – Renewal -	AO50-12059	? (1986)	?
	AO – Renewal 11/12/96	AO50-203679 -	11/12/91	
	AO – Amendment	AO50-203679	-	-
	AO – Amendment	AO50-203679	-	-
	AO – Extension	AO50-203679	-	Note
1	-			
	AO – Amendment	AO50-203679	-	-
003	Mill Boiler No. 3			
	AO - Initial 7/1/75	AO50-2050 -	5/23/73	
	AC – AQCS N/A	AC50-2051A -	2/10/75	
	AO – Renewal 4/12/81	AO50-2051A	? (1976)	
	AO – Renewal -	AO50-7262	6/30/81	?
(1986)	-			
(1991)	AO – Renewal -	AO50-144971 & PSD-FL-134 Twin Towers Office Building 2600 N. US Highway 1 Tallahassee, Florida 32399-2400	? (1986)	Leb Bush Governor
	AC – Major Modification N/A	AC50-144971 & PSD-FL-134	10/21/88	
	AC – Amendment	AC50-144971 & PSD-FL-134	-	
	AC – Amendment	AC50-144971 & PSD-FL-134	-	

Department of
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(1986)
(1991)

Appendix H-1, Permit History/ID Number Changes

Osceola Farms Company

DRAFT Title V

Permit No.: 0990019-002-AV

Sugarcane Processing & Power Generation Facility

Page 2 of 5

<u>EU ID No.</u> <u>Date.</u>	<u>Description</u> <u>Revised Date</u>	<u>Permit No(s).</u>	<u>Issue Date</u>	<u>Exp.</u>
003	Mill Boiler No. 3 (cont.)			
	AO – Initial/Renewal 6/26/94	AO50-165813 -	6/26/89	
	AO – Amendment	AO50-165813	-	-
	AO – Amendment	AO50-165813	-	-
	AO – Amendment	AO50-165813	-	-
004	Mill Boiler No. 4			
	AO – Initial 7/1/75	AO50-2051 -	5/23/73	
	AC – AQCS N/A	AC50-2052A -	5/27/74	
	AC – Amendment	AC50-2052A	-	-
	AO – Renewal 3/30/81	AO50-2052A -	3/30/76	
(1986)	AO – Renewal -	AO50-7263	6/30/81	?
(1991)	AO – Renewal -	AO50-12059	?(1986)	?
	AO – Renewal 11/12/96	AO50-203680 -	11/12/91	
	AO – Amendment	AO50-203680	-	-
	AO – Amendment	AO50-203680	-	-
	AO – Extension	AO50-203680	-	Note
1	-			
	AO – Amendment	AO50-203680	-	-
005	Mill Boiler No. 5			
	AC – Initial	AC50-4770	5/26/78	
	AC – Amendment	AC50-4770	-	
(1984)	AO – Initial -	AO50-?	?(1984)	
(1989)	AO – Renewal -	AO50-?	?(1984)	
	AO – Renewal 6/19/94	AO50-165626 -	6/19/89	
EU ID No.	Description	Permit No(s)	Issue Date	Exp.

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Appendix H-1, Permit History/ID Number Changes

Osceola Farms Company

DRAFT Title V**Permit No.: 0990019-002-AV**

Sugarcane Processing & Power Generation Facility

Page 3 of 5

<u>Date.</u>	<u>Revised Date</u>			
005	Mill Boiler No. 5 (cont.)			
	AO – Amendment	AO50-165626	-	-
	AO – Amendment	AO50-165626	-	-
	AO – Extension	AO50-165626	-	Note
1	-			
	AO – Amendment	AO50-203680	-	-
006	Mill Boiler No. 6			
	AC – Initial	AC50-43777	11/12/81	-
	AC – Initial (EPA)	PSD-FL-080	12/4/81	-
	AO – Initial	AO50-79267	? (1984)	?
(1989)	-			
	AC – Modification	AC50-112851	10/13/86	-
	AO – Operating/COCOC	AO50-132502	? (1987)	?
(1992)	-			
	AO – Amendment	AO50-132502	-	-
	AC – Modification	AC50-144972 & PSD-FL-134	10/17/88	-
	AC – Amendment	AC50-144972 & PSD-FL-134	-	-
	AO – Renewal	AO50-165814	6/22/89	
	6/22/94	-		
	AO – Amendment	AO50-165814	-	-
	AO – Amendment	AO50-165814	-	-
	AO – Amendment	AO50-165814	-	-
	AO – Amendment	AO50-165814	-	-
	AO – Extension	AO50-165814	-	Note
1	-			
007	Lime Silo			
	AC – Initial	AO50-165814	11/7/96	

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Appendix H-1, Permit History/ID Number Changes

Osceola Farms Company

DRAFT Title V

Permit No.: 0990019-002-AV

Sugarcane Processing & Power Generation Facility

Page 4 of 5

<u>EU ID No.</u> <u>Date.</u>	<u>Description</u> <u>Revised Date</u>	<u>Permit No(s).</u>	<u>Issue Date</u>	<u>Exp</u>
008	Materials Handling and Storage Operations (Cogeneration Facility)			
	AC – Initial	AC50-219795 & PSD-FL-197	9/27/93	-
	AC – Modification	AC50-269980 & PSD-FL-197A	10/16/95	-
	AC – Extension	AC50-269980 & PSD-FL-197A	-	Note
2	-			
009	Bagasse Handling Operations (Sugarcane Process Facility)			
	AC – Initial	AC50-43777	11/12/81	-
	AC – Initial (EPA)	PSD-FL-080	12/4/81	-
	AO – Initial	AO50-79267	? (1984)	?
(1989)	-			
	AO – Operating/COCOC	AO50-132502	? (1987)	?
(1992)	-			
	AO – Amendment	AO50-132502	-	-
	AC – Modification	AC50-144972 & PSD-FL-134	10/17/88	-
	AO – Renewal	AO50-165814	6/22/89	
	6/22/94	-		
	AO – Amendment	AO50-165814	-	-
	AO – Amendment	AO50-165814	-	-
	AO – Amendment	AO50-165814	-	-
	AO – Extension	AO50-165814	-	Note
1	-			
010 & 011	Cogeneration Boiler Nos. 1 & 2 (Cogeneration Facility)			
	AC -- Initial	AC50-219795 & PSD-FL-197	9/27/93	-
	AC – Modification	AC50-269980 & PSD-FL-197A	10/16/95	-
	AC – Extension	AC50-269980 & PSD-FL-197A	-	Note
2	-			
	AC – Amendment	PSD-FL-197A	-	
	AC – Amendment	AC50-269980 & PSD-FL-197A	-	

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Appendix H-1, Permit History/ID Number Changes

Osceola Farms Company

DRAFT Title V**Permit No.: 0990019-002-AV**

Sugarcane Processing & Power Generation Facility

Page 5 of 5

<u>EU ID No.</u> <u>Date.</u>	<u>Description</u> <u>Revised Date</u>	<u>Permit No(s).</u>	<u>Issue Date</u>	<u>Exp</u>
	AC – Amendment	AC50-269980 & PSD-FL-197A	-	-
	AC – Amendment	AC50-269980 & PSD-FL-197A	-	-
	AC – Amendment	AC50-269980 & PSD-FL-197A	-	-
010 & 011	Cogeneration Boiler Nos. 1 & 2 (Cogeneration Facility)			
	AC – Amendment	AC50-269980 & PSD-FL-197A	-	-
012	Volatile Organic Liquid Storage Vessels (NSPS Kb)			
	AC/AO	Rule 62-210.300(b)(3), F.A.C. (Temporary Exemption)		

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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Appendix OMP-001, Operation and Maintenance Plan – Fly Ash Silo Baghouse

Reserved – To be provided at least 30 days prior to reactivation of the Cogeneration Facility Boilers.

Example Requirements:

The plan shall include a schedule for the maintenance and inspection of each control device and collection system and a schedule for recording performance parameters of the control devices, collection systems and auxiliary equipment. Records of inspections, maintenance and performance data of control devices and auxiliary equipment shall be retained by the emissions unit and shall be made available to the Department upon request. The performance parameters shall include such physical, chemical or electrical characteristics as are applicable to the particular emissions unit and which are indicators of the condition, operating rates and efficiencies. Such parameters may include, but shall not be limited to, the following indicators for:

Baghouses

- Bag pressure drop
- Gas flowrate: direct method preferred; indirect method acceptable
- Air to cloth ratio
- Bag Weave
- Bag material
- Gas temperature, inlet and outlet
- Bag cleaning conditions:
 - Pulse: Air pressure
 - Shake: shaker motor current
 - Reverse: reverse air fan current
- Bag cleaning cycle:
 - Shake: duration, frequency, and delay periods
 - Reverse: duration, frequency, and delay periods

The Operation and Maintenance plan shall include identification of control device(s) for each emissions unit subject to provisions of this rule including but not limited to the following appropriate design specifications and other descriptive data:

1. Manufacturer
2. Model name and number
3. Type: scrubber, baghouse, electrostatic precipitator, dry scrubber, etc.
4. Design flow rate (liquid and/or gas)
5. For EPS's: primary and secondary voltage and current
6. Efficiency rating at design capacity
7. Pressure drop
8. Liquid to gas ratio
9. Scrubbing liquor composition

Appendix OMP-001, Operation and Maintenance Plan – Fly Ash Silo Baghouse

Appropriate parameters of processing or materials handling systems provide a measure of the rate of operations. The operation and maintenance plan shall include performance parameters which indicate the rate of operation, process weight through-put, the fuel or other energy source, the materials being processed or other physical or chemical characteristics, as applicable. Such parameters may include, but shall not be limited to the following:

- a. Weight per unit time of raw materials input;
- b. Process temperature or pressure;
- c. Fuel or fuel mixture;
- d. Chemical or physical data on product or raw materials;
- e. Air to fuel ratio or percent excess oxygen;
- f. Electrical power use rate by auxiliary equipment.

The plan shall contain inspection and maintenance schedules including periodic assessments of the condition of manholes, ducting, breaching, hoods, conveyor and elevator housing, loading sheds and other equipment, and a schedule for recording of performance parameter data.

Records of inspection, maintenance and performance parameter data shall be retained and shall be made available to the Department upon request.

Appendix OMP-002, Operation and Maintenance Plan – Mercury Control Agent silo Baghouses

Reserved – To be provided at least 30 days prior to reactivation of the Cogeneration Facility Boilers.

Example Requirements:

The plan shall include a schedule for the maintenance and inspection of each control device and collection system and a schedule for recording performance parameters of the control devices, collection systems and auxiliary equipment. Records of inspections, maintenance and performance data of control devices and auxiliary equipment shall be retained by the emissions unit and shall be made available to the Department upon request. The performance parameters shall include such physical, chemical or electrical characteristics as are applicable to the particular emissions unit and which are indicators of the condition, operating rates and efficiencies. Such parameters may include, but shall not be limited to, the following indicators for:

Baghouses

- Bag pressure drop
- Gas flowrate: direct method preferred; indirect method acceptable
- Air to cloth ratio
- Bag Weave
- Bag material
- Gas temperature, inlet and outlet
- Bag cleaning conditions:
 - Pulse: Air pressure
 - Shake: shaker motor current
 - Reverse: reverse air fan current
- Bag cleaning cycle:
 - Shake: duration, frequency, and delay periods
 - Reverse: duration, frequency, and delay periods

The Operation and Maintenance plan shall include identification of control device(s) for each emissions unit subject to provisions of this rule including but not limited to the following appropriate design specifications and other descriptive data:

1. Manufacturer
2. Model name and number
3. Type: scrubber, baghouse, electrostatic precipitator, dry scrubber, etc.
4. Design flow rate (liquid and/or gas)
5. For EPS's: primary and secondary voltage and current
6. Efficiency rating at design capacity
7. Pressure drop
8. Liquid to gas ratio
9. Scrubbing liquor composition

Appendix OMP-002, Operation and Maintenance Plan – Mercury Control Agent silo Baghouses

Appropriate parameters of processing or materials handling systems provide a measure of the rate of operations. The operation and maintenance plan shall include performance parameters which indicate the rate of operation, process weight through-put, the fuel or other energy source, the materials being processed or other physical or chemical characteristics, as applicable. Such parameters may include, but shall not be limited to the following:

- a. Weight per unit time of raw materials input;
- b. Process temperature or pressure;
- c. Fuel or fuel mixture;
- d. Chemical or physical data on product or raw materials;
- e. Air to fuel ratio or percent excess oxygen;
- f. Electrical power use rate by auxiliary equipment.

The plan shall contain inspection and maintenance schedules including periodic assessments of the condition of manholes, ducting, breaching, hoods, conveyor and elevator housing, loading sheds and other equipment, and a schedule for recording of performance parameter data.

Records of inspection, maintenance and performance parameter data shall be retained and shall be made available to the Department upon request.

Appendix OMP-003, Operation and Maintenance Plan – Cogeneration Facility Boiler AQCS

Reserved – To be provided at least 30 days prior to reactivation of the Cogeneration Facility Boilers.

Example Requirements:

The plan shall include a schedule for the maintenance and inspection of each control device and collection system and a schedule for recording performance parameters of the control devices, collection systems and auxiliary equipment. Records of inspections, maintenance and performance data of control devices and auxiliary equipment shall be retained by the emissions unit and shall be made available to the Department upon request. The performance parameters shall include such physical, chemical or electrical characteristics as are applicable to the particular emissions unit and which are indicators of the condition, operating rates and efficiencies. Such parameters may include, but shall not be limited to, the following indicators for:

Electrostatic Precipitators.

The following information shall be recorded unless otherwise agreed to by the Department:

- Primary voltage
- Primary current
- Secondary current
- Spark rate
- Secondary voltage
- Rapper frequency, plate
- Rapper Vibrator frequency, wire
- Rapper duration, plate
- Rapper Vibrator duration, wire
- Gas temperature, inlet and outlet
- Estimated gas flowrate
- Static pressure

The Operation and Maintenance plan shall include identification of control device(s) for each emissions unit subject to provisions of this rule including but not limited to the following appropriate design specifications and other descriptive data:

1. Manufacturer
2. Model name and number
3. Type: scrubber, baghouse, electrostatic precipitator, dry scrubber, etc.
4. Design flow rate (liquid and/or gas)
5. For EPS's: primary and secondary voltage and current
6. Efficiency rating at design capacity
7. Pressure drop
8. Liquid to gas ratio
9. Scrubbing liquor composition

Appendix OMP-003, Operation and Maintenance Plan – Cogeneration Facility Boiler AQCS

Appropriate parameters of processing or materials handling systems provide a measure of the rate of operations. The operation and maintenance plan shall include performance parameters which indicate the rate of operation, process weight through-put, the fuel or other energy source, the materials being processed or other physical or chemical characteristics, as applicable. Such parameters may include, but shall not be limited to the following:

- a. Weight per unit time of raw materials input;
- b. Process temperature or pressure;
- c. Fuel or fuel mixture;
- d. Chemical or physical data on product or raw materials;
- e. Air to fuel ratio or percent excess oxygen;
- f. Electrical power use rate by auxiliary equipment.

The plan shall contain inspection and maintenance schedules including periodic assessments of the condition of manholes, ducting, breaching, hoods, conveyor and elevator housing, loading sheds and other equipment, and a schedule for recording of performance parameter data.

The operation and maintenance plan may include, but shall not be limited to, the following:

Steam flow
Fuel type (e.g., gas, oil, coal, or mixtures thereof)
Consumption rate for type(s) of fuel(s) burned
Fuel oil temperature (if applicable)

Records of inspection, maintenance and performance parameter data shall be retained and shall be made available to the Department upon request.

Appendix OMP-004, Operation and Maintenance Plan – Mill Boiler No. 3 - CO BACT

O/M Plan Requirement	Requirement Type
Operate the boiler with trained personnel as recommended by the manufacturer and as determined by operating practice.	Training
Instruct the boiler operators and other appropriate personnel in proper boiler and scrubber operation so as to minimize emissions; such instruction shall take place and shall be repeated as necessary to inform new employees.	Training
Provide uniform air distribution in the combustion zone using under-fire and/or over-fire as necessary and practicable.	Design
At least once per hour, examine the bagasse feeders to assure proper and uniform distribution of bagasse.	Monitor & Record
With regard to flue gases, take all appropriate measures to minimize the leakage of tramp air into the boiler flue gas ducts, visually check the integrity of the ducts once per week, and make necessary repairs (temporary or permanent) within seven days, unless a longer time period is approved by the Compliance Authority.	Monitor & Record
Provide sufficient oxygen as necessary and practicable for efficient boiler operation.	Operating
Calibrate, operate, and maintain the existing O ₂ monitor and take readings of the O ₂ two times per shift.	Maintenance & Operation
Operate Boiler No. 3 in an O ₂ range between 2 and 12 percent (one hour average).	Operating
Maintain the existing alarm system for the O ₂ monitor on Boiler No. 3 to be triggered if the O ₂ range is exceeded.	Maintenance & Operation

Appendix OMP-005, Operation and Maintenance Plan – Mill Boiler No. 6 - CO BACT

O/M Plan Requirement	Requirement Type
Operate the boiler with trained personnel as recommended by the manufacturer and as determined by operating practice.	Training
Instruct the boiler operators and other appropriate personnel in proper boiler and scrubber operation so as to minimize emissions; such instruction shall take place and shall be repeated as necessary to inform new employees.	Training
Provide uniform air distribution in the combustion zone using under-fire and/or over-fire as necessary and practicable.	Design
At least once per hour, examine the bagasse feeders to assure proper and uniform distribution of bagasse.	Monitor & Record
With regard to flue gases, take all appropriate measures to minimize the leakage of tramp air into the boiler flue gas ducts, visually check the integrity of the ducts once per week, and make necessary repairs (temporary or permanent) within seven days, unless a longer time period is approved by the Compliance Authority.	Monitor & Record
Provide sufficient oxygen as necessary and practicable for efficient boiler operation.	Operating
Calibrate, operate, and maintain the existing O ₂ monitor and take readings of the O ₂ two times per shift.	Maintenance & Operation
Operate Boiler No. 6 in an O ₂ range between 2 and 12 percent (one hour average).	Operating
Maintain the existing alarm system for the O ₂ monitor on Boiler No. 6 to be triggered if the O ₂ range is exceeded.	Maintenance & Operating

Appendix RBL-001, RACT, BACT & LEAR Determinations

The following RACT, BACT and LAER determination(s) are part of the Title V Operating Permit:

Date	Emissions Unit ID No.	Type	Pollutant(s)
08/07/81	006, Mill Boiler No. 6	BACT BACT BACT BACT	Particulate (Bagasse) Particulate (fuel oil) Sulfur Dioxide (fuel oil) Visible Emissions
08/14/81	006, Mill Boiler No. 6	LAER	Hydrocarbons
10/17/88	003, Mill Boiler No. 3	LAER BACT BACT	Volatile Organic Compounds Oxides of Nitrogen Carbon Monoxide
10/17/88	006, Mill Boiler No. 6	LAER BACT BACT	Volatile Organic Compounds Oxides of Nitrogen Carbon Monoxide
07/22/91	003, Mill Boiler No. 3	BACT	Carbon Monoxide
07/22/91	006, Mill Boiler No. 6	BACT	Carbon Monoxide
9/17/93	010 & 011 Cogen Boilers	BACT BACT BACT	Sulfur Dioxide Fluorides Beryllium
9/17/93	010 & 011 Cogen Boilers	RACT RACT	Nitrogen Oxides Volatile Organic Compounds
10/11/95	010 & 011 Cogen Boilers	Re-BACT Re-BACT Re-BACT	Sulfur Dioxide Fluorides Beryllium
10/22/97	010 & 011 Cogen Boilers	BACT	Nitrogen Oxides

Appendix TDF-001, Tire Derived Fuel Authority To Conduct Test Burn

The Permitting Authority reviewed the request from Osceola Power Limited Partnership received on May 16, 1996, and the supplementary information dated July 17, and October 8, 1996 concerning the burning of a blend of tire derived fuel (TDF) and biomass in the cogeneration facility located near Pahokee, Palm Beach County, Florida.

The permittee is authorized to conduct performance tests on one boiler at this or a similar (Okeelanta Power LP) facility while it is burning a blend of up to 25 percent TDF (by weight) for the regulated air pollutants and metals for a period not to exceed 60 days, and within 90 days from the first day TDF is burned in the boiler. Test results must include a material balance (fuels, emissions, bottom ash, and fly ash) of the metals in the fuels. All conditions of permit No. AC 50-269980/PSD-FL-197B related to air pollution emission limits and control equipment remain in force during the test burn.

The performance test shall be conducted in order to gather data regarding air pollutant emissions, any operation limitations on burning a blend of up to 25 percent by weight TDF in the boiler, and to determine the metal content in the bottom and fly ash. The test results and any changes to the current request to permanently be allowed to burn TDF in this facility shall be sent to the Department's Bureau of Air Regulation, South District, and the Palm Beach County Public Health Department within 45 days of completion of the tests.

The performance test shall be subject to the following conditions:

1. The permittee shall notify the Palm Beach County Public Health Department, the DEP South District, and the Bureau of Air Regulation at least one day prior to burning TDF and 15 days prior to commencement of the performance test. A written test report shall be submitted to these offices within 45 days of completion of the last test run.
2. The maximum TDF content of the fuel shall not exceed 25 percent by weight. Performance testing shall be conducted in 60 calendar days and completed within 90 days of when the TDF is first introduced into the boiler.
3. Stack emissions due to TDF firing shall not exceed any limit for coal firing in the construction permit No. PSD-FL-197B for this unit.
4. To provide reasonable assurance that this fuel blend can be burned in compliance with the air regulations, as-burned fuel samples (biomass and TDF), bottom ash, and fly ash shall be collected and analyzed for total metals content (selenium, silver, chromium, copper, arsenic, cadmium, zinc oxide, mercury, lead, and beryllium) throughout the test burn of the blended fuel. Weekly composite of daily samples shall be required as well as analyses of a composite sample collected during the particulate matter tests.

To provide reasonable assurance that the ash generated from this fuel blend can be disposed of in compliance with the solid and hazardous waste regulations, representative samples of the fly and bottom ash generated as the result of burning wood waste and TDF shall be sampled and analyzed in accordance with the requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition."

- a) Representative samples shall account for variability in both the fly and bottom ash. The US EPA's June 1995 protocol entitled "Guidance For Sampling and Analysis of Municipal Waste Combustion Ash For the Toxicity Characteristic" shall be used as guidance for collecting, handling, storing and analyzing a representative sample.

Appendix TDF-001, Tire Derived Fuel Authority To Conduct Test Burn

- b) Representative composite samples of fly and bottom ash shall be analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc oxide using SW-846 test method 1311 (TCLP) and 3050 (total metals digestion).
 - c) A minimum of two composite samples each of fly and bottom ash shall be collected and analyzed at the beginning of the sampling event for organic constituents listed in 40 CER 261.24 Table I using SW-846 test method 1311 (TCLP). If organic constituents are present, then the remainder of the composite samples collected shall be analyzed for organic constituents listed in 40 CFR 261.24 Table 1 using SW-846 test method 1311 (TCLP).
 - d) A minimum of two composite samples of each of the fly and bottom ash, shall be collected and analyzed at the beginning of the sampling event for those PCDD/PCDF constituents listed in SW-846 test method 8290. The ash samples shall be analyzed using SW-846 test method 8290.
 - e) Daily composite samples of the blended fuel, wood waste mixed with TDF, shall be collected during the ash sampling period and analyzed for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc oxide using SW-846 test method 3050. The blended fuel mixture, wood waste and TDF, samples shall be blended and reduced in size to pass through a #60 mesh screen prior to analysis of specific chemicals.
5. A material balance of the metals in the fuel, emissions, bottom, and fly ash shall be reported based on the test/analytical data.
6. The maximum feed rate of tires to each boiler at the Osceola cogeneration plant shall not exceed 23,871 lbs/hr or 25 percent by weight of the total feed rate, whichever is less.
7. Besides the currently regulated pollutants, test the emissions for hydrochloric acid, arsenic, cadmium, chromium, zinc oxide, benzene, PCB, and dioxins/furans.
8. Emission tests shall be conducted for sulfur dioxide, nitrogen oxides, carbon monoxide, and visible emissions from the boiler during the test burn.
9. Based on the data collected during the test burn, estimate the actual and potential emissions that will occur if the maximum amount of TDF requested is burned in the facility.
10. Any performance test shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix LX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C.
11. The existing construction permit is extended until July 1, 1997, to allow time to complete the performance test. If additional time is needed, the permittee shall request an extension of time and provide the Department with documentation of the progress accomplished to date and shall identify the work required to complete the performance test.
12. Daily records (i.e., mass feed rates of each fuel, heat input, steam production, pressure, temperature, MW, fuel input rates, etc.) of the boiler operations when firing the TDF blend during the tests shall be maintained.
13. For rule applicability determination, calculate any change in emissions (lbs/hr and TPY) for all air pollutants that would result from the firing of a blend of TDF compared with presently permitted scenarios.

Appendix TDF-001, Tire Derived Fuel Authority To Conduct Test Burn

14. The authorized TDF test burn performance test shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C.
15. Performance testing shall cease as soon as possible if the test boiler operations are not in accordance with the conditions in the air permit No. PSD-FL-197B, or this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
16. This Department action is only to authorize the TDF blend performance test. Any firing of tire derived fuel beyond the 60 calendar day of testing approved to conduct such tests will be deemed a violation of permit No. PSD-FL-197C.
17. The Palm Beach County Public Health Department, the Department's South District and Bureau of Air Regulation shall be notified within 5 days, in writing, upon completion of the final test.
18. The testing series shall include emissions test for the maximum TDF blend (25 percent) with the boiler operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the capacity allowed by Permit No. PSD-FL-197B.
19. A test protocol, specifying the pollutants to be tested and the sampling and analysis methods, including fuel and ash, shall be submitted to the Bureau of Air Regulation, with copies to the Palm Beach County Public Health Department and Department's South District, for approval prior to commencement of testing.

Appendix U-1, List of Unregulated Emission Units and/or Activities

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities have been identified by the permittee as ‘unregulated emissions units’.

EU ID No.	EU Description	Activities/Equipment
013	Sugar Mill Boiling House	<ul style="list-style-type: none"> Centrifugals with mixers Crystallizers Evaporator Cleaning Operations Evaporators (w/ non-condensable gas vent) Juice Heaters Mud Filter Condensers Vacuum Pumps Non-NSPS Process Tanks (batch, clarified juice, coagulant mix, flash, liming, mingler, mixer, mud mixing, pan feed, magma, mud waste, muriatic, sugar receiver, syrup storage, and alcohol (isopropanol)) Rotary Vacuum Filters Sugar Receiver Tanks Vacuum Pans, Condensers, and Pumps
014	Sugar Mill Building	<ul style="list-style-type: none"> Cane Mills Cush-cush and DSM Screens Mill Turbines with vents
015	Sugar Mill Agricultural Shop	<ul style="list-style-type: none"> Agricultural shop operations Auto repairs & maintenance (non-painting) Harvester blade remanufacturing station
016	Sugar Mill Boiler House	<ul style="list-style-type: none"> Boiler Ash Disposal, Handling, and Storage Boiler Blowdown Pipes & Vents Boiler Water Chemical Prep Tanks Boiler water deaerator and tank
017	Sugar Mill Cane Dumping Area	<ul style="list-style-type: none"> Cane dumping, handling, and storage Cane knives, shredding, and conveying
018	Sugar Mill Cooling Tower Area	<ul style="list-style-type: none"> Molasses Loadout Surge Tank Three Cell Cooling Tower
019	Sugarcane Processing Facility	<ul style="list-style-type: none"> Bagasse & wood chip storage piles Batch mixers (<30 Cu. ft.) Carbonaceous fuel storage piles Cold cleaning devices (non-halogenated solvent) Containers for oils/wax/grease Cooling water towers and canals Diesel, gasoline, fuel oil, kerosene, lube oil, waste and used oil storage tanks (Non-NSPS)

Appendix U-1, List of Unregulated Emission Units and/or Activities

EU ID No.	EU Description	Activities/Equipment
019	Sugarcane Processing Facility	<ul style="list-style-type: none"> • Electric ovens for drying • Emergency generators • Gear boxes, reducers vents • Handling of raw sugar • Molasses storage tanks • Oil/water separator/skimmer equipment • Painting operations • Portable diesel air compressors • Portable welders • Pressurized LPG tanks • Process water filtration intake screens • Process wide flanges and valves • Scrubber water ponds and troughs • Stationary internal combustion engines (general) • Used oil tanks/drums (covered) • Vacuum cleaning systems • Vacuum filter cake (cachassa) ponds • Vehicle generated dust • Vents from hydraulic/lube oil reservoirs • Woodworking and metal working operations
020	Sugar Mill Fuel Farm	<ul style="list-style-type: none"> • Diesel & Gasoline Pumps and Loading Arms
021	Sugar Mill Sewer Plant	<ul style="list-style-type: none"> • Portable Water Treatment Plant
022	Sugar Mill Process Water Discharge	<ul style="list-style-type: none"> • Discharge Canals
023	Process Water Treatment	<ul style="list-style-type: none"> • Aqueous Lime Storage • Aqueous Lime Receiving • Lime Mixing Tanks
024	Cogeneration Facility	<ul style="list-style-type: none"> • Boiler drum blowdown tank • Boiler feed water diesel pump (emergency use only) • Cooling Tower • Decarbonator Tower • Diesel fire pump diesel engine and diesel fuel storage tank • Hydrogen Sulfide degasifier • No. 2 distillate fuel oil storage tank • Return condensate water tank • Tire derived fuel and handling operations • Waste water neutralization tank

Appendix Wood-001, Sugar Mill Boilers Authority To Burn Wood Chip Fuel

The Permitting Authority authorized the firing of wood chip fuels through the following permit amendments:

- May 24, 1994, Emissions Unit 002 – Mill Boiler No. 2
- July 26, 1994, Emissions Unit 003 – Mill Boiler No. 3 (NSPS Db Boiler)
- May 24, 1994, Emissions Unit 004 – Mill Boiler No. 4
- May 24, 1994, Emissions Unit 005 – Mill Boiler No. 5
- July 26, 1994, Emissions Unit 006 – Mill Boiler No. 6

Authorization was based on an application for an amendment to the existing air pollution operation permits received from Osceola Farms Company (Osceola) on January 27, 1994, requesting authority to burn wood chip fuel in the mill boilers. The authorizations were granted based on no increase in actual emissions from any of the units. The authorizations are subject to the following requirements:

1. Osceola is authorized to burn clean wood chip fuel in the following boilers:
 - (a) Emissions Unit 002, Mill Boiler No. 2
 - (b) Emissions Unit 003, Mill Boiler No. 3 (NSPS Db Boiler)
 - (c) Emissions Unit 004, Mill Boiler No. 4
 - (d) Emissions Unit 005, Mill Boiler No. 5
 - (e) Emissions Unit 006, Mill Boiler No. 6
2. Osceola shall not burn wood chip fuel that contains any of the following:
 - (a) Paint.
 - (b) Pentachlorophenol.
 - (c) Creosote.
 - (d) Tar.
 - (e) Asphalt.
 - (f) Wood preservative.
 - (g) Tires.
 - (h) Rubber.
 - (i) Roofing material.
 - (j) Railroad cross ties.
 - (k) Plastics.
 - (l) Asbestos.
 - (m) Garbage.
 - (n) Hazardous substances.
 - (o) Hazardous wastes.
 - (p) Biomedical wastes.

Appendix Wood-001, Sugar Mill Boilers Authority To Burn Wood Chip Fuel

3. The maximum heat input rate of wood chip fuels shall not exceed any of the following limits:

Emissions Unit ID	Heat Input Rate	Maximum Heat Input
002, Mill Boiler No. 2	81.3 percent of the heat input rate of wood chip fuel to boiler number 6 during the NOx stack tests conducted pursuant to the requirements of 40 CFR 60 Appendix C during the 1994/1995 crop season.	280.0 million Btu per hour (56,000 pounds per hour)
003, Mill Boiler No. 3	84.7 percent of the heat input rate of wood chip fuel to boiler number 6 during the NOx stack tests conducted pursuant to the requirements of 40 CFR 60 Appendix C during the 1994/1995 crop season.	292 million Btu per hour (58,400 pounds per hour)
004, Mill Boiler No. 4	93.3 percent of the heat input rate of wood chip fuel to boiler number 5 during the NOx stack tests conducted pursuant to the requirements of 40 CFR 60 Appendix C during the 1994/1995 crop season.	280.0 million Btu per hour (56,000 pounds per hour)
005, Mill Boiler No. 5	110 percent of the heat input rate of wood chip fuel to boiler number 5 during the NOx stack tests conducted pursuant to the requirements of 40 CFR 60 Appendix C during the 1994/1995 crop season.	330.0 million Btu per hour (66,000 pounds per hour)
006, Mill Boiler No. 6	110 percent of the heat input rate of wood chip fuel to boiler number 6 during the NOx stack tests conducted pursuant to the requirements of 40 CFR 60 Appendix C during the 1994/1995 crop season.	379.0 million Btu per hour (78,800 pounds per hour)

4. The existing bagasse conveyor systems shall be utilized to deliver wood chips to boilers.
5. Osceola shall visually inspect each load of wood chip fuel and record the results of the visual inspection. The record of inspection shall include, at a minimum; the date, exact place, and time of the visual inspection; the person responsible for performing the visual inspection; the quantity of wood chip fuel inspected (tons) ; and the results of the visual inspection. Osceola shall retain records of the visual inspections for at least three years from the date of the inspections.
6. Osceola shall obtain written certification from the wood chip fuel vendor, for each load of wood chip fuel, certifying that the load of wood chip fuel consists of only clean wood chips that are free of all prohibited materials. Osceola shall retain the written certifications for at least three years from the date of delivery of the loads of wood chip fuel.
7. Should Osceola actually burn wood chip fuel containing prohibited materials, the visual inspection records and written vendor certifications do not relieve Osceola of the legal liability for violations.
8. Osceola is not required to burn wood chip fuel during annual compliance tests.

FIGURE 1 - SUMMARY REPORT

GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

Emission data summary ¹	CMS performance summary ¹
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes 2. Total duration of excess emissions 3. Total duration of excess emissions x (100) / [Total source operating time] % ²	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions b. Non-Monitor equipment malfunctions c. Quality assurance calibration d. Other known causes e. Unknown causes 2. Total CMS Downtime 3. [Total CMS Downtime] x (100) / [Total source operating time] % ²

1. For opacity, record all times in minutes. For gases, record all times in hours.

2. For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ Date: _____

Title: _____



"Table 2-1.xls"



"Table 1-1.xls"